ank=20250626:20250627094960

Årsredovisning

för

Saft AB

556013-8819

Räkenskapsåret

2024

Fastställelseintyg

Undertecknad verkställande direktör i Saft AB intygar att resultaträkningen och balansräkningen i årsredovisningen har fastställts på årsstämma den 19 juni 2025. Årsstämman beslutade att godkänna styrelsens förslag till resultatdisposition.

Jag intygar också att innehållet i årsredovisningen och revisionsberättelsen stämmer överens med originalen.

Oskarshamn 19/6 2025

Richard Karlsson

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Årsredovisning

för

Saft AB

556013-8819

Räkenskapsåret

2024

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Styrelsen och verkställande direktören för Saft AB med säte i Oskarshamn har härmed upprättat följande årsredovisning för räkenskapsåret 2024.

Förvaltningsberättelse

Information om verksamheten

Saft AB i Oskarshamn utvecklar, tillverkar och säljer industribatterier av typen nickel-kadmium, en mycket robust och beprövad teknologi bland annat för reservkraft- och energilagringssystem. Inom Saft AB finns en utvecklingsavdelning och ett tekniskt center för divisionen Industrial Mobility and Infrastructure (IMI) samt delar av koncernens globala marknads- och säljteam som handhar flera batteriteknologier. Det mesta av Saft AB:s produktion blir till batteri-installationer utomlands. Företaget har under sin mer än 120-åriga historia bibehållit sina globala kundrelationer genom syster-säljbolag och ombud, samt verkat för en svensk "ax till limpa produktion" med ett effektivt leverantörsnätverk.

På grund av sin höga exportandel följer bolaget utvecklingen i ett flertal länder, främst i mellanöstern och sydost Asien, samt även koncernens direktiv avseende enskilda länders risknivå och i förekommande fall sanktioner. Bolaget har liksom tidigare år under 2024 levererat till projekt inom sektorerna vindkraft, olja- och gas, el- och vattendistribution, transportsektorn samt till infrastrukturprojekt. Bolagets leveranser till de sydostasiatiska länderna är fortsätt väsentlig och god.

Väsentliga händelser under räkenskapsåret

Bolaget har framgångsrikt fortsatt arbetet med produktivitetsutveckling, digitalisering samt minskat kassation . En större automationsanläggning installerades under första halvåret 2024 för att säkerställa fortsatt produktivitetsutveckling och konkurrenskraft mot omvärlden.

Priser på råmaterial sjönk jämfört med 2023 och stabiliserades på en nivå i likhet med 2020 och 2021. Bolagets verksamhet och försäljning har under verksamhetsåret gynnats av en allt svagare svensk krona.

Förväntad framtida utveckling samt väsentliga risker och osäkerhetsfaktorer

En förväntad framtida utveckling är att bolagets kundportfölj kommer att behövas breddas och bli mindre beroende av kunder som leverar till projekt och anläggningar inom olja och gas. Bolagets vunna projekt inom infrastruktur och förnybar energi samt service-tjänster är en ökande marknad. Elektrifieringen och dess konsekvenser för elförsörjningens olika systemdelar är förväntade att ge bolaget ytterligare möjligheter men även nya konkurrensrisker. Framtida pris- och tillgångsutveckling för batterimineraler, komponenter, plastråvara samt energi har stor påverkan på lönsamheten.

Kreditrisk på kundfordringar bedöms som små. Vid någon form av kreditrisk, t ex vid sanktioner mot länder har bolaget reserverat fulla risken. Bolaget utsätts genom sin verksamhet för olika former av finansiella risker, främst valuta-, råvarupris- och kundkreditrisker. Fakturering sker i utländsk valuta till > 80 % medan inköp i utländsk valuta sker till lägre nivåer. Råvarupriserna varierar, varvid bolaget delvis möter den risken via olika hedging kontrakt. På senare år har de s.k. batterimetallerna främst nickel, kobolt och litium varit föremål för allokeringar och spekulationer vilket har lett till kraftiga prisvariationer. Bolaget har även intensifierat sina materialkvalificeringar, inklusive återvunnet material, för att utöka sin leverantörsbas. Det pågår även aktivt arbete för att säkerställa alternativa leveransflöden (double sourcing).

Hållbarhetsupplysningar

Företaget upprättar enligt 7 kap 31 a§ inte någon lagstadgad hållbarhetsrapport. Moderföretaget TotalEnergies SE., reg nr 542 051 180 RCS Nanterre med säte i Paris, upprättar hållbarhetsrapport för

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koncernen där företaget ingår. Koncernens hållbarhetsrapport finns tillgänglig via https://totalenergies.com/investors/publications-and-regulated-information/regulated-information/annual-financial-reports

Företaget arbetar löpande med mätningar och undersökningar av grundvatten, dagvatten, utsläpp och buller för att säkerställa en trygg och säker verksamhet för våra anställda och vår omgivning.

Tillstånds- eller anmälningspliktig verksamhet enligt miljöbalken

Bolaget bedriver verksamhet som kräver tillstånd enligt miljöbalken. Tillstånd för tillverkning av kadmiumoxid, aktivt material och nickelkadmiumbatterier samt bearbetning av stoft, slam och förbrukade batterier utfärdades av Mark- och miljödomstolen vid Växjö tingsrätt i september 2011. Tillståndet gäller tills vidare. Bolaget ansökte om ändringstillstånd och dom meddelades av Växjö tingsrätt i mars 2022. Ändringstillståndet tillåter bolaget en högre förbrukning av metaller.

Verksamheten påverkar den yttre miljön främst genom tillståndsgivna utsläpp av nickel, kadmium och kobolt till vatten och luft. Bolaget är certifierat enligt ISO 14000.

Ägarförhållanden

Bolaget är ett helägt dotterbolag till Saft Groupe SAS som i sin tur ingår i koncernen TotalEnergies SE.

Flerårsöversikt (Tkr)	**2024**	**2023**	**2022**	**2021**	**2020**
Nettoomsättning	1 374 609	1 411 170	1 256 899	1 201 096	1 235 260
Resultat efter finansiella poster	558 172	451 932	271 737	284 707	272 606
Balansomslutning	1 708 243	1 543 641	1 426 293	1 494 360	1 494 031
Avkastning på eget kap. (%)	43,9	40,7	27,8	30,7	27,7
Soliditet (%)	74,5	71,9	68,6	62,1	65,9

För definitioner av nyckeltal, se Redovisnings- och värderingsprinciper.

Förslag till vinstdisposition

Styrelsen föreslår att till förfogande stående vinstmedel (kronor):

balanserad vinst	478 785 963
årets vinst	456 655 482
	935 441 445
disponeras så att	
Utdelning, 1 500 000 aktier * 270 kronor per aktie	405 000 000
i ny räkning överföres	530 441 445
	935 441 445

Styrelsen föreslås bemyndigas att besluta om tidpunkt då utdelningen skall betalas.

Styrelsen anser att förslaget är förenligt med försiktighetsregeln i 17 kap. 3 § aktiebolagslagen enligt följande redogörelse:

Den föreslagna utdelningen reducerar bolagets soliditet till 66,52 %. Soliditeten bedöms som tillfredställande mot bakgrund av att bolagets verksamhet fortsatt bedrives med betryggande lönsamhet. Likviditeten i bolaget bedöms kunna upprätthållas på en likaledes betryggande nivå.

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Styrelsens uppfattning är att den föreslagna utdelningen inte hindrar bolaget från att fullgöra sina förpliktelser på kort och lång sikt, inte heller att fullgöra erforderliga investeringar.

Företagets resultat och ställning i övrigt framgår av efterföljande resultat- och balansräkning samt kassaflödesanalys med noter.

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Resultaträkning
Tkr

	Not	2024-01-01 -2024-12-31	2023-01-01 -2023-12-31
Nettoomsättning	3	1 374 608	1 411 170
Kostnad sålda varor		-935 012	-1 043 749
Bruttoresultat		**439 596**	**367 421**
Rörelsens kostnader			
Försäljningskostnader		-133 481	-132 226
Administrationskostnader		-45 682	-53 344
Forsknings- och utvecklingskostnader		-16 228	-15 265
Övriga rörelseintäkter		9 853	17 051
Övriga rörelsekostnader		0	-4 831
		-185 538	**-188 615**
Rörelseresultat	4, 5, 6, 7	**254 058**	**178 806**
Resultat från finansiella poster			
Resultat från andelar i koncernföretag	8	286 405	260 497
Övriga ränteintäkter och liknande resultatposter	9	20 723	13 805
Räntekostnader och liknande resultatposter	10	-3 014	-1 176
		304 114	**273 126**
Resultat efter finansiella poster		**558 172**	**451 932**
Bokslutsdispositioner	11	-37 726	-50 768
Resultat före skatt		**520 446**	**401 164**
Skatt på årets resultat	12	-63 791	-39 933
Årets resultat		**456 655**	**361 231**

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Balansräkning

Tkr

	Not	2024-12-31	2023-12-31
TILLGÅNGAR			
Anläggningstillgångar			
Immateriella anläggningstillgångar			
Balanserade utgifter för utvecklingsarbeten och liknande arbeten	13	0	0
Materiella anläggningstillgångar			
Nedlagda utgifter på annans fastighet	14	5 779	3 761
Maskiner och andra tekniska anläggningar	15	127 687	103 931
Inventarier, verktyg och installationer	16	43 707	39 727
Pågående nyanläggningar och förskott avseende materiella anläggningstillgångar	17	66 459	51 980
		243 632	**199 399**
Finansiella anläggningstillgångar			
Andelar i koncernföretag	18, 19	300 517	300 517
Uppskjuten skattefordran	20	9 540	6 014
Andra långfristiga fordringar	34	6 791	6 791
		316 848	**313 322**
Summa anläggningstillgångar		**560 480**	**512 721**
Omsättningstillgångar			
Varulager m m			
Råvaror och förnödenheter		91 254	139 213
Varor under tillverkning		45 362	63 588
Färdiga varor och handelsvaror		35 750	22 609
		172 366	**225 410**
Kortfristiga fordringar			
Kundfordringar		201 178	179 827
Fordringar hos koncernföretag	33	731 301	581 109
Aktuella skattefordringar		0	13 501
Övriga fordringar		6 895	1 601
Förutbetalda kostnader och upplupna intäkter	21	1 214	3 282
		940 588	**779 320**
Kassa och bank		34 809	26 190
Summa omsättningstillgångar		**1 147 763**	**1 030 920**
SUMMA TILLGÅNGAR		**1 708 243**	**1 543 641**

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Balansräkning

Tkr

	Not	2024-12-31	2023-12-31
EGET KAPITAL OCH SKULDER			
Eget kapital	22, 29		
Bundet eget kapital			
Aktiekapital		30 000	30 000
Reservfond		30 000	30 000
		60 000	**60 000**
Fritt eget kapital			
Balanserad vinst eller förlust		478 786	442 555
Årets resultat		456 655	361 231
		935 441	**803 786**
Summa eget kapital		**995 441**	**863 786**
Obeskattade reserver	23	348 238	310 512
Avsättningar	24		
Övriga avsättningar för pensioner och liknande förpliktelser		6 791	6 791
Övriga avsättningar		13 530	14 086
Summa avsättningar		**20 321**	**20 877**
Långfristiga skulder			
Skulder till koncernföretag	25	60 518	60 227
Kortfristiga skulder			
Förskott från kunder		22 483	32 932
Leverantörsskulder		115 113	130 960
Skulder till koncernföretag		13 685	13 502
Aktuella skatteskulder		8 235	0
Övriga skulder		4 276	5 817
Upplupna kostnader och förutbetalda intäkter	26	119 933	105 028
Summa kortfristiga skulder		**283 725**	**288 239**
SUMMA EGET KAPITAL OCH SKULDER		**1 708 243**	**1 543 641**

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Rapport över förändringar i eget kapital

Tkr

	Bundet eget kapital		Fritt eget kapital	
	Aktie-kapital	Bundna reserver	Balanserat resultat	Summa eget kapital
Ingående eget kapital 2023-01-01	**30 000**	**30 000**	**712 555**	**772 555**
Utdelning			-270 000	-270 000
Årets resultat			361 231	361 231
Utgående eget kapital 2023-12-31	**30 000**	**30 000**	**803 786**	**863 786**
Ingående eget kapital 2024-01-01	**30 000**	**30 000**	**803 786**	**863 786**
Utdelning			-325 000	-325 000
Årets resultat			456 655	456 655
Utgående eget kapital 2024-12-31	**30 000**	**30 000**	**935 441**	**995 441**

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Kassaflödesanalys

Tkr

	Not	2024-01-01 -2024-12-31	2023-01-01 -2023-12-31
Den löpande verksamheten			
Resultat efter finansiella poster		558 172	451 932
Justeringar för poster som inte ingår i kassaflödet	28	33 996	31 501
Betald skatt		-42 056	-27 653
Kassaflöde från den löpande verksamheten före förändring av rörelsekapital		**550 112**	**455 780**
Kassaflöde från förändring av rörelsekapitalet			
Förändring av varulager		53 044	39 224
Förändring av rörelsefordringar		-178 295	-192 079
Förändring av rörelseskulder		-13 508	-32 797
Kassaflöde från den löpande verksamheten		**411 353**	**270 128**
Investeringsverksamheten			
Investeringar i materiella anläggningstillgångar		-78 024	-42 961
Investeringar i finansiella anläggningstillgångar		0	-331
Kassaflöde från investeringsverksamheten		**-78 024**	**-43 292**
Finansieringsverksamheten			
Upptagna lån		290	315
Utbetald utdelning		-325 000	-270 000
Kassaflöde från finansieringsverksamheten		**-324 710**	**-269 685**
Årets kassaflöde		**8 619**	**-42 849**
Likvida medel vid årets början			
Likvida medel vid årets början		26 190	69 039
Likvida medel vid årets slut		**34 809**	**26 190**

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Noter
Tkr

Not 1 Redovisnings- och värderingsprinciper

Allmänna upplysningar
Årsredovisningen är upprättad i enlighet med årsredovisningslagen och BFNAR 2012:1 Årsredovisning och koncernredovisning (K3).

Fordringar har upptagits till de belopp varmed de beräknas inflyta.

Övriga tillgångar och skulder har upptagits till anskaffningsvärden där inget annat anges.

Redovisningsprinciperna är oförändrade jämfört med föregående år.

Intäktsredovisning
Intäkter har tagits upp till verkligt värde av vad som erhållits eller kommer att erhållas och redovisas i den omfattning det är sannolikt att de ekonomiska fördelarna kommer att tillgodogöras bolaget och intäkterna kan beräknas på ett tillförlitligt sätt.

Fakturerad försäljning omfattar i huvudsak försäljning av batteriackumulatorer. Intäkter redovisas när huvudsakligen alla risker och rättigheter som är förknippade med ägandet övergått till köparen, vilket normalt inträffar i samband med leverans.

Egenutvecklade immateriella anläggningstillgångar
Företaget redovisar internt upparbetade immateriella anläggningstillgångar enligt aktiveringsmodellen. Det innebär att samtliga utgifter som avser framtagandet av en internt upparbetad immateriell anläggningstillgång aktiveras och skrivs av under tillgångens beräknade nyttjandeperiod.

Anläggningstillgångar
Materiella anläggningstillgångar redovisas till anskaffningsvärde minskat med ackumulerade avskrivningar enligt plan och eventuella nedskrivningar.

Avskrivning sker linjärt över den förväntade nyttjandeperioden med hänsyn till väsentligt restvärde. Följande avskrivningsprincip tillämpas:

Nedlagda utgifter på annans fastighet	20 år
Maskiner och andra tekniska anläggningar	5-10 år
Inventarier, verktyg och installationer	5-10 år

Leasingavtal
Företaget redovisar samtliga leasingavtal som operationella leasingavtal. Operationella leasingavtal redovisas som en kostnad linjärt över leasingperioden.

Utländsk valuta
Poster i utländsk valuta
Monetära poster i utländsk valuta räknas om till balansdagens kurs. Icke-monetära poster räknas inte om utan redovisas till kursen vid anskaffningstillfället.

Valutakursdifferenser som uppkommer vid reglering eller omräkning av monetära poster

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redovisas i resultaträkningen det räkenskapsår de uppkommer.

Varulager

Varulagret är upptaget till anskaffningsvärdet. Anskaffningsvärdet beräknas enligt först införst ut- principen. I anskaffningsvärdet ingår förutom utgifter för inköp även utgifter för att bringa varorna till deras aktuella plats och skick.

I egentillverkade halv- och helfabrikat består anskaffningsvärdet av direkta tillverkningskostnader och de indirekta kostnader som utgör mer än en oväsentlig del av den sammanlagda utgiften för tillverkningen. Vid värdering har hänsyn tagits till normalt kapacitetsutnyttjande.

Underhållsartiklar värderas till anskaffningsvärde.

Skatter

Skatt på årets resultat i resultaträkningen består av aktuell skatt och uppskjuten skatt. Aktuell skatt är inkomstskatt för innevarande räkenskapsår som avser årets skattepliktiga resultat och den del av tidigare räkenskapsårs inkomstskatt som ännu inte har redovisats. Uppskjuten skatt är inkomstskatt för skattepliktigt resultat avseende framtida räkenskapsår till följd av tidigare transaktioner eller händelser.

Uppskjuten skatt

Uppskjuten skatteskuld redovisas för alla skattepliktiga temporära skillnader, dock inte för temporära skillnader som härrör från första redovisningen av goodwill. Uppskjuten skattefordran redovisas för avdragsgilla temporära skillnader och för möjligheten att i framtiden använda skattemässiga underskottsavdrag. Värderingen baseras på hur det redovisade värdet för motsvarande tillgång eller skuld förväntas återvinnas respektive regleras. Beloppen baseras på de skattesatser och skatteregler som är beslutade före balansdagen och har inte nuvärdeberäknats.

Uppskjutna skattefordringar har värderats till högst det belopp som sannolikt kommer att återvinnas baserat på innevarande och framtida skattepliktiga resultat. Värderingen omprövas varje balansdag.

Ersättningar till anställda - pensioner

I företaget finns såväl avgiftsbestämda som förmånsbestämda pensionsplaner. Utgifter för avgiftsbestämda planer redovisas som en kostnad under den period de anställda utför de tjänster som ligger till grund för förpliktelsen. Företagets förmånsbestämda pensionsförpliktelser är uteslutande är beroende av värdet på av företaget ägda kapitalförsäkringar. Kapitalförsäkringarna redovisas som en finansiell anläggningstillgång. I enlighet med förenklingsregeln i BFNAR 2012:1 redovisas pensionsförpliktelsen som en avsättning till samma värde som kapitalförsäkringens redovisade värde.

Avsättningar och eventualförpliktelser

En avsättning redovisas i balansräkningen när företaget har en legal eller informell förpliktelse till följd av en inträffad händelse och det är sannolikt att ett utflöde av resurser krävs för att reglera förpliktelsen och en tillförlitlig uppskattning av beloppet kan göras. Vid första redovisningstillfället värderas avsättningar till den bästa uppskattningen av det belopp som kommer att krävas för att reglera förpliktelsen på balansdagen. Avsättningarna omprövas varje balansdag.

Som eventualförpliktelser redovisas förpliktelser som härrör från inträffade händelser, men som inte redovisas som en skuld eller en avsättning eftersom det inte är sannolikt att någon form av utbetalning kommer att krävas, eller att utbetalningens storlek inte kan beräknas med tillräcklig säkerhet.

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Koncernbidrag

Huvudregel för redovisning av koncernbidrag enligt 35 kap. inkomstskattelagen (1999:1229).

Koncernbidrag som erhållits/lämnats redovisas som en bokslutsdisposition i resultaträkningen. Det erhållna/lämnade koncernbidraget har påverkat företagets aktuella skatt.

Kassaflödesanalys

Kassaflödesanalysen har upprättats enligt den indirekta metoden varvid justering skett för transaktioner som inte medfört in- eller utbetalningar. Som likvida medel klassificeras, förutom kassa- och banktillgodohavanden, tillgodohavanden på koncernkonto och kortfristiga likvida placeringar som lätt kan omvandlas till känt belopp och som är utsatt för en obetydlig risk för värdefluktuation.

Nyckeltalsdefinitioner

Nettoomsättning
Rörelsens huvudintäkter, fakturerade kostnader samt intäktskorrigeringar.

Rörelsemarginal (%)
Rörelseresultat i procent av omsättningen.

Balansomslutning
Företagets samlade tillgångar.

Avkastning på eget kap. (%)
Resultat efter finansiella poster i procent av justerat eget kapital (eget kapital och obeskattade reserver med avdrag för uppskjuten skatt).

Soliditet (%)
Justerat eget kapital (eget kapital och obeskattade reserver med avdrag för uppskjuten skatt) i procent av balansomslutning.

Not 2 Uppskattningar och bedömningar

Företagsledningen gör uppskattningar och antaganden om framtiden. Dessa uppskattningar kommer sällan att motsvara det verkliga resultatet. De uppskattningar och antaganden som kan komma att leda till risk för väsentliga justeringar i redovisade värden för tillgångar och skulder är exempelvis värdering av avsättningar och kundfordringar.

Varje år prövas om det finns någon indikation på att tillgångars värde är lägre än det redovisade värdet. Finns en indikation så beräknas tillgångens återvinningsvärde, vilket är det lägsta av tillgångens verkliga värde med avdrag för försäljningskostnader och nyttjandevärdet.

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Not 3 Nettoomsättningens fördelning

	2024	2023
Nettoomsättningen per geografisk marknad		
Sverige	349 261	430 708
Europa	259 879	234 601
Asien	245 966	250 087
Nord- och Sydamerika	246 212	284 716
Mellanöstern	234 599	190 304
Övrigt	38 692	20 754
	1 374 609	**1 411 170**

Av faktureringen till Sverige ingår fakturering till dotterföretag som sedan fakturerar vidare på export. Under året uppgick detta till 285 863 tkr (fg år 378 398 tkr)

Not 4 Operationell leasing - leasetagare

Framtida leasingavgifter, för icke uppsägningsbara leasingavtal, förfaller till betalning enligt följande:

	2024	2023
Inom ett år	1 374	1 437
Senare än ett år men inom fem år	1 026	2 331
	2 400	**3 768**

Operationell leasing, inkl. hyra för lokal

Leasingavgifter, årets kostnad exkl hyra	2 573	2 278
Kostnadsförda lokalhyror	709	860
	3 282	**3 138**

Hyresavtalet för lokalen löper utan förfallotidpunkt. För 2024 uppgår hyran till 315tkr per år. Lokalhyran ingår inte i ovanstående uppgifter om framtida minimileaseavgifter.

Not 5 Arvode till revisorer

	2024	2023
Ernst & Young AB		
Revisionsuppdrag	656	658
	656	**658**

Arvode för dotterbolaget Alcad AB ingår i ovanstående sammanställning uppgående till 30 kkr (30 kkr).

ank=20250626;20250627095510

Not 6 Anställda och personalkostnader

	2024	2023
Medelantalet anställda		
Kvinnor	116	119
Män	299	327
	415	**446**
Löner och andra ersättningar		
Styrelse och verkställande direktör	2 054	2 365
Övriga anställda	190 340	201 263
	192 394	**203 628**
Sociala kostnader		
Pensionskostnader för styrelse och verkställande direktör	729	1 040
Pensionskostnader för övriga anställda	20 365	25 996
Övriga sociala avgifter enligt lag och avtal	61 377	64 634
	82 471	**91 670**
Totala löner, ersättningar, sociala kostnader och pensionskostnader	**274 865**	**295 298**

Bolaget skiftade VD under 2023, varpå både den tidigare VD:s samt den nuvarande VD:s löner och pensionskostnader inkluderats i jämförelseposten.

Könsfördelning bland ledande befattningshavare		
Andel kvinnor i styrelsen	60 %	60 %
Andel kvinnor bland övriga ledande befattningshavare	20 %	20 %

Avtal om avgångsvederlag
Vid uppsägning från företagets sida respektive VD:s sida uppgår uppsägningstiden till tolv månader respektive sex månader. Vid uppsägning från företagets sida utbetalas utöver lön under uppsägningstiden ett avgångsvederlag motsvarande tolv månadslöner.

Not 7 Inköp och försäljningar mellan koncernföretag

	2024	2023
Andel av årets totala inköp som skett från andra företag i koncernen	5,65 %	9,08 %
Andel av årets totala försäljningar som skett till andra företag i koncernen	31,73 %	29,67 %

PNN

ank=20250626709511

Not 8 Resultat från andelar i koncernföretag

	2024	2023
Erhållna utdelningar	286 405	260 497
	286 405	**260 497**

Not 9 Övriga ränteintäkter och liknande resultatposter

	2024	2023
Ränteintäkter från koncernföretag	13 587	8 462
Övriga ränteintäkter	7 136	5 344
	20 723	**13 806**

Not 10 Räntekostnader och liknande resultatposter

	2024	2023
Övriga räntekostnader	3 014	1 176
	3 014	**1 176**

Not 11 Bokslutsdispositioner

	2024	2023
Förändring av överavskrivningar	9 726	5 768
Avsättning till periodiseringsfonder	83 000	45 000
Återföring av periodiseringsfonder	-55 000	0
	37 726	**50 768**

Not 12 Aktuell och uppskjuten skatt

	2024	2023
Skatt på årets resultat		
Aktuell skatt	67 318	40 109
Förändring av uppskjuten skatt avseende temporära skillnader	-3 527	-176
Totalt redovisad skatt	**63 791**	**39 933**

Avstämning av effektiv skatt

	2024		2023	
	Procent	**Belopp**	**Procent**	**Belopp**
Redovisat resultat före skatt		520 446		401 164
Skatt enligt gällande skattesats	20,60	107 212	20,60	82 640
Ej avdragsgilla kostnader		949		444
Ej skattepliktiga intäkter		-58 999		-53 662
Justering avseende skatter för föregående år				-2 083

ank=20250626:20250627095512

Skatt på schablonintäkt på periodiseringsfond		1 009		819
Avdragen utländsk källskatt		13 620		11 775
Redovisad effektiv skatt	**12,25**	**63 791**	**9,95**	**39 932**

Not 13 Balanserade utgifter för utvecklingsarbeten och liknande arbeten

	2024-12-31	2023-12-31
Ingående anskaffningsvärden	19 790	19 790
Utgående ackumulerade anskaffningsvärden	**19 790**	**19 790**
Ingående avskrivningar	-3 298	-3 298
Utgående ackumulerade avskrivningar	**-3 298**	**-3 298**
Ingående nedskrivningar	-16 492	-16 492
Utgående ackumulerade nedskrivningar	**-16 492**	**-16 492**
Utgående redovisat värde	**0**	**0**

Not 14 Nedlagda utgifter på annans fastighet

	2024-12-31	2023-12-31
Ingående anskaffningsvärden	21 341	19 819
Omklassificeringar	2 518	1 522
Utgående ackumulerade anskaffningsvärden	**23 859**	**21 341**
Ingående avskrivningar	-17 580	-17 161
Årets avskrivningar	-500	-419
Utgående ackumulerade avskrivningar	**-18 080**	**-17 580**
Utgående redovisat värde	**5 779**	**3 761**

Not 15 Maskiner och andra tekniska anläggningar

	2024-12-31	2023-12-31
Ingående anskaffningsvärden	528 446	507 232
Omklassificeringar	46 247	21 214
Utgående ackumulerade anskaffningsvärden	**574 693**	**528 446**
Ingående avskrivningar	-424 515	-401 722
Årets avskrivningar	-22 491	-22 794
Utgående ackumulerade avskrivningar	**-447 006**	**-424 516**
Utgående redovisat värde	**127 687**	**103 930**

PWN

ank=20250626-20250627095513

Not 16 Inventarier, verktyg och installationer

	2024-12-31	2023-12-31
Ingående anskaffningsvärden	87 929	56 371
Omklassificeringar	14 604	31 558
Utgående ackumulerade anskaffningsvärden	**102 533**	**87 929**
Ingående avskrivningar	-48 202	-41 284
Årets avskrivningar	-10 625	-6 918
Utgående ackumulerade avskrivningar	**-58 827**	**-48 202**
Utgående redovisat värde	**43 706**	**39 727**

Not 17 Pågående nyanläggningar och förskott avseende materiella anläggningstillgångar

	2024-12-31	2023-12-31
Vid årets början	51 980	63 313
Omklassificeringar	-63 545	-54 293
Investeringar	78 024	42 960
	66 459	**51 980**

Not 18 Andelar i koncernföretag

	2024-12-31	2023-12-31
Ingående anskaffningsvärden	300 517	300 517
Utgående ackumulerade anskaffningsvärden	**300 517**	**300 517**
Utgående redovisat värde	**300 517**	**300 517**

Ägarandelen av kapitalet avses, vilket även överensstämmer med andelen av rösterna för totalt antal aktier.
NIFE Vertriebs GmbH bedriver ingen verksamhet varför någon intressebolagsredovisning inte föreligger.

Not 19 Specifikation andelar i koncernföretag

Namn	Kapital-andel	Rösträtts-andel	Antal andelar	Bokfört värde
Tadiran Batteries Ltd	100	100	5 000 000	232 958
Alcad AB	100	100	1 000	100
OSKVOLT Battery Services KB	99,9	100		67 459
NIFE Vertriebs GmbH		35		
				300 517

	Org.nr	Säte
Tadiran Batteries Ltd	51-207442-8	Kiryat Ekron, Israel
Alcad AB	556250-3572	Oskarshamn
OSKVOLT Battery Services KB	916618-4599	Oskarshamn
NIFE Vertriebs GmbH	55-142-7636	Düsseldorf, Tyskland

ank=20250626;20250627095314

Not 20 Uppskjuten skatt på temporära skillnader

2024-12-31

Temporära skillnader	**Uppskjuten skattefordran**	**Netto**
Garantiavsättning	1 055	1 055
Övriga temporära skillnader	8 485	8 485
	9 540	**9 540**

2023-12-31

Temporära skillnader	**Uppskjuten skattefordran**	**Netto**
Garantiavsättning	1 289	1 289
Övriga temporära skillnader	4 724	4 724
	6 014	**6 014**

Förändring av uppskjuten skatt

	Belopp vid årets ingång	**Årets avsättningar**	**Belopp vid årets utgång**
Garantiavsättning	1 289	-234	1 055
Övriga temporära skillnader	4 724	3 761	8 485
	6 014	**3 527**	**9 540**

Not 21 Förutbetalda kostnader och upplupna intäkter

	2024-12-31	**2023-12-31**
Förutbetalda omkostnader	1 214	3 282
	1 214	**3 282**

Not 22 Antal aktier och kvotvärde

	Antal aktier	**Kvot-värde**
Antal Aktier	1 500 000	20
	1 500 000	

Not 23 Obeskattade reserver

	2024-12-31	**2023-12-31**
Ackumulerade överavskrivningar maskiner & inventarier	70 238	60 512
Periodiseringsfond 2018	0	55 000
Periodiseringsfond 2019	50 000	50 000
Periodiseringsfond 2020	50 000	50 000
Periodiseringsfond 2021	50 000	50 000
Periodiseringsfond 2023	45 000	45 000
Periodiseringsfond 2024	83 000	
	348 238	**310 512**

PLN

ank=20250626-20250627095135

Skatteeffekt av schablonränta på periodiseringsfond	1 009	819

Not 24 Avsättningar

	2024-12-31	2023-12-31
Pensioner och liknande förpliktelser		
Belopp vid årets ingång	6 791	6 460
Årets avsättningar		331
	6 791	**6 791**
Övriga avsättningar		
Belopp vid årets ingång	14 086	13 046
Årets avsättningar		1 040
Under året ianspråktagna belopp	-556	0
	13 530	**14 086**

Övriga avsättningar avser garantireserv

Not 25 Långfristiga skulder

	2024-12-31	2023-12-31
Förfaller senare än fem år efter balansdagen		
Skulder till koncernföretag	60 518	60 227
	60 518	**60 227**

Not 26 Upplupna kostnader och förutbetalda intäkter

	2024-12-31	2023-12-31
Upplupna personalrelaterade kostnader	66 264	69 259
Övriga poster	52 910	35 769
	119 174	**105 028**

Not 27 Avskrivningar

	2024-12-31	2023-12-31
Maskiner	22 491	22 794
Inventarier	6 869	4 182
Datainventarier	3 755	2 735
Byggnader	500	419
	33 615	**30 130**

ank=20250626;20250627709516

Not 28 Justering för poster som inte ingår i kassaflödet

	2024-12-31	2023-12-31
Avskrivningar	33 615	30 130
Förändring av avsättningar	206	1 371
Vinst vid försäljning av anläggningstillgångar	175	0
	33 996	**31 501**

Not 29 Disposition av vinst eller förlust

	2024-12-31
Förslag till vinstdisposition	
Styrelsen föreslår att till förfogande stående vinstmedel:	
balanserad vinst	478 786
årets vinst	456 655
	935 441
disponeras så att	
Utdelning, 1 500 000 aktier * 270 kronor per aktie	405 000
i ny räkning överföres	530 441
	935 441

Not 30 Ställda säkerheter

	2024-12-31	2023-12-31
Ställda säkerheter för egna skulder och avsättningar		
Företagsinteckningar	35 000	35 000
	35 000	**35 000**

Not 31 Koncernuppgifter

Företaget som utgör moderföretag för en koncern med dotterföretag enligt not 17, upprättar ej koncernredovisning med hänvisning till reglerna i Årsredovisningslagen 7 kap. 2 §.

Bolaget är helägt dotterbolag till Saft Groupe SAS (RCS 481 480 465 med säte i Paris), med säte i Oskarshamn. Moderföretaget i den största koncern där Saft AB ingår och där koncernredovisning upprättas är TotalEnergies SE., reg nr 542 051 180 RCS Nanterre med säte i Paris.
Koncernredovisningen finns att tillgå på www.totalenergies.com

Not 32 Väsentliga händelser efter räkenskapsårets slut

Inga väsentliga händelser att rapportera efter räkenskapsårets slut.

PW

ank=20250626;20250627095317

Not 33 Fordringar hos koncernföretag

	2024-12-31	2023-12-31
Ingående anskaffningsvärden	581 109	348 090
Tillkommande fordringar	150 192	170 616
Omklassificeringar		62 403
Utgående ackumulerade anskaffningsvärden	**731 301**	**581 109**
Utgående redovisat värde	**731 301**	**581 109**

Av redovisat värde 731 300 tkr avser 344 747tkr (fg år 65 574tkr) fordring i cashpool med TotalEnergies samt 302 203 tkr (fg år 403 482 tkr) fordringar i cashpool med koncernmoder Saft Groupe SAS.

Not 34 Andra långfristiga fordringar

Avser kapitalförsäkring gällande direktpension för anställda.

	2024-12-31	2023-12-31
Ingående anskaffningsvärden	6 791	6 460
Nytecknade försäkringar	0	331
Utgående ackumulerade anskaffningsvärden	**6 791**	**6 791**
Utgående redovisat värde	**6 791**	**6 791**

ank=20250626;20250627095518

Underskrifter

Oskarshamn 2025-05-28

Erik Viriot
Ordförande

Jenny Sjölebrant

Marion Renard Bruel

Johanna Lövgren

Richard Karlsson
Verkställande direktör

Vår revisionsberättelse har lämnats 18/6-25

Ernst & Young AB

Pia Anell
Auktoriserad revisor

ank=20250627095319

Underskrifter

28/5 2025

Oskarshamn

Erik Viriot
Ordförande

Marion Renard Bruel

Jenny Solebrant

Johanna Lövgren

Richard Karlsson
Verkställande direktör

Vår revisionsberättelse har lämnats

Ernst & Young AB

Pia Anell
Auktoriserad revisor

ank=20250626-20250627709520

Underskrifter

Oskarshamn

Erik Viriot
Ordförande

Marion Renard Bruel May 28th 2025

Jenny Solebrant

Johanna Lövgren

Richard Karlsson
Verkställande direktör

Vår revisionsberättelse har lämnats

Ernst & Young AB

Pia Anell
Auktoriserad revisor

ank=20250626-20250627095521

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Revisionsberättelse

Till bolagsstämman i Saft AB, org.nr 556013-8819

Rapport om årsredovisningen

Uttalanden

Vi har utfört en revision av årsredovisningen för Saft AB för år 2024.

Enligt vår uppfattning har årsredovisningen upprättats i enlighet med årsredovisningslagen och ger en i alla väsentliga avseenden rättvisande bild av Saft ABs finansiella ställning per den 31 december 2024 och av dess finansiella resultat och kassaflöde för året enligt årsredovisningslagen. Förvaltningsberättelsen är förenlig med årsredovisningens övriga delar.

Vi tillstyrker därför att bolagsstämman fastställer resultaträkningen och balansräkningen.

Grund för uttalanden

Vi har utfört revisionen enligt International Standards on Auditing (ISA) och god revisionssed i Sverige. Vårt ansvar enligt dessa standarder beskrivs närmare i avsnittet *Revisorns ansvar*. Vi är oberoende i förhållande till Saft AB enligt god revisorssed i Sverige och har i övrigt fullgjort vårt yrkesetiska ansvar enligt dessa krav.

Vi anser att de revisionsbevis vi har inhämtat är tillräckliga och ändamålsenliga som grund för våra uttalanden.

Styrelsens och verkställande direktörens ansvar

Det är styrelsen och verkställande direktören som har ansvaret för att årsredovisningen upprättas och att den ger en rättvisande bild enligt årsredovisningslagen. Styrelsen och verkställande direktören ansvarar även för den interna kontroll som de bedömer är nödvändig för att upprätta en årsredovisning som inte innehåller några väsentliga felaktigheter, vare sig dessa beror på oegentligheter eller misstag.

Vid upprättandet av årsredovisningen ansvarar styrelsen och verkställande direktören för bedömningen av bolagets förmåga att fortsätta verksamheten. De upplyser, när så är tillämpligt, om förhållanden som kan påverka förmågan att fortsätta verksamheten och att använda antagandet om fortsatt drift. Antagandet om fortsatt drift tillämpas dock inte om styrelsen och verkställande direktören avser att likvidera bolaget, upphöra med verksamheten eller inte har något realistiskt alternativ till att göra något av detta.

Revisorns ansvar

Våra mål är att uppnå en rimlig grad av säkerhet om att årsredovisningen som helhet inte innehåller några väsentliga felaktigheter, vare sig dessa beror på oegentligheter eller misstag, och att lämna en revisionsberättelse som innehåller våra uttalanden. Rimlig säkerhet är en hög grad av säkerhet, men är ingen garanti för att en revision som utförs enligt ISA och god revisionssed i Sverige alltid kommer att upptäcka en väsentlig felaktighet om en sådan finns. Felaktigheter kan uppstå på grund av oegentligheter eller misstag och anses vara väsentliga om de enskilt eller tillsammans rimligen kan förväntas påverka de ekonomiska beslut som användare fattar med grund i årsredovisningen.

Som del av en revision enligt ISA använder vi professionellt omdöme och har en professionellt skeptisk inställning under hela revisionen. Dessutom:

- identifierar och bedömer vi riskerna för väsentliga felaktigheter i årsredovisningen, vare sig dessa beror på oegentligheter eller misstag, utformar och utför granskningsåtgärder bland annat utifrån dessa risker och inhämtar revisionsbevis som är tillräckliga och ändamålsenliga för att utgöra en grund för våra uttalanden. Risken för att inte upptäcka en väsentlig felaktighet till följd av oegentligheter är högre än för en väsentlig felaktighet som beror på misstag, eftersom oegentligheter kan innefatta agerande i maskopi, förfalskning, avsiktliga utelämnanden, felaktig information eller åsidosättande av intern kontroll.
- skaffar vi oss en förståelse av den del av bolagets interna kontroll som har betydelse för vår revision för att utforma granskningsåtgärder som är lämpliga med hänsyn till omständigheterna, men inte för att uttala oss om effektiviteten i den interna kontrollen.
- utvärderar vi lämpligheten i de redovisningsprinciper som används och rimligheten i styrelsens och verkställande direktörens uppskattningar i redovisningen och tillhörande upplysningar.
- drar vi en slutsats om lämpligheten i att styrelsen och verkställande direktören använder antagandet om fortsatt drift vid upprättandet av årsredovisningen. Vi drar också en slutsats, med grund i de inhämtade revisionsbevisen, om det finns någon väsentlig osäkerhetsfaktor som avser sådana händelser eller förhållanden som kan leda till betydande tvivel om bolagets förmåga att fortsätta verksamheten. Om vi drar slutsatsen att det finns en väsentlig osäkerhetsfaktor, måste vi i revisionsberättelsen fästa uppmärksamheten på upplysningarna i årsredovisningen om den väsentliga osäkerhetsfaktorn eller, om sådana upplysningar är otillräckliga, modifiera uttalandet om årsredovisningen. Våra slutsatser baseras på de revisionsbevis som inhämtas fram till datumet för revisionsberättelsen. Dock kan framtida händelser eller förhållanden göra att ett bolag inte längre kan fortsätta verksamheten.
- utvärderar vi den övergripande presentationen, strukturen och innehållet i årsredovisningen, däribland upplysningarna, och om årsredovisningen återger de underliggande transaktionerna och händelserna på ett sätt som ger en rättvisande bild.

Vi måste informera styrelsen om bland annat revisionens planerade omfattning och inriktning samt tidpunkten för den. Vi måste också informera om betydelsefulla iakttagelser under revisionen, däribland de eventuella betydande brister i den interna kontrollen som vi identifierat.

ank=20250626;20250627095322

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Rapport om andra krav enligt lagar och andra författningar

Uttalanden

Utöver vår revision av årsredovisningen har vi även utfört en revision av styrelsens och verkställande direktörens förvaltning av Saft AB för år 2024 samt av förslaget till dispositioner beträffande bolagets vinst eller förlust.

Vi tillstyrker att bolagsstämman disponerar vinsten enligt förslaget i förvaltningsberättelsen och beviljar styrelsens ledamöter och verkställande direktören ansvarsfrihet för räkenskapsåret.

Grund för uttalanden

Vi har utfört revisionen enligt god revisionssed i Sverige. Vårt ansvar enligt denna beskrivs närmare i avsnittet *Revisorns ansvar*. Vi är oberoende i förhållande till Saft AB enligt god revisorssed i Sverige och har i övrigt fullgjort vårt yrkesetiska ansvar enligt dessa krav.

Vi anser att de revisionsbevis vi har inhämtat är tillräckliga och ändamålsenliga som grund för våra uttalanden.

Styrelsens och verkställande direktörens ansvar

Det är styrelsen som har ansvaret för förslaget till dispositioner beträffande bolagets vinst eller förlust. Vid förslag till utdelning innefattar detta bland annat en bedömning av om utdelningen är försvarlig med hänsyn till de krav som bolagets verksamhetsart, omfattning och risker ställer på storleken av bolagets egna kapital, konsolideringsbehov, likviditet och ställning i övrigt.

Styrelsen ansvarar för bolagets organisation och förvaltningen av bolagets angelägenheter. Detta innefattar bland annat att fortlöpande bedöma bolagets ekonomiska situation och att tillse att bolagets organisation är utformad så att bokföringen, medelsförvaltningen och bolagets ekonomiska angelägenheter i övrigt kontrolleras på ett betryggande sätt. Verkställande direktören ska sköta den löpande förvaltningen enligt styrelsens riktlinjer och anvisningar och bland annat vidta de åtgärder som är nödvändiga för att bolagets bokföring ska fullgöras i överensstämmelse med lag och för att medelsförvaltningen ska skötas på ett betryggande sätt.

Revisorns ansvar

Vårt mål beträffande revisionen av förvaltningen, och därmed vårt uttalande om ansvarsfrihet, är att inhämta revisionsbevis för att med en rimlig grad av säkerhet kunna bedöma om någon styrelseledamot eller verkställande direktören i något väsentligt avseende:

- företagit någon åtgärd eller gjort sig skyldig till någon försummelse som kan föranleda ersättningsskyldighet mot bolaget, eller
- på något annat sätt handlat i strid med aktiebolagslagen, årsredovisningslagen eller bolagsordningen.

Vårt mål beträffande revisionen av förslaget till dispositioner av bolagets vinst eller förlust, och därmed vårt uttalande om detta, är att med rimlig grad av säkerhet bedöma om förslaget är förenligt med aktiebolagslagen.

Rimlig säkerhet är en hög grad av säkerhet, men ingen garanti för att en revision som utförs enligt god revisionssed i Sverige alltid kommer att upptäcka åtgärder eller försummelser som kan föranleda ersättningsskyldighet mot bolaget, eller att ett förslag till dispositioner av bolagets vinst eller förlust inte är förenligt med aktiebolagslagen.

Som en del av en revision enligt god revisionssed i Sverige använder vi professionellt omdöme och har en professionellt skeptisk inställning under hela revisionen. Granskningen av förvaltningen och förslaget till dispositioner av bolagets vinst eller förlust grundar sig främst på revisionen av räkenskaperna. Vilka tillkommande granskningsåtgärder som utförs baseras på vår professionella bedömning med utgångspunkt i risk och väsentlighet. Det innebär att vi fokuserar granskningen på sådana åtgärder, områden och förhållanden som är väsentliga för verksamheten och där avsteg och överträdelser skulle ha särskild betydelse för bolagets situation. Vi går igenom och prövar fattade beslut, beslutsunderlag, vidtagna åtgärder och andra förhållanden som är relevanta för vårt uttalande om ansvarsfrihet. Som underlag för vårt uttalande om styrelsens förslag till dispositioner beträffande bolagets vinst eller förlust har vi granskat styrelsens motiverade yttrande samt ett urval av underlagen för detta för att kunna bedöma om förslaget är förenligt med aktiebolagslagen.

Malmö 18/6 2025

Ernst & Young AB

Pia Anell

Pia Anell
Auktoriserad revisor



Universal Registration Document 2024

including the Annual Financial Report

TotalEnergies

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TotalEnergies

Universal Registration Document 2024
including the Annual Financial Report

"I certify, that the information contained in this Document d'enregistrement universel (Universal Registration Document) is in accordance with the facts and makes no omission likely to affect its import.

I certify, to the best of my knowledge, that the Statutory and Consolidated Financial Statements of TotalEnergies SE (the Corporation) have been prepared in accordance with applicable set of accounting standards and give a true and fair view of the assets, liabilities, financial position and profit and loss of the Corporation and of all the entities included in the consolidation, and that the rapport de gestion (management report) of the Board of Directors as referenced in the cross-reference list included on page 673 of this Document d'enregistrement universel (Universal Registration Document) presents a fair view of the development and performance of the business and financial position of the Corporation and of all the entities included in the consolidation, taken as a whole, and describes the principal risks and uncertainties they face and that it has been prepared in accordance with applicable sustainability reporting standards."

On March 31, 2025

Patrick Pouyanné
Chairman and Chief Executive Officer

AUTORITÉ DES MARCHÉS FINANCIERS
AMF

This Universal Registration Document was filed on March 31, 2025 with the French Financial Markets Authority (Autorité des marchés financiers), as the competent authority under Regulation (EU) 2017/1129, without prior approval in accordance with Article 9 of said Regulation.

This Document d'enregistrement universel (Universal Registration Document) may be used for the purposes of a public offer of financial securities or the admission of financial securities to trading on a regulated market only if supplemented by a transaction note and, if applicable, a summary and all amendments to the Document d'enregistrement universel (Universal Registration Document). The group of documents then formed is approved by the French Financial Markets Authority in accordance with Regulation (EU) 2017/1129.

This Universal Registration Document is a reproduction in PDF format, translated into english, of the official version of the Universal Registration Document established in format XHTML filed with the AMF on March 31, 2025 and available on the AMF website. This reproduction is available on our website totalenergies.com.

This document has not been approved by the UK Financial Conduct Authority and does not constitute a Universal Registration Document within the meaning of applicable UK law.

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1.1 TotalEnergies at a glance

1.1.1 An integrated energy company

TotalEnergies is a global integrated energy company that produces and markets energies: oil and biofuels, natural gas, biogas and low-carbon hydrogen, renewables and electricity. Our more than 100,000 employees are committed to provide as many people as possible with energy that is more reliable, more affordable and more sustainable. Active in about 120 countries, TotalEnergies places sustainability at the heart of its strategy, its projects and its operations.

VALUES ANCHORED IN OUR DAILY ACTIVITIES

Safety, Respect for Each Other, Pioneer Spirit, Stand Together and Performance-Minded are what drive us. These values guide daily the actions and relations of the Company with its stakeholders.

These five values also require all of TotalEnergies' employees to behave in an exemplary manner. Priority is given to safety, security, health, the environment, integrity in all its forms (including the fight against corruption, fraud and anti-competitive practices) and human rights.

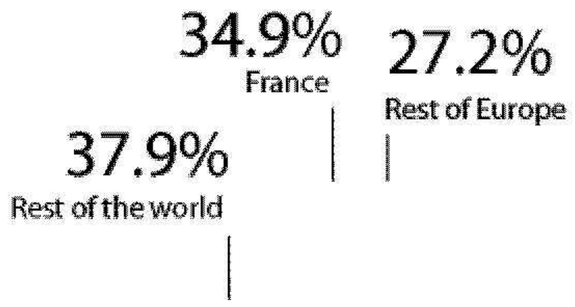
It is through the strict adherence of our employees to these values and to this course of action that our Company intends to build strong and sustainable growth for ourselves and for all of our stakeholders.

In this way, we deliver on our commitment to better energy.

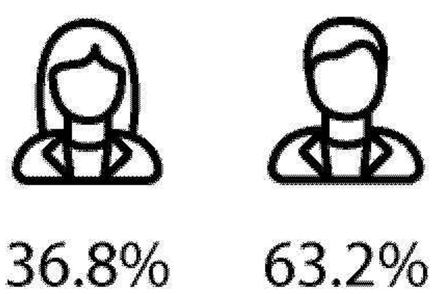
OUR PROFILE

Our employees

Employees breakdown by geographical area



Employees breakdown by gender



- **102,887** employees
- Nearly **170 nationalities**
- More than **513,000 days** of training
- More than **400 talent developers** to help employees along their professional development path

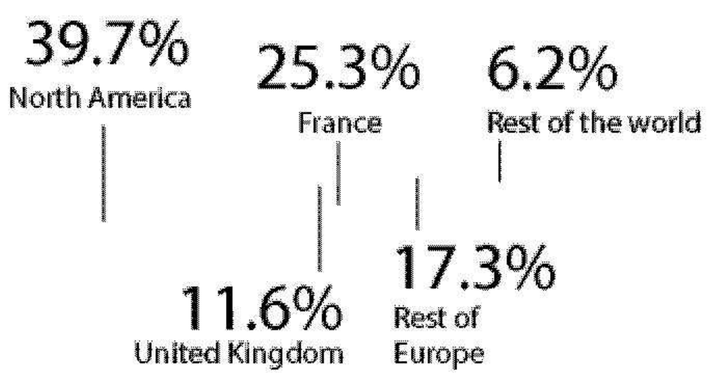
- **$9.5 billion** payroll (including social security charges)
- More than **€220 M** for training
- **92.7%** of employees on permanent contracts, and women account for **42.2%** of employees hired on permanent contracts
- **85.3%** of employees hired by the Company and **66.1%** of managers hired were non-French nationals

Workforce as of December 31, 2024: 102,887

Our shareholders

Shareholding structure by geographical area [1]

Estimate as of December 31, 2024, based on the request for the identification of shareholders made on that date, pursuant to Article L. 228-2 of the French Commercial Code.



Shareholding structure by shareholder type [1]

Estimate as of December 31, 2024, based on the request for the identification of shareholders made on that date, pursuant to Article L. 228-2 of the French Commercial Code.



(1) Excluding treasury shares.

(2) On the basis of employee shareholding as defined in Article L. 225-102 of the French Commercial Code and Article 11 paragraph 6 of the Articles of Association of the Corporation.

Our climate ambition: ANNUAL REPORT ON CARBON NEUTRALITY BY 2050, together with society

OUR 2024 KEY FIGURES

Financial indicators[1]

$18.3 billion
Adjusted net income (TotalEnergies share)

$15.8 billion
Net income (TotalEnergies share)

15.8%
Return on equity (ROE)

14.8%
Return on average capital employed (ROACE)

$29.9 billion
Cash flow from operations excluding working capital (CFFO)

€3.22
Dividend per share for the fiscal year 2024[2]

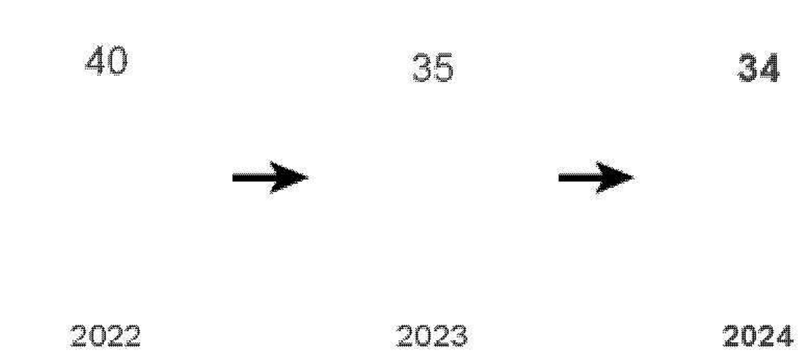
8.3%
Gearing ratio[3]

$17.8 billion
Net investment ($4.8 billion for low-carbon energies mainly in power)

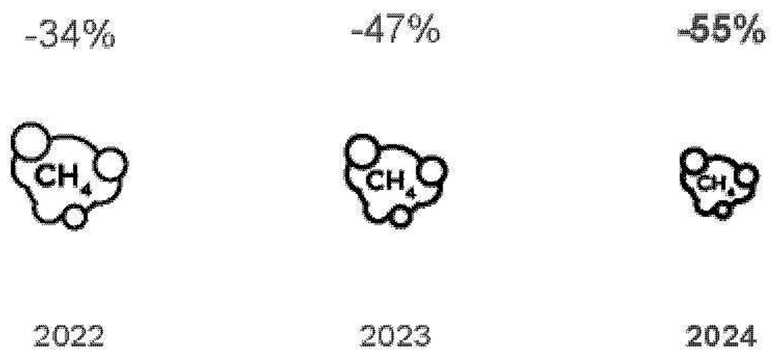
$25.4/b
Pre-dividend organic cash breakeven

Extra-financial indicators

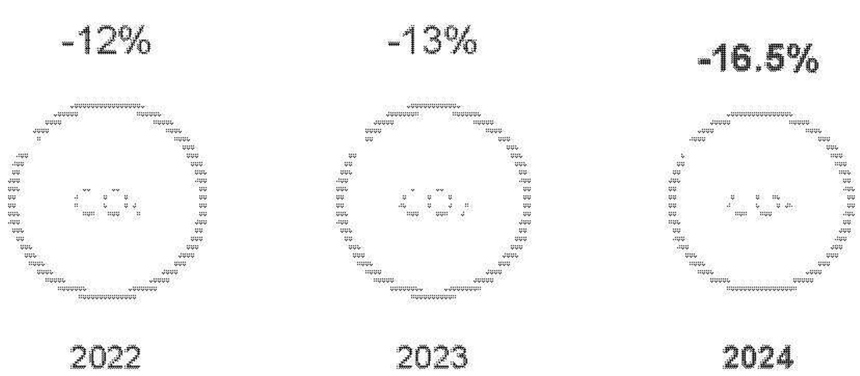
Greenhouse gas (GHG) emissions Scope 1+2 from operated facilities *(Mt CO_2 e)*



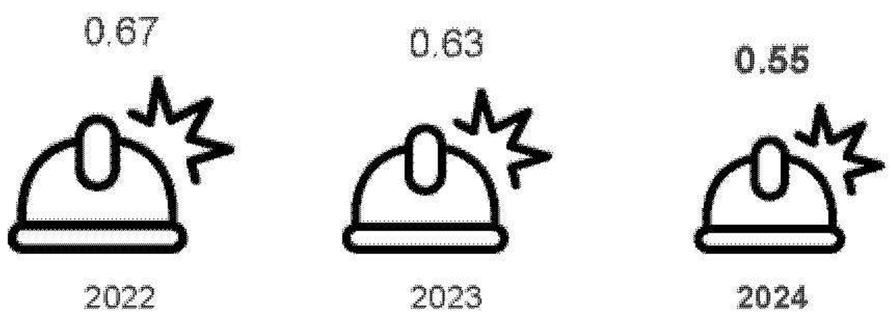
Methane emissions from operated facilities *(vs 2020)*



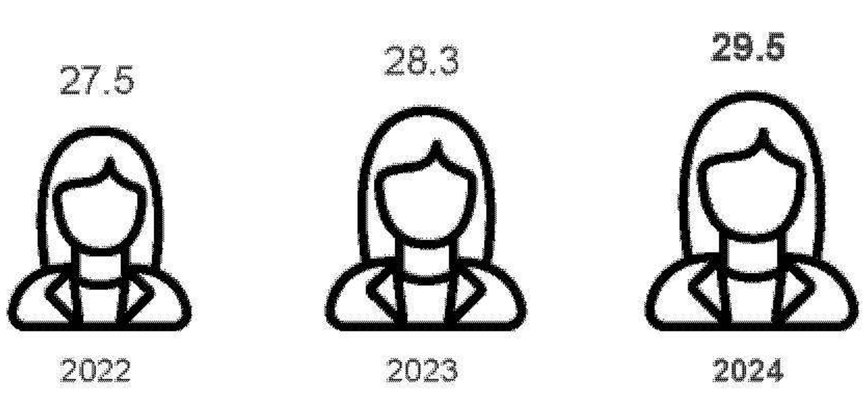
Carbon intensity of energy products sold *(vs 2015)*



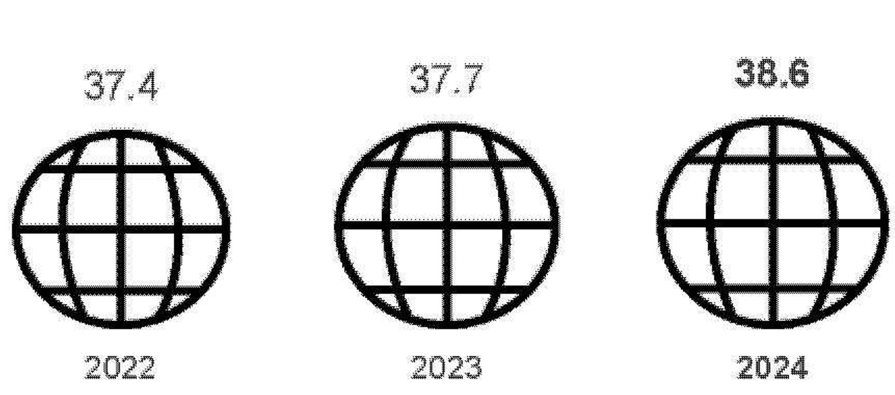
Total recordable injury rate



Share of women among senior executives *(%)*

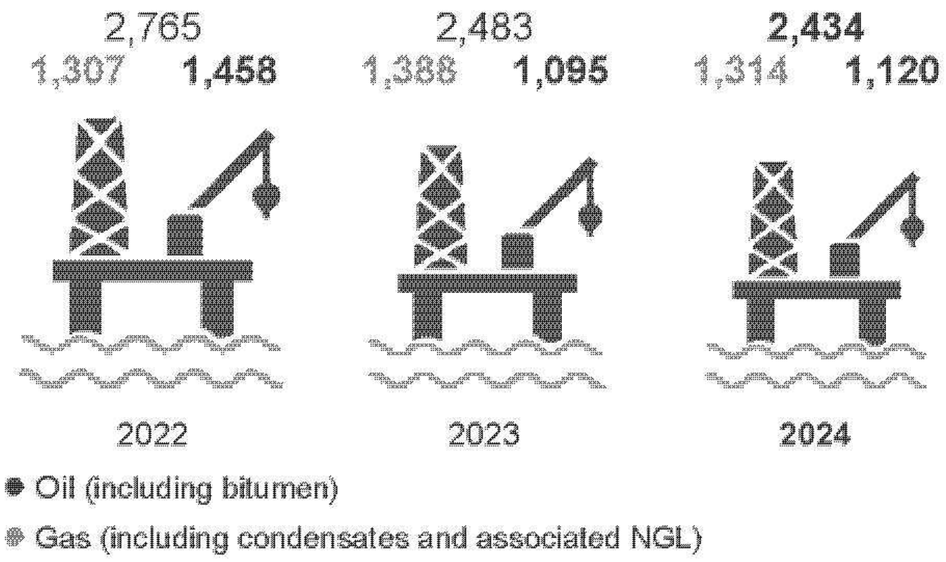


Share of non-French nationals among senior executives *(%)*

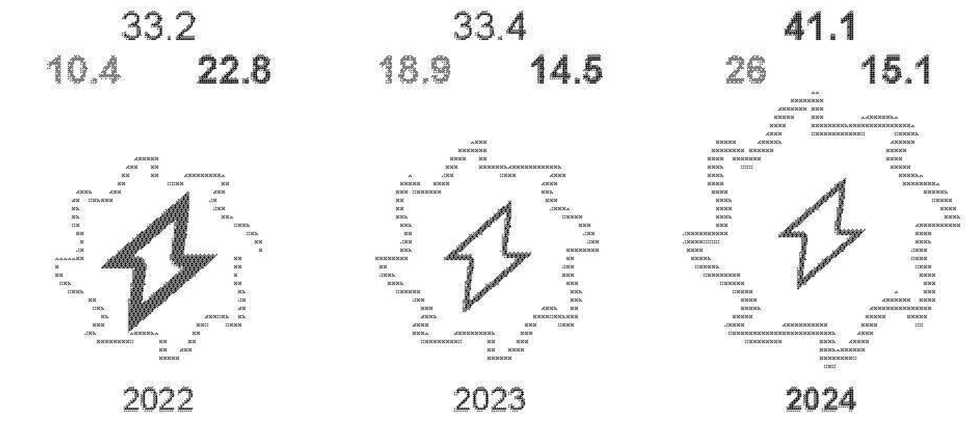


(1) Refer to the glossary for definitions and additional information on alternative performance measures (APM, Non-GAAP measures) and to point 1.9 for reconciliation tables.
(2) Subject to approval by the Shareholders' Meeting on May 23, 2025.
(3) Excluding leases; 13.8% including leases.

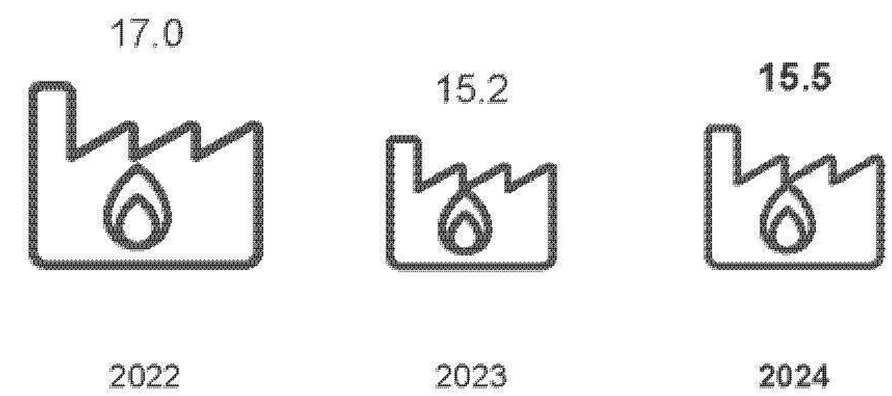
Hydrocarbon production[1]
(kboe/d)



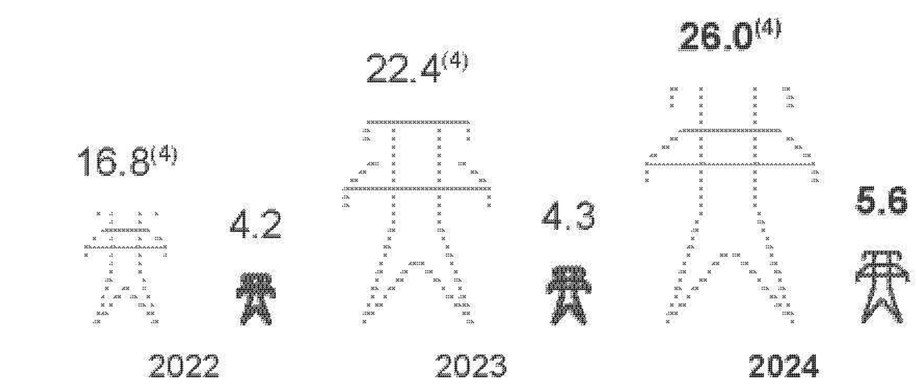
Net power production[2]
(TWh)



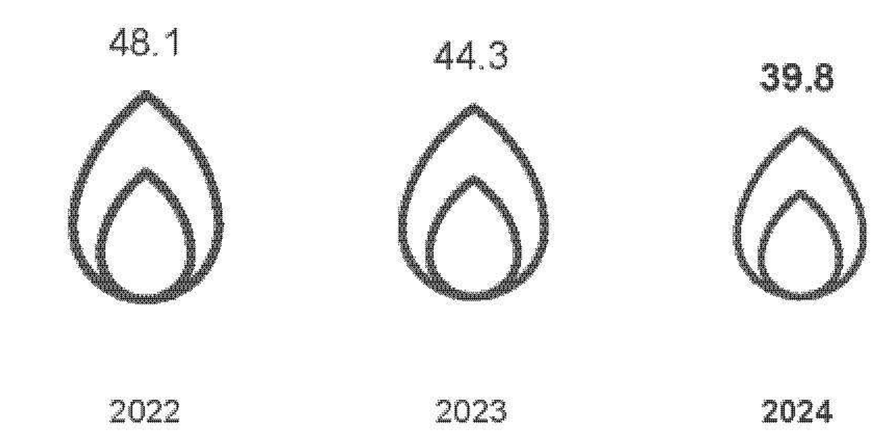
LNG production
(Mt)



Gross installed power generation capacities at year-end 2024[3] *(GW)*



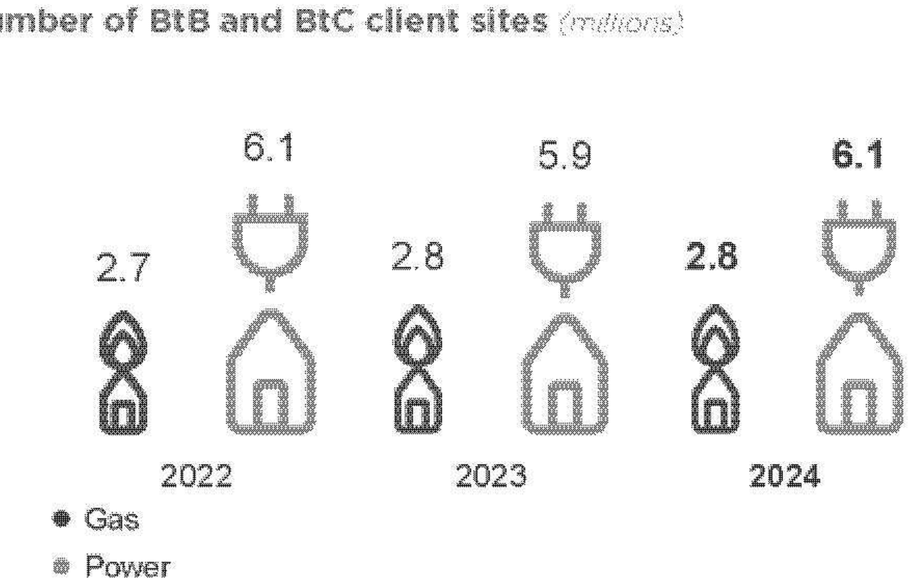
LNG sales volumes
(Mt)



Portfolio of gross renewable power generation capacities at year-end 2024[4] *(GW)*



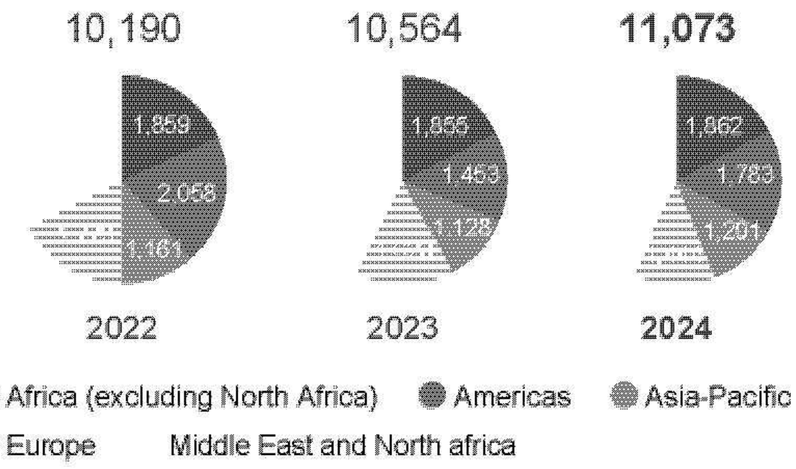
Gas and power sales - number of BtB and BtC client sites *(millions)*



(1) Company production = E&P production + Integrated LNG production.
(2) Solar, wind, hydroelectric and gas flexible capacities.
(3) Excluding combined-cycle gas plant in Taweelah, United Arab Emirates.
(4) Includes 20% of Adani Green Energy Ltd's gross capacity, 50% of Clearway Energy Group's gross capacity effective third quarter 2022, and 49% of Casa dos Ventos' gross capacity effective first quarter 2023.

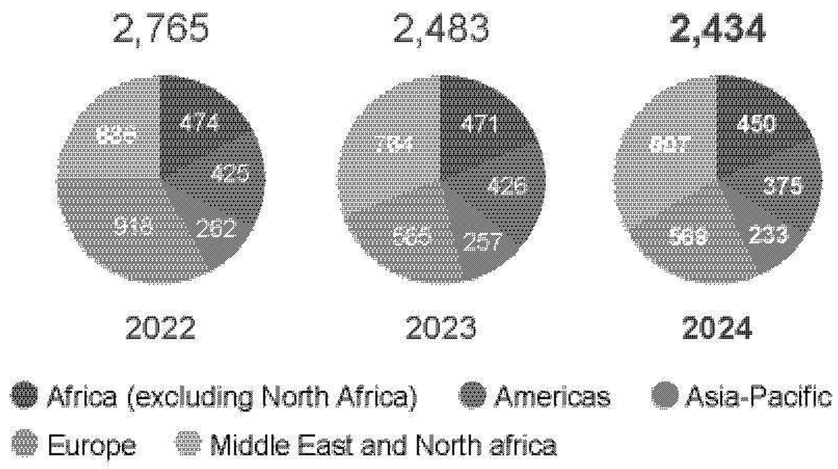
Hydrocarbon proved reserves[1] by geographic areas

(Mboe)



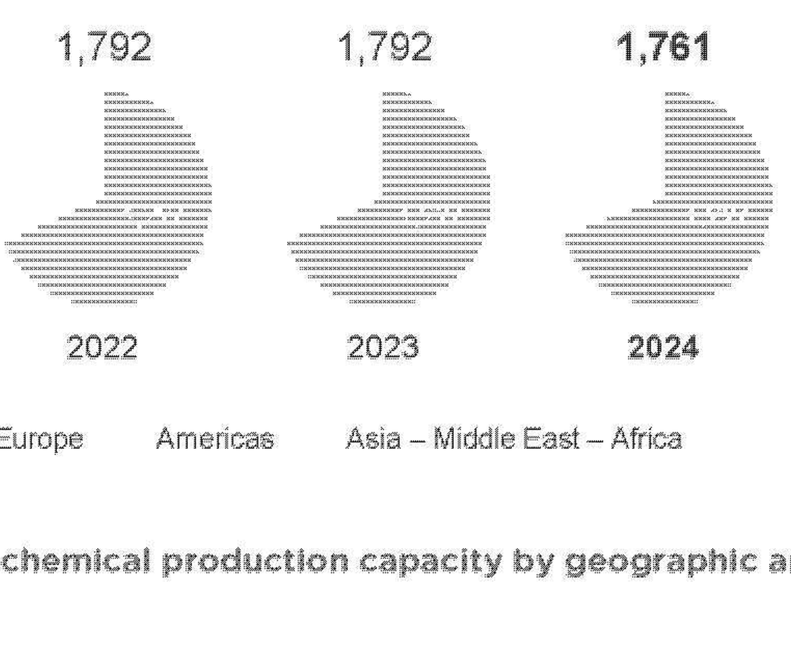
Hydrocarbon production by geographic area

(kboe/d)



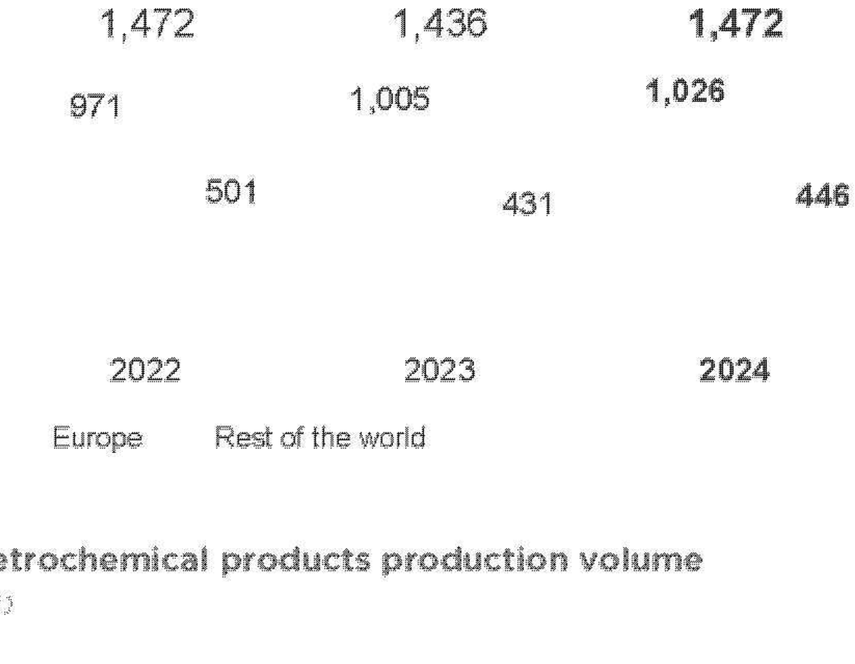
Crude oil refining capacity[2]

(kb/d)



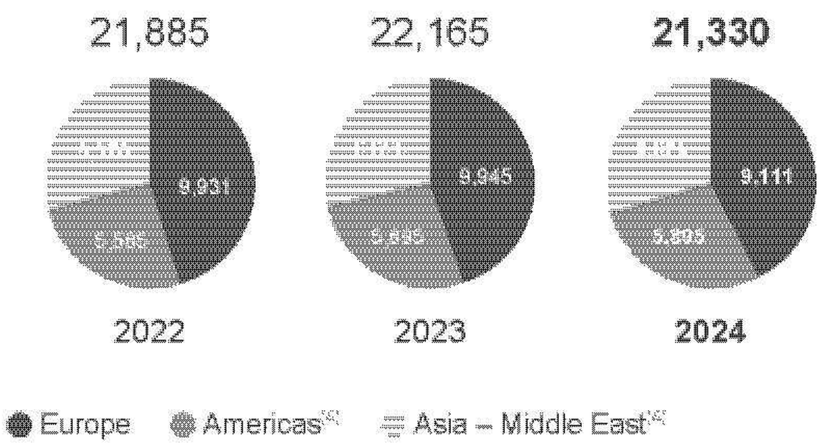
Refinery throughput

(kb/d)



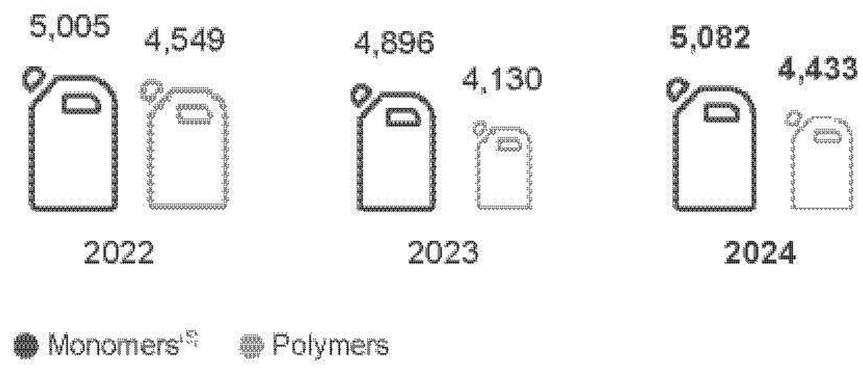
Petrochemical production capacity by geographic area

(kt)

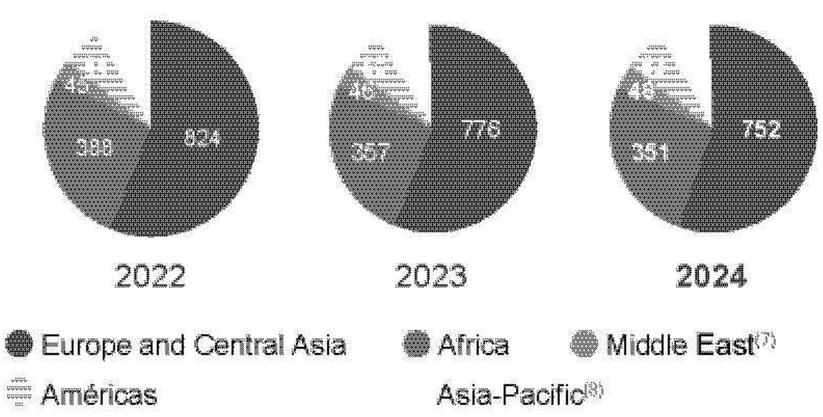


Petrochemical products production volume

(kt)



Marketing & Services[6] petroleum product sales by geographic area *(kb/d)*



Production of biofuels

(kt)



(1) Based on SEC rules (Brent at $81.17/b in 2024, $83.27/b in 2023 and $101.24/b in 2022).
(2) Capacity data based on crude distillation unit stream-day capacities under normal operating conditions, less the average impact of shutdowns for regular repair and maintenance activities.
(3) Including 50% of the joint-venture between TotalEnergies and Borealis.
(4) Including interests in Qatar, 50% of the capacities of Hanwha TotalEnergies Petrochemical Co. Limited and 37.5% of SATORP in Saudi Arabia.
(5) Olefins.
(6) Excluding trading and bulk refining sales.
(7) Including Turkey.
(8) Including Indian Ocean islands.

1.1.2 Our history

The Company was founded on March 28, 1924. Ever since it took its first steps in oil production in Iraq back in 1927, the Company has continually transformed and forged a reputation for its pioneering spirit, whether extending its geographical reach or innovating and pushing back the boundaries of technology. This ability to constantly adapt has also been demonstrated over the years through its successful partnerships with such companies as Petrofina, Elf Aquitaine and, more recently, Saft, Mærsk Oil and Direct Energie.

In an effort to meet the challenges of a largely net zero future, the Company is pursuing a new strategy to become an integrated energy company by developing its activities in electricity, mainly renewables, which will play a key role in the energy system of tomorrow's world.

By changing its name to TotalEnergies in 2021, the Company has ensured that its identity reflects the strong ambition driving the Company, and is committed to a balanced transition strategy for the benefit of the energy transition. The pioneering spirit that has powered it since day one continues to guide it in achieving this transition.

1924 to 1945

The beginnings

1924
Creation of the Compagnie Française des Pétroles (CFP).

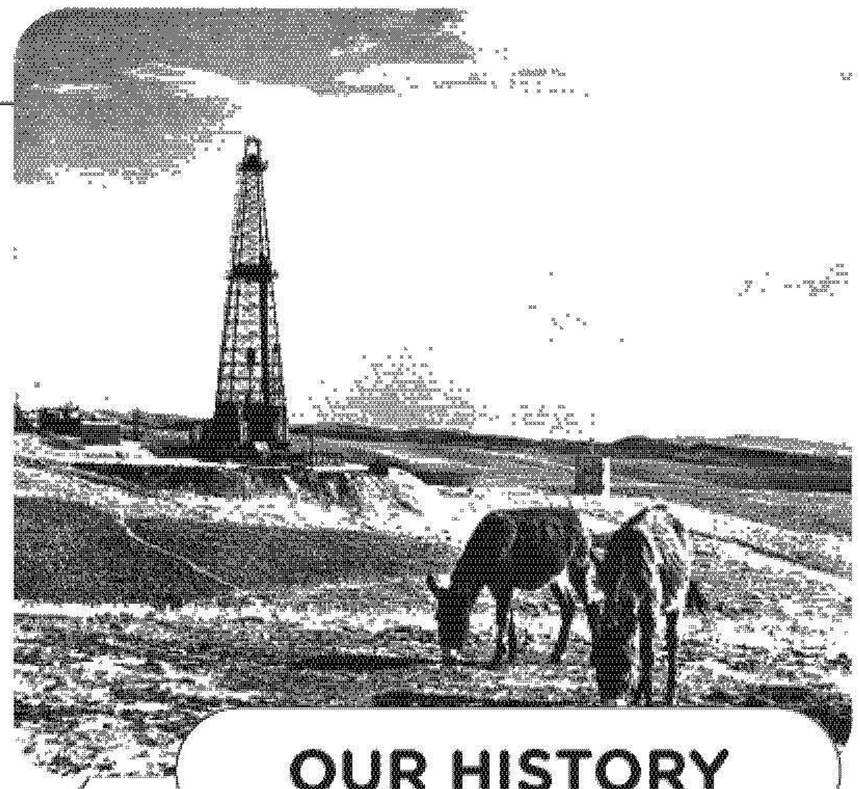
1927
Initial discovery at the Kirkuk field in Iraq.

1929
Listing of CFP shares on the Paris Stock Exchange.

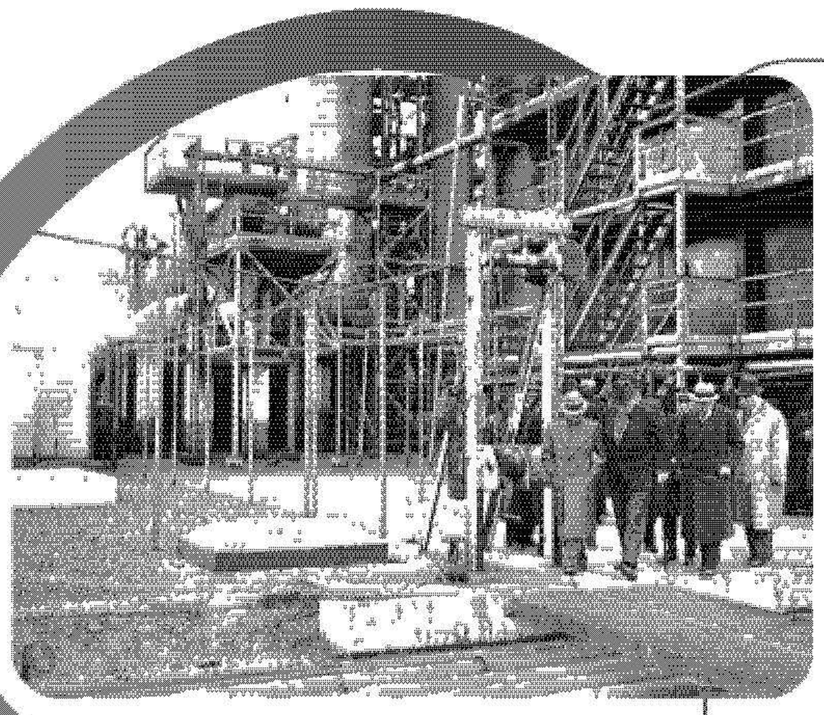
1933
Production start-up at the Gonfreville refinery in Normandy (France).

1939
Discovery of the Saint-Marcet gas field, the first hydrocarbon reserves found in France.

1941
Creation of Société Nationale des pétroles d'Aquitaine (SNPA).



OUR HISTORY



1945 to 1970

Towards an integrated model

1951
SNPA discovers the Lacq gas field in France.

1954
CFP launches the Total brand. Creating our own distribution network.

1956
Discovery of the Edjeleh, Hassi R'Mel (gas) and Hassi Messaoud (oil) fields in the Algerian Sahara.

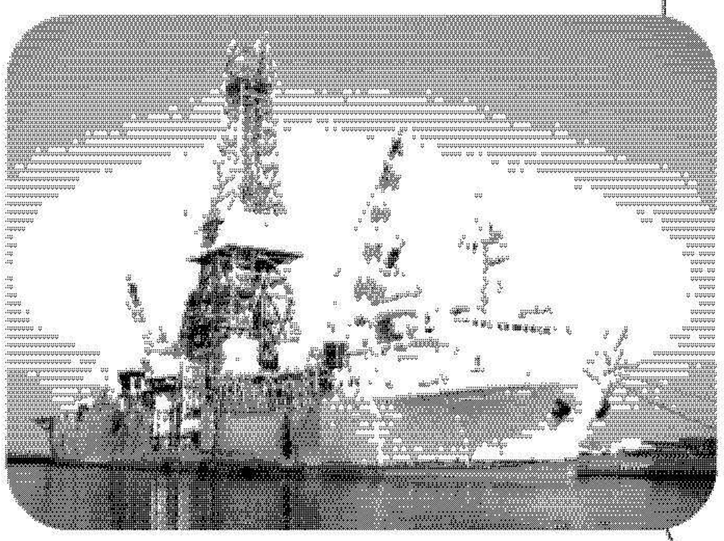
1958
First offshore well on Umm Shaif (Abu Dhabi).

1961
Discovery of the first offshore fields in Gabon.

1964
Inauguration of the Feyzin Refinery.

1971 to 1997

A new era



1971
Production start-up at the Ekofisk field in the North Sea.

1974
The Group acquires Hutchinson-Mapa.

1976
Creation of Société Nationale Elf Aquitaine (SNEA).

1982
A new world record for CFP with the drilling of a deepwater well to a depth of 1,714 meters in the Mediterranean Sea.

1991
CFP becomes Total.

1996
Discovery in Angola of one of the biggest offshore oil fields in the world.

2005 - today

From Total to TotalEnergies: committed to the energy transition

Pioneers for 10 years

2011
Investment in the solar energy sector with the acquisition of 60% of the US company SunPower.

2016
Total acquires Saft Groupe.

2018
Total announces the completion of the acquisition of Direct Energie.

Total acquires Engie's LNG business and becomes the world's number two liquefied natural gas player.

Total acquires exploration and production company Mærsk Oil & Gas A/S.

2020
Total announces its ambition of carbon neutrality by 2050, together with society.

2021
Total becomes TotalEnergies.

2023
TotalEnergies becomes an operator again in Iraq thanks to a multi-energy project (oil, gas, electricity).

2024
The Company celebrates its centenary.



1998 to 2004

United for success - the consolidation

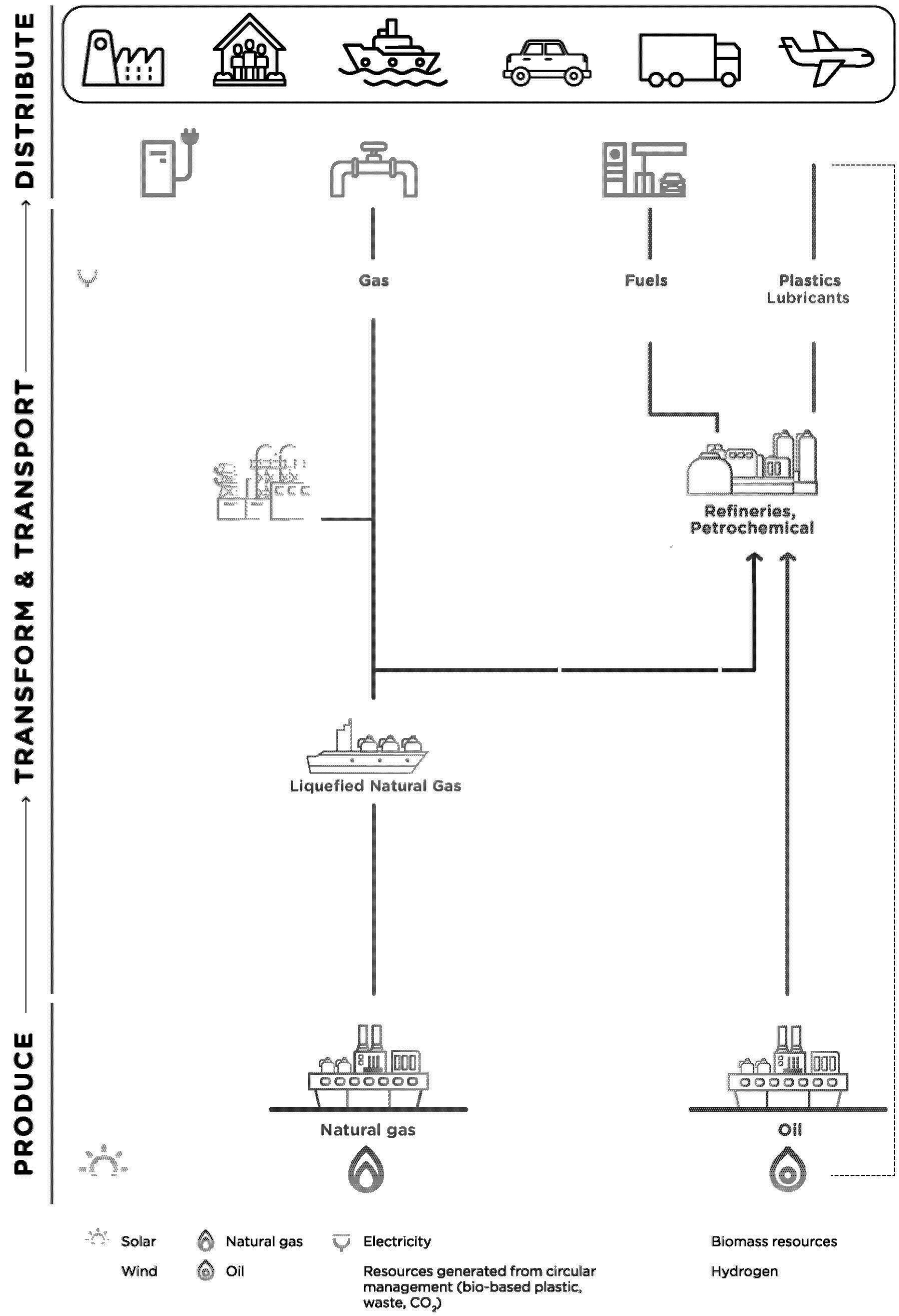
2000
Total merges with Petrofina and Elf Aquitaine.

2001
Production start-up at the Girassol field on Block 17 in Angola starts production.

2003
TotalFinaElf changes its name to Total.

1.1.3 Our business model

Integrated value chain



Resources and ecosystem

Proven expertise

- **102,887** employees
- Close to **170** nationalities
- More than **513,000** days of training
- More than **400** talent developers to help employees along their professional development path

A responsible innovation

- R&D budget: **$805 million**
- **15** R&D centers worldwide
- More than **250** patent applications in 2024

Top-tier industrial and commercial assets

- **26.0 GW**[1] of gross installed renewable power generation capacities
- Close to **78,000** operated and supervised EV charging points
- Proved reserves of **11.1 Bboe** and hydrocarbon production of **2,434 kboe/d**
- **14** refineries including **1** biorefinery (La Mède); 1 biorefinery currently being converted (Grandpuits)
- **26** petrochemical sites including **6** integrated platforms (refining-petrochemicals)
- **84** specialty chemicals production sites
- **38** production sites operated (lubricants and greases)
- More than **13,000** service stations in approximately **60** countries

Solid financials

- Cash flow from operations excluding working capital (CFFO): **$29.9 billion**
- Net investments: **$17.8 billion**
- Gearing ratio (excluding leases): **8.3%**
- Pre-dividend organic cash breakeven: **$25.4/b**

Geographic reach

- Present in about **120** countries
- Hydrocarbon exploration and production in about **50** countries

Environment

- Fresh water withdrawal: **92 Mm³** (ESRS perimeter)[3]
- Net primary energy consumption: **156 TWh** (operated perimeter)

Shared value creation

Employees

- **$9.5 billion** payroll (including social security charges)
- More than **€220 million** for training
- **92.7%** of employees on permanent contracts and women account for **42.2%** of employees hired on permanent contracts
- **85.3%** of employees hired by the Company and **66.1%** of managers hired were non-French nationals

Customers

- Sales: **$215 billion**
- 3rd largest LNG player worldwide with **39.8 Mt** of LNG sold in 2024, including **15.5 Mt** from equity production of the Company
- **41.1 TWh** of net power production, including **26 TWh** from renewable sources
- **98.6 TWh** of gas delivered to **2.8 million** BtB and BtC clients sites
- **50.7 TWh** of power delivered to **6.1 million** BtB and BtC clients sites
- More than **10,000** patents in force worldwide

Suppliers

- **$31 billion** worth of purchases of goods and services, from a network of more than **100,000** suppliers, supporting hundreds of thousands of direct and indirect jobs worldwide

Shareholders

- **$7.7 billion** distributed as dividends[2]
- More than **1.8 million** individual shareholders
- More than **70%** of employees are shareholders

Communities

- Fostering social and economic development in host countries with contributions amounting to **$10,212 million** in income tax, **$11,783 million** in production taxes paid by EP activities, **$2,396 million** in employer social charges and **$18,940 million** in excise taxes
- A global integrated local development approach (in-country value)

Climate

- Reducing GHG emissions (Scope 1+2) from operated facilities from 46 Mt CO_2e in 2015 to **34 Mt CO_2e** in 2024
- Reducing methane emissions[4] from operated facilities by **50%** between 2010 and 2020 and by **55%** between 2020 and 2024
- Scope 3[5] GHG emissions at **342 Mt CO_2e** in 2024, below the level of 2015
- Reducing Scope 3 GHG emissions of the petroleum products sold worldwide by **38%** in 2024, compared to 2015
- Reducing life carbon intensity[6] of energy products sold by **16.5%** between 2015 and 2024

Data as of December 31, 2024.

(1) Includes 20% of Adani Green Energy Ltd's gross capacity, 50% of Clearway Energy Group's gross capacity effective third quarter 2022 and 49% of Casa dos Ventos' gross capacity effective first quarter 2023.
(2) Excluding dividends paid to non-controlling minority interests.
(3) As defined in point 5.1.1.1 of chapter 5.
(4) Excluding biogenic methan.
(5) GHG Protocol – Category 11 (refer to the glossary).
(6) Lifecycle carbon intensity of energy products sold (refer to the glossary).

1.2 Our transition strategy

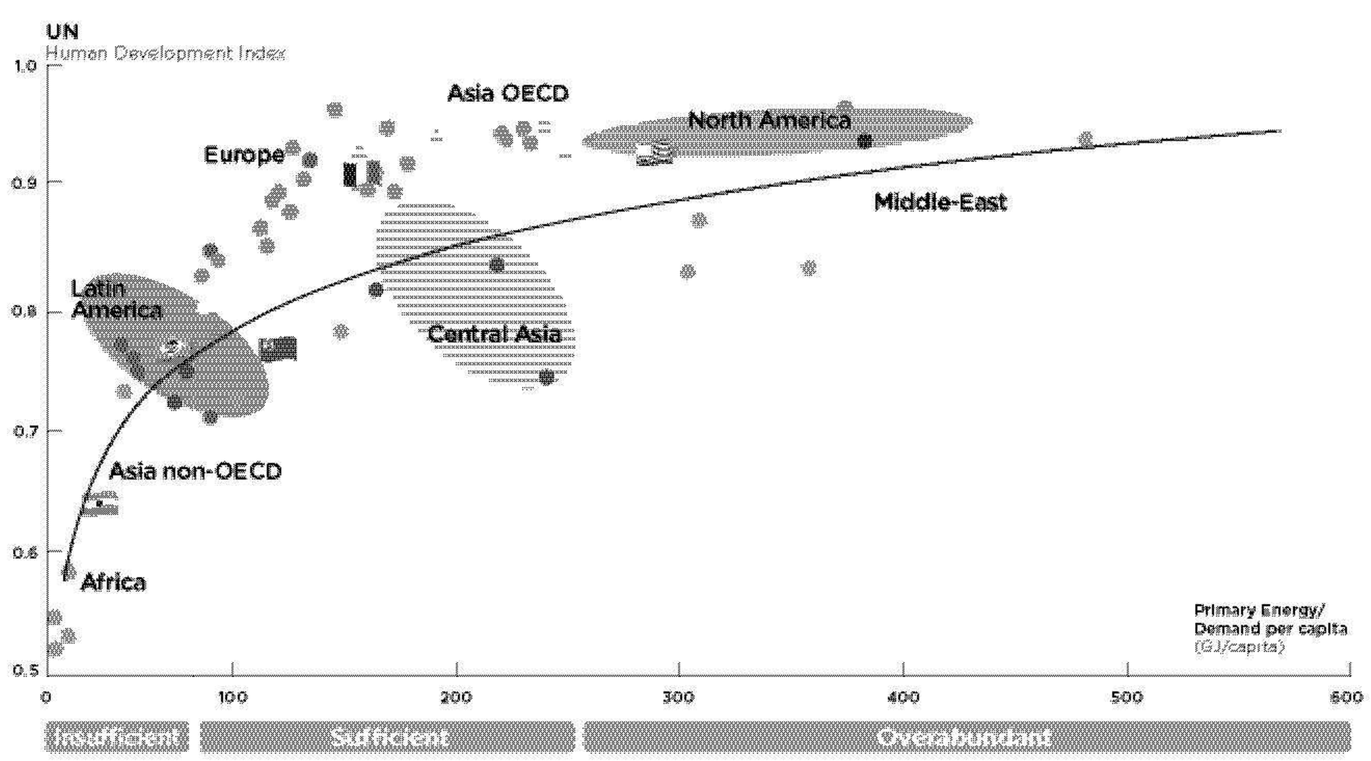
1.2.1 Global challenges: more energy, less emissions

Since the Paris Agreement in 2015, states have made a joint commitment *"to strengthen the global response to the threat of climate change, in the context of sustainable development and the fight against poverty, including by containing the rise in global average temperature to well below 2°C above pre-industrial levels and continuing action to limit the rise in temperature to 1.5°C above pre-industrial levels."*

TotalEnergies supports the objectives of the Paris Agreement and is deploying a strategy to meet the needs of both development and energy transition: more energy and less emissions.

More energy to fuel human development

Energy access and human development index



Access to energy is essential for human development. The figure above, adapted from the work of energy historian Vaclav Smil, shows that the human development index increases with the energy available per capita. The available energy must exceed the threshold of 70 GJ/capita to reach an index level deemed sufficient.

Today, around 4.5 billion people live below this threshold. Getting them there today would require a 3-fold increase in the energy available to them. By 2050, taking into account the demographic growth of these populations, the energy available will have to be multiplied by 4.

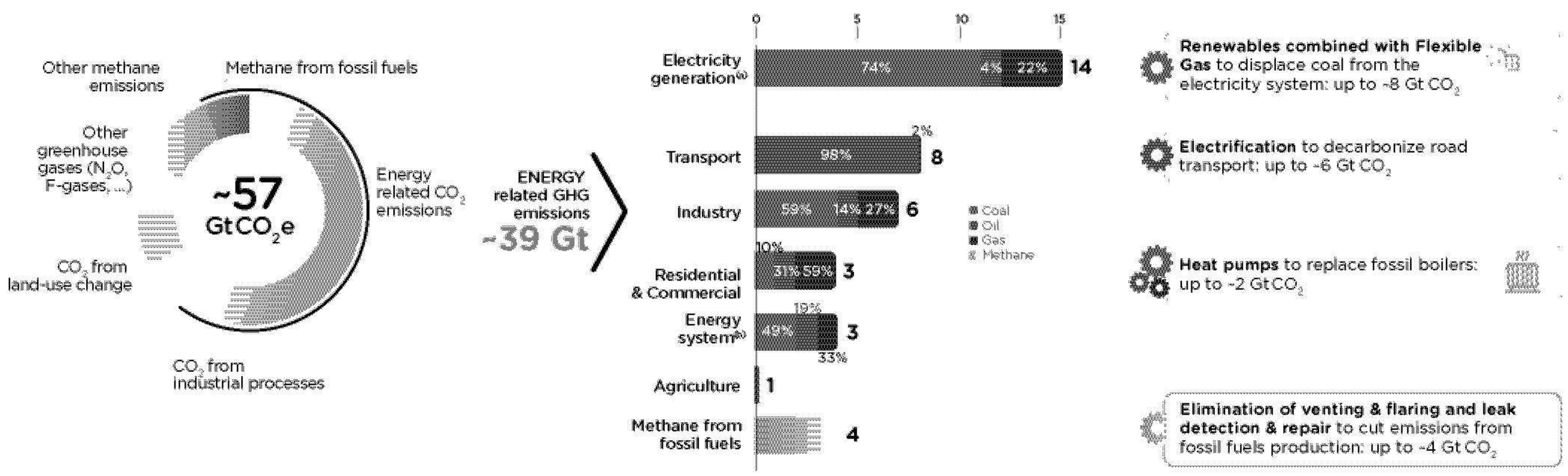
Recent history shows that such an increase is possible: between 2000 and 2022, China increased its available energy per capita by a factor of 3, from -40 to -120 GJ/capita, lifting ~800 million people out of poverty. This historic economic and social development resulted from the massive exploitation of coal, an abundant and often cheap source of domestic energy.

The challenge of the energy transition is therefore twofold: (i) to decarbonize the "mature" energy systems of developed countries, and (ii) to increase the energy available in the Global South and India by fuelling economic and social development with low-carbon electricity rather than coal.

Less emissions

Global anthropogenic GHG emissions in 2023 (Gt CO_2e)

AVAILABLE TECHNOLOGIES TO REDUCE GHG EMISSIONS AND THEIR POTENTIAL IMPACT



(a) Including heat combined with power.
(b) Includes energy sector own use, transport losses and energy transformation. Sources: IEA, Enerdata, TTE analysis. "Methane from fossil fuels", includes methane emissions from the production and transport of fossil fuels.

In 2023, GHG emissions from the energy system accounted for 39 billion tonnes of the 57 billion tonnes of anthropogenic GHG emissions. Burning coal to produce electricity is the biggest contributor, at around 10 Gt CO_2, followed by using oil for transport, at around 8 Gt.

The global deployment of mature and competitive low-carbon technologies would make it possible to eliminate around 20 of these 39 Gt:

- solar and wind – and natural gas to ensure the long-term balancing of the system – to produce electricity;
- electric vehicles and heat pumps to use it, and
- technologies to reduce methane emissions in the energy system.

Reconciling economic and social development with the fight against climate change requires a pragmatic approach to deploy low-carbon technologies at a global scale, taking into account their cost (cost merit curve) and technological maturity.

1.2.2 A two-pillar multi-energy strategy

TOTALENERGIES STAYS THE COURSE OF ITS BALANCED INTEGRATED MULTI-ENERGY STRATEGY...

TotalEnergies reaffirms the relevance of its balanced integrated multi-energy strategy considering the developments in the oil, gas and electricity markets. Anchored on two pillars, Oil & Gas, notably LNG, and electricity, the energy at the heart of the transition, the Company plans to increase its energy production (hydrocarbons and electricity) by +4% per year between 2024 and 2030 and is in a very favorable position to take advantage of energy prices evolution. Thanks to the refocusing of the Oil & Gas portfolio on assets and projects with low breakeven and low greenhouse gas emissions, and to the diversification into electricity, notably renewable, through an integrated strategy from production to customer, the Company is implementing its transition strategy while ensuring an attractive shareholder return policy.

... RESPONSIBLY PRODUCING LOW COST, LOW EMISSIONS OIL & GAS...

While drastically lowering the emissions of greenhouse gas from its operations, TotalEnergies plans to grow its Oil & Gas production by around 3% per year over the next five years, predominantly from LNG, thanks to its rich low cost, low emission project portfolio which has been the subject of major investment decisions in 2024 to ensure its medium-term growth.

The Company will put more than ten projects into production by 2030 starting from 2025-2026, in oil in the United States, Brazil, Iraq and Uganda and in gas in Argentina, Nigeria, Malaysia, Qatar and Mexico.

In 2027 and 2028, the start-ups of LNG projects will follow in Qatar, the United States, and Oman. At the same time, the Company strengthens its leading position in Europe in regasification and its leading LNG exporter position in the United States.

The oil projects developed, like the liquefaction plant projects, are well positioned on their respective merit curves, enabling them to generate value for the Company, even in a low-price scenario. The key indicator of its progress on this pillar is the reduction in Scope 1+2 emissions of its Oil & Gas assets because its first duty as a producer of hydrocarbons is to reduce the greenhouse gas emissions linked to their production.

... AND DEVELOPING A PROFITABLE AND DIFFERENTIATED INTEGRATED POWER MODEL TO CREATE A FUTURE CASH ENGINE OF THE COMPANY.

TotalEnergies is replicating its integrated Oil & Gas business model into the electricity value chain to achieve a profitability (ROACE[1]) of ~12% for the Integrated Power segment, equivalent to Upstream Oil & Gas ROACE at 60 $/b, above the returns of the traditional Utilities model.

The Company is building a world class cost-competitive portfolio combining renewable (solar, onshore wind, offshore wind) and flexible assets (CCGT, storage) to deliver low-carbon electricity available 24/7. In particular, TotalEnergies is leveraging its scale effect in equipment purchases and digital to lower its operational costs in its renewable assets.

TotalEnergies also uses the strength of its balance sheet to increase its market exposure from 10% in 2024 to 30% in 2030, allowing it to capture additional margins in a volatile market. Finally, the last lever is the recycling of capital through farm-downs of post-development assets in order to reinvest in new projects.

The Company aims to grow its annual power generation to more than 100 TWh (around 70% renewables / 30% flexible) by 2030, investing around $4 billion per year; the generated cash flow of this segment was $2.6 billion in 2024 and will be more than $4 billion in 2028, the Integrated Power segment becoming net cash-flow positive at that time.

Additionally, TotalEnergies plans to invest in a targeted manner in low-carbon molecules (biofuels, SAF and biogas, as well as hydrogen and its derivatives: e-fuels) as part of an "equity light" business model with partners.

The key indicator of its progress to measure our transition towards low-carbon energy products is the lifecycle carbon intensity[2] of the energy products used by the Company's customers. The reduction in carbon intensity reflects the lower carbon content of the energy sold to our customers and the Company's progress in implementing its transition strategy. This intensity decreased by 16.5% between 2015 and 2024.

1.2.3 2030: Our objectives for more energy and less emissions

Over the decade 2020-2030, TotalEnergies' energy transition strategy based on two pillars is reflected in the production targets shown below.

TotalEnergies plans to **increase its energy production (oil, gas and electricity), overall by 4% per year between 2024 and 2030.**

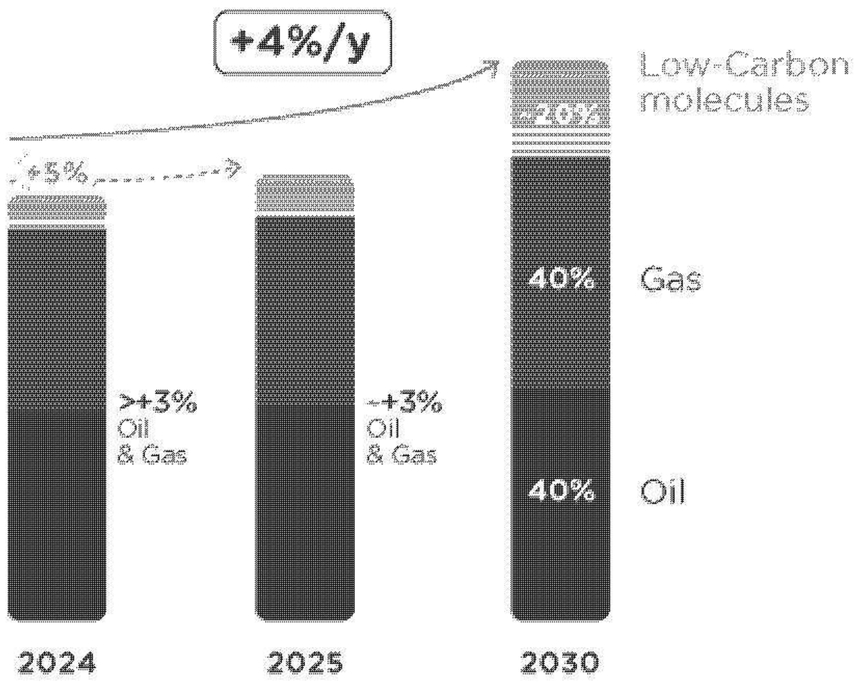
In 2025, the electricity production should account for 10% of its hydrocarbon production. By 2030, its objective is to increase it to nearly 20%.

At the same time, the Company is pursuing its trajectory of reducing its emissions (Scope 1+2 CO_2 and methane) from its operated facilities with a view to reducing net emissions by 40% compared with 2015.

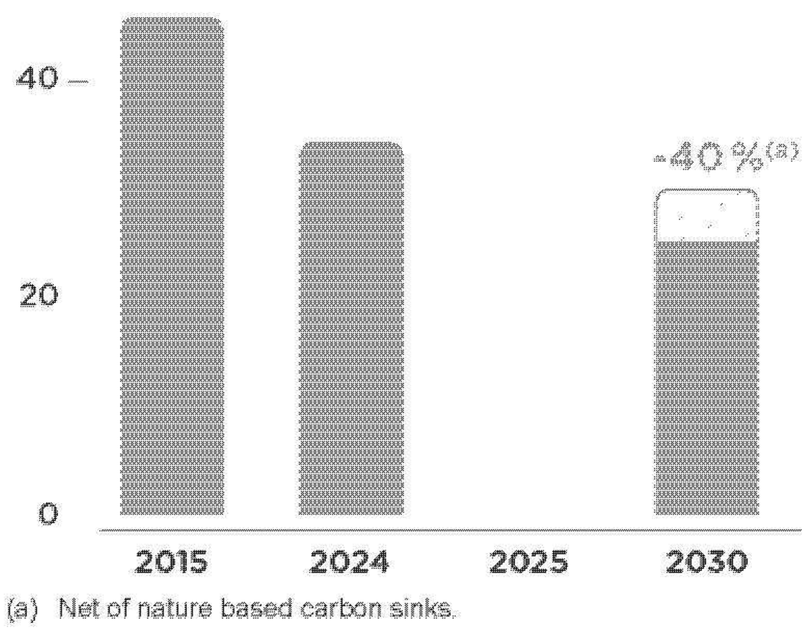
The growth of its electricity sales allows it to target a 25% reduction in the lifecycle[3] carbon intensity of our sales by 2030 compared to 2015.

(1) Refer to the glossary for definitions and additional information on alternative performance measures (APM, Non-GAAP measures) and to point 1.9 for reconciliation tables.
(2) Lifecycle carbon intensity of energy products sold (refer to the glossary).
(3) Lifecycle carbon intensity of energy products sold (refer to the glossary).

Energy Production (in PJ/d)

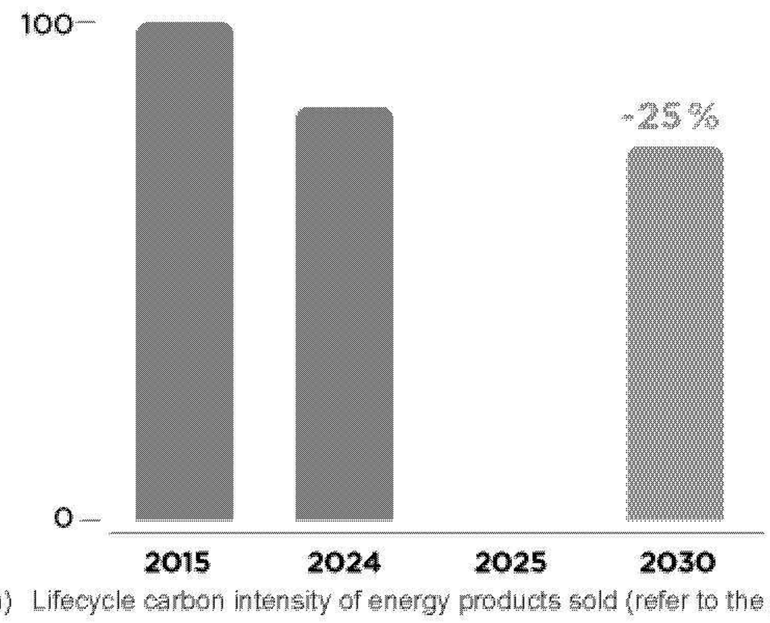


GHG Emissions, Scope 1+2 from TotalEnergies' operated facilities (Mt CO_2e)



(a) Net of nature based carbon sinks.

Lifecycle carbon intensity of the petroleum products sold[a] (Scope 1+2+3, base 100 in 2015)



(a) Lifecycle carbon intensity of energy products sold (refer to the glossary).

1.2.4 Our ambition of carbon neutrality by 2050, together with society

The energy transition is underway and the growth in renewable electricity production across the world is paving the way for the decarbonization of energy. However, energy demand trajectories are still a long way from the scenarios compatible with the Paris Agreement.

The energy transition requires the participation of all stakeholders, from regulators to end customers, and industrial players. TotalEnergies is deploying a strategy that supports this collective transition and will enable our Company to adapt to the different scenarios that may materialize, depending on developments in low-carbon technologies (adoption rate, cost reduction), geopolitical relations and international trade and consumer behavior. In a scenario where low-carbon electrification continues to grow, both in power generation and uses, and which would enable an affordable low-carbon molecules on a large scale, TotalEnergies shares a possible vision of what its own activities could be as part of its ambition of carbon neutrality by 2050, together with society.

By 2050, TotalEnergies would produce:

- about 50% of its energy in the form of electricity, including the corresponding storage capacity, totaling around 500 TWh/year, on the premise that TotalEnergies would develop about 400 GW of gross renewable capacity;
- about 25% of its energy, equivalent to 50 Mt/year of low-carbon energy molecules in the form of biogas, hydrogen, or synthetic liquid fuels from the circular reaction: $H_2 + CO_2 \rightarrow$ *e-fuel;*
- around 1 Mboe/day of Oil & Gas, primarily liquefied natural gas (about 0.7 Mboe/d, or 25-30 Mt/year) with very low-cost oil accounting for the rest. Most of that oil would be used in the petrochemicals industry to produce about 10 Mt/ year of polymers, of which two thirds would come from the circular economy.

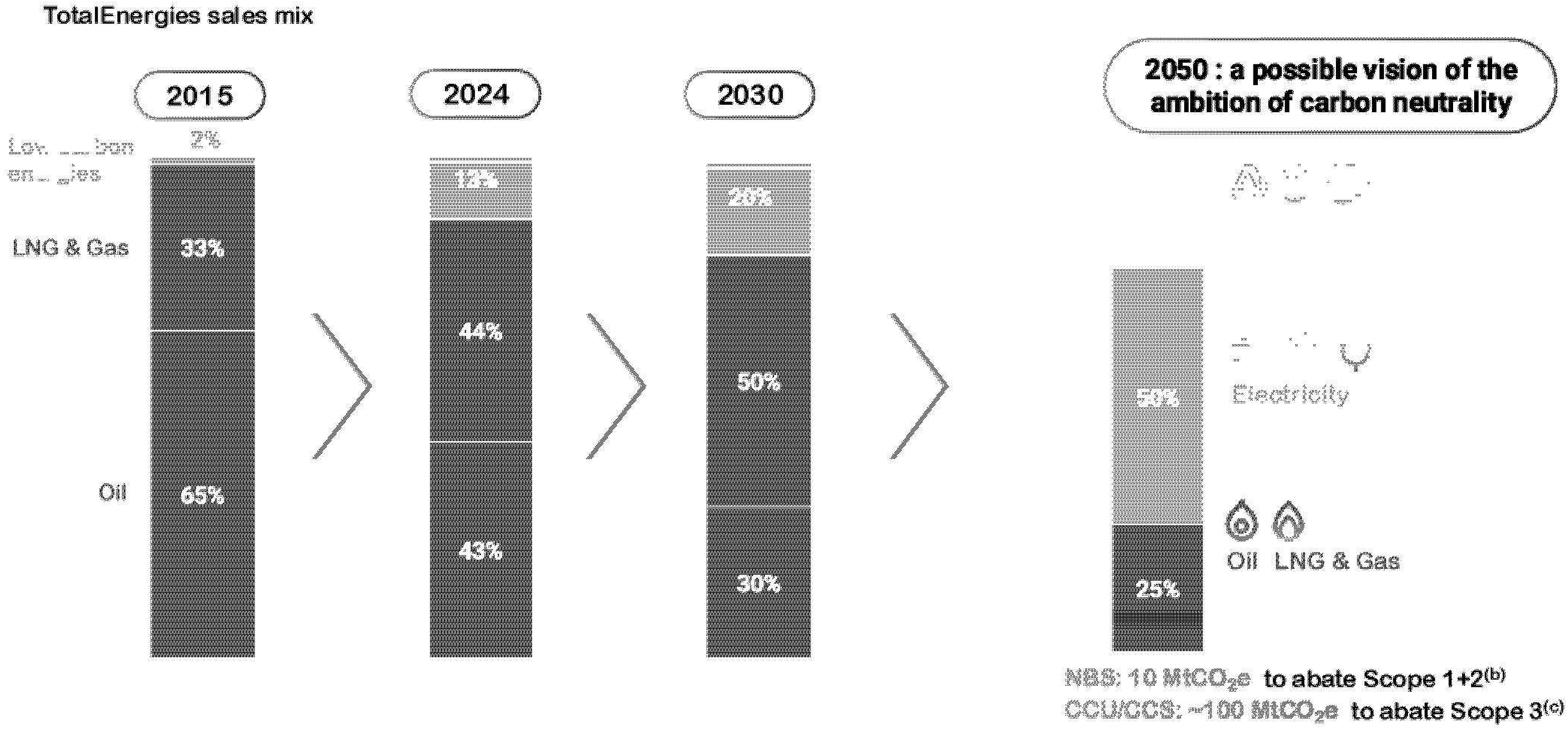
These hydrocarbons would represent:

- about 10 Mt CO_2e/year of Scope 1+2 residual emissions, including methane emissions aiming towards zero (below 0.1 Mt CO_2e/ year); those emissions would be fully offset by nature-based carbon sink projects;
- scope 3 emissions[1] totaling about 100 Mt CO_2 e/year. As part of its ambition of carbon neutrality by 2050, together with society, TotalEnergies would contribute to "eliminate" the equivalent of 100 Mt/year of CO_2 generated by its customers by developing carbon utilization (CCU) and carbon capture and storage (CCS) solutions.

In 2050, our trading portfolio would be aligned with our productions and sales.

(1) GHG Protocol - Category 11. Refer to Glossary for the definition.

A possible vision of the ambition of carbon neutrality by 2050, together with society



(a) Biofuels, biogas, hydrogen and e-fuels/e-gas.
(b) From operated facilities.
(c) GHG Protocol – Category 11 – Refer to the glossary for the definition.

1.2.5 Producing oil differently: Focus on low-cost and low-emission oil assets

In 2024, global demand for petroleum products reached 102.9 Mb/d, i.e. + 0.94 Mb/d (+ ~1%) compared to 2023, and should continue to grow over the decade (105.6 Mb/d by 2029 according to the IEA). Beyond 2030, the trajectories of the different forecasters vary between moderate growth, plateau and start of decline. These demand forecasts remain dependent in particular on population and economic growth, market penetration pace of low-carbon technology innovations such as electric vehicles and changes in behavior.

In addition, it should evolve in a differentiated way according to the specific energy transition roadmaps of the various countries. Thus, demand for oil could start to decline between 2030 and 2040, but at a slower rate than the current natural decline rate of existing fields (around 5% per year).

TotalEnergies therefore believes that new oil projects are still needed to meet this demand and to keep prices at an acceptable level in order to create the conditions for a just transition that gives people time to adapt their energy use. In 2024, TotalEnergies produced 1.4 Mb/d of oil, equivalent to its 2019 level, representing around 1.5% of world production.

TotalEnergies' first responsibility as an oil producer is to produce differently, by reducing to the minimum emissions. To that end, it approves hydrocarbon projects on the basis of performance criteria, notably technical costs and carbon intensity (Scope 1+2). The Company operates its fields in accordance with strict requirements concerning safety, emissions reduction and environmental impact. The cash flow generated by these Oil and Gas activities contributes to financing its investments in renewable energy.

1.2.6 Liquefied Natural Gas: a key fuel for the energy transition

In the gas markets, TotalEnergies focuses on Liquefied Natural Gas (LNG), which can be shipped everywhere in the world and thus contributes to energy security, as it has been the case in Europe since 2022 with the strong reduction of Russian pipeline gas deliveries.

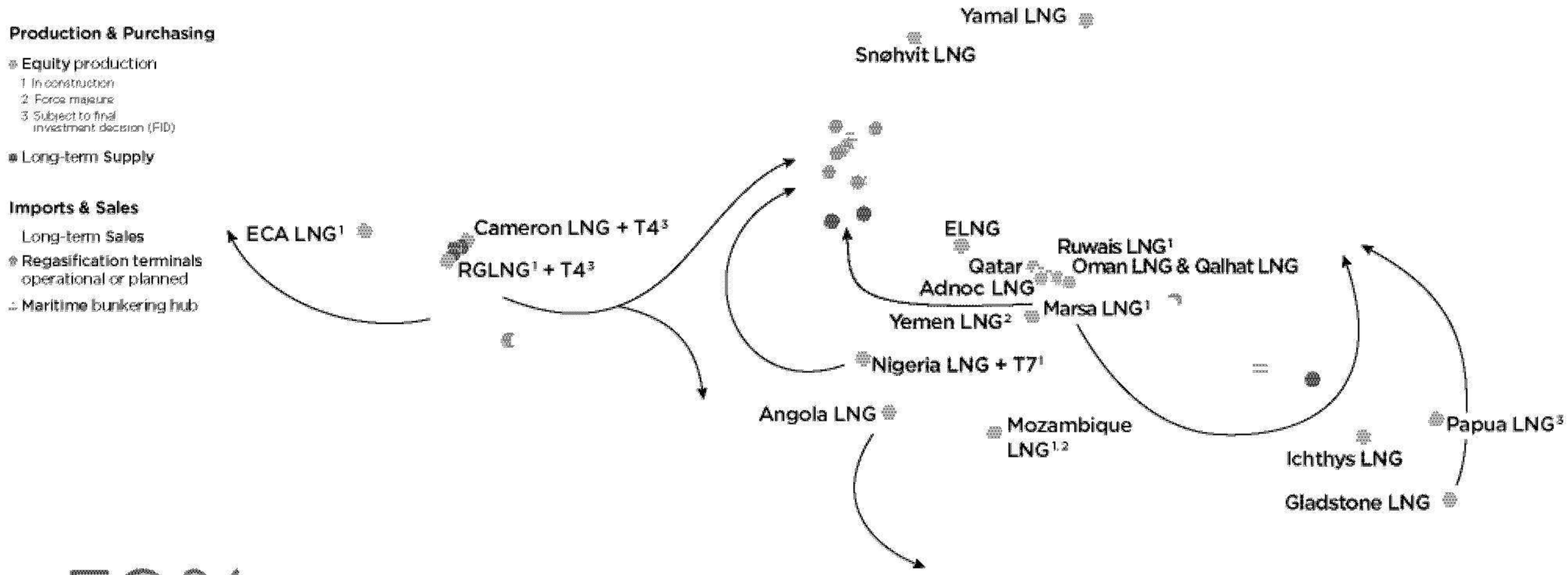
The growth of renewable electricity, intermittent and seasonal by nature, will require an increase in flexible power generation resources. The dispatchable generation of gas-fired power plants helps secure electricity supply against weather variability affecting renewables, while also responding to fluctuations in demand. In addition, natural gas plays an essential role in reducing emissions from power generation as a replacement of coal, emitting half as much greenhouse gas for the same amount of electricity produced[1]. It is particularly the case in Asia where this one still accounts for a very large part of the electricity mix of many countries (e.g. 62% in China, 72% in India[2]).

With diversified positions, and in particular a leading position of exporter in the United States – over 10 Mt in 2024 – TotalEnergies is the 3rd world's largest LNG player, with 40 Mt sold in 2024. The Company also signed numerous LNG sales contracts with major Asian customers last year, particularly in China.

In line with its balanced multi-energy strategy, TotalEnergies intends to consolidate its integrated position across the entire LNG value chain. The LNG volumes managed by the Company (excluding Russian volumes and spot volumes) are thus expected to grow by 50% between 2023 and 2030. TotalEnergies intends to focus on improving the flexibility and resilience of its LNG portfolio by investing in low-cost liquefaction projects, which are best positioned on the merit curve, and to continue growing its Brent-indexed sales in Asia.

(1) Source: IEA; Life Cycle Upstream Emission Factors 2024.
(2) Source: Enerdata.

A diversified, integrated portfolio, resilient through cycles



Reducing the carbon footprint of the LNG portfolio

TotalEnergies aims to gradually reduce GHG emissions of the LNG value chain, from gas production to end use.

In addition to its efforts to reduce methane emissions, initiatives are being implemented throughout the whole chain. The electrification of liquefaction plant processes is helping to reduce LNG's carbon footprint today, and tomorrow this reduction will be reinforced by CO_2 capture and storage projects.

TotalEnergies is also working to reduce shipping emissions by renewing its fleet of chartered LNG carriers with modern, high-performing vessels. (average age of the fleet under long-term charter: 6 years versus 11 years for the global fleet of LNG carriers[1]).

All LNG carriers chartered by TotalEnergies use LNG as fuel. Furthermore, TotalEnergies actively supports the industry's efforts to reduce "methane slip" (emission of unburned methane in engines) and joined the MAMII (Methane Abatement in Maritime Innovation Initiative) last February.

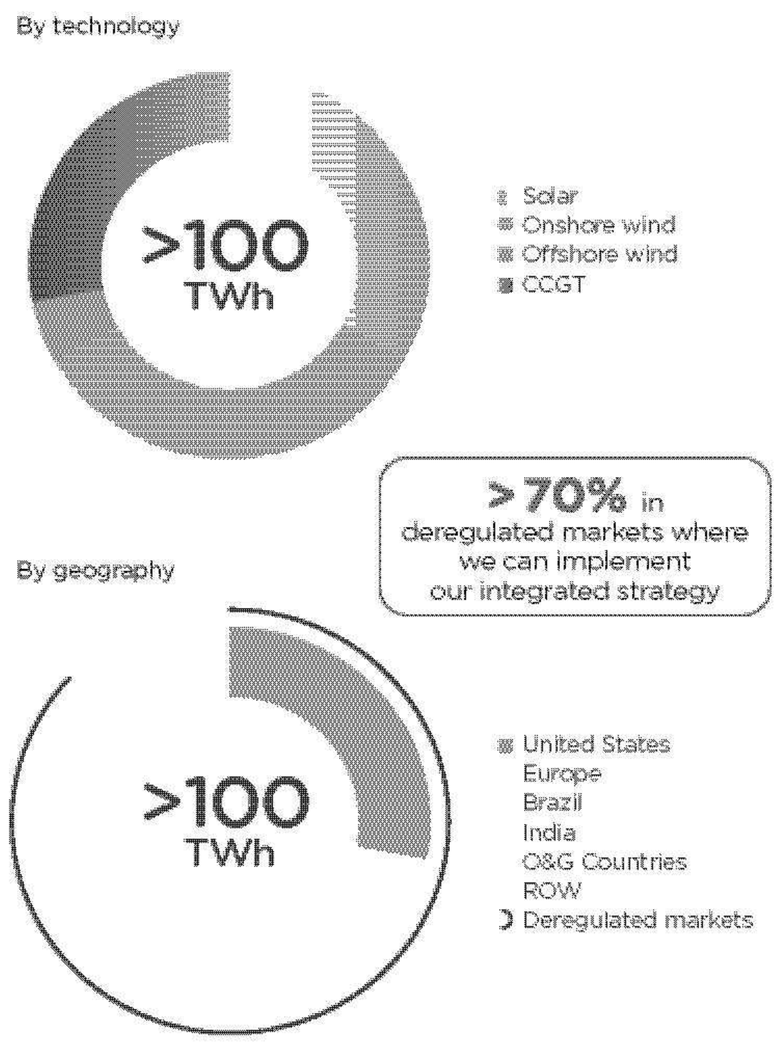
1.2.7 Our major development in electricity: an integrated approach

Electricity demand, which is essential to the success of the energy transition, is expected to grow sharply, as decarbonization is at the heart of the roadmaps of countries committed to carbon neutrality by 2050. In response, Integrated Power, the second pillar of the Company's strategy, is developing an integrated model encompassing the entire value chain, from power generation to sales and trading activities, with a profitability target of around 12% ROACE[2].

TotalEnergies net electricity production target is to produce more than 100 TWh by 2030 (70% of production from renewable sources, 30% from flexible sources). As part of its transformation into an integrated multi-energy company, TotalEnergies is building a competitive portfolio of renewable (solar, onshore and offshore wind) and flexible (CCGT, storage) assets to provide its customers with less and less carbon-intensive electricity available 24/7.

The Company' levers to grow with a return on average capital employed of around 12% are selectivity in its choices of projects; integration across the entire electricity value chain; cost control using its project management and offshore development skills; mobilizing external financing at competitive rates and farm-downs to accelerate cash flow generation and diversify its portfolio's exposure.

2030 Power generation



(1) Source: S&P.
(2) Refer to the glossary for definitions and additional information on alternative performance measures (APM, Non-GAAP measures) and to point 1.9 for reconciliation tables.

1.2.8 Our renewable electricity build-up

TotalEnergies is executing its roadmap in renewables. In 2024, It has reached a gross installed production capacity of 26 GW of renewable electricity and intends to continue developing these activities to reach 35 GW in 2025 and 100 GW in 2030, a level that should make it one of the world's top five producers of renewable electricity (wind and solar) producers set aside.

Gross installed capacity of renewable electricity generation (GW)

	December 31, 2024				
	Solar	onshore wind	offshore wind	Storage and hydro-electricity	Total
France	1.2	0.7	0.0	0.2	**2.1**
Rest of Europe	0.6	1.1	1.1	0.3	**3.1**
Africa	0.1	0.0	0.0	0.0	**0.1**
Middle-East	1.2	0.0	0.0	0.0	**1.2**
North America	5.4	2.2	0.0	0.7	**8.2**
Latin America	0.4	1.3	0.0	0.0	**1.7**
India	6.7	0.6	0.0	0.0	**7.3**
Asia-Pacific	1.6	0.0	0.6	0.0	**2.2**
Total	17.2	6.0	1.7	1.1	26.0

1.2.9 Anticipating changes in demand by adapting our sales of petroleum products

TotalEnergies' downstream business has been a steady contributor to the Company's results, while transitioning and adapting its activities to focus on high value-added markets.

The Company is addressing the sustainability challenges of its downstream activities through 3 levers:

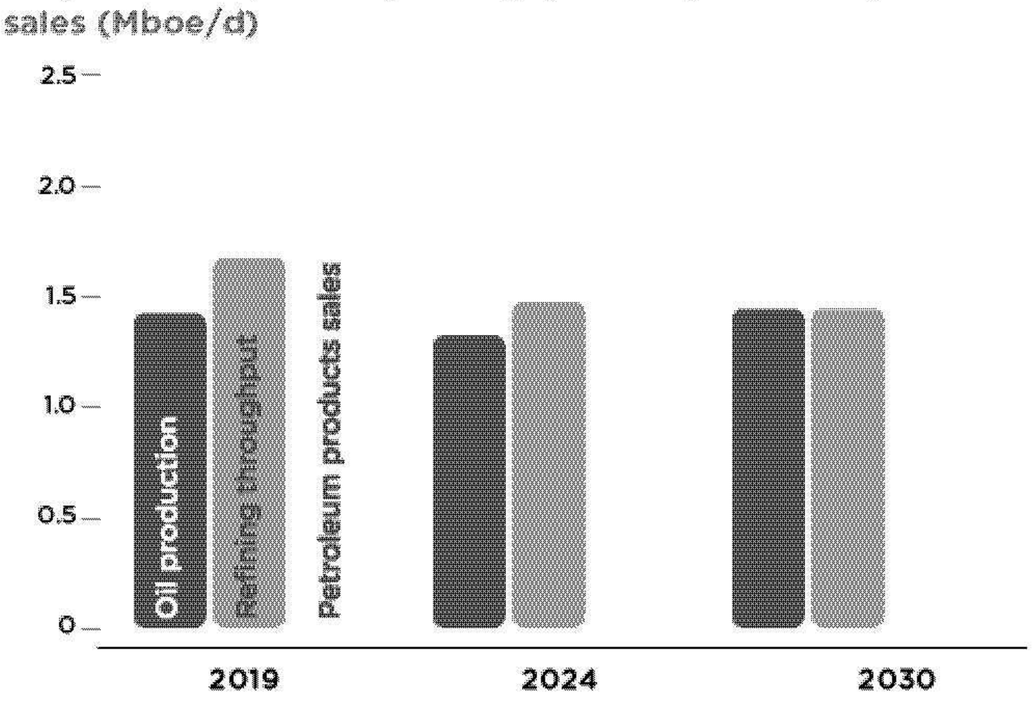
- lowering the breakeven point of its refining-petrochemicals assets in a cyclical industry;
- reducing GHG emissions from its operations;
- offering customers low-carbon mobility solutions.

In Refining & Chemicals, TotalEnergies is continuing to develop its biofuels business. It is capitalizing on its existing assets by implementing SAF production by co-processing raw materials from waste and residues (used cooking oils and animal fats), excluding first generation 1G biomass (in competition with food consumption) in jet units in operation or by converting existing refineries into biorefineries (La Mède since 2019 and Grandpuits from 2026).

For the Marketing & Services, TotalEnergies is developing a three-fold strategy:

- **Network:** focusing on geographies where it has a competitive advantage, such as France, Africa and certain niche markets, in order to adapt to the evolving demand for petroleum products, particularly in Europe as part of the implementation of the "Fit for 55" program;
- **Lubricants:** differentiating ourselves through high value-added, high-margin products and developing more sustainable products to meet growing demand for circular products (RRBO[1]);
- **Electric mobility:** expand its positions in high-power charging in Europe and develop a low-equity business model (partnerships and leverage).

Oil production, refinery throughput and petroleum product sales (Mboe/d)



1.2.10 Our extra-financial ratings

Today, TotalEnergies is recognized by the main extra-financial rating agencies as a benchmark in its sector for its strategy and actions in favor of the energy transition, its consideration of environmental issues, social responsibility requirements, governance, and for its high level of transparency.

In 2024, TotalEnergies maintained its presence in a number of extra-financial indices such as the FTSE4Good index, the DJSI World and DJSI Europe indexes, the MSCI Europe ESG Leaders, the MSCI World ESG Screened and the MSCI Europe ESG Screened.

Paris Agreement

MSCI : In their enhanced Implied Temperature Rise (ITR) model seeking to align with the best practice guidance from the Glasgow Financial Alliance for Net Zero (GFANZ), MSCI have assessed TotalEnergies's ITR to be 1.9°C indicating that "TotalEnergies SE is in line with the Paris agreement's minimal goal of limiting global mean temperature to below 2°C".

TPI : Refer to point 1.3.2.

(1) Re-Refined Base Oils.

Other evaluations

Climate Action 100+ : TotalEnergies has made further progress in the Net Zero Company Benchmark in 2024, thanks to the actions implemented in the areas of interest representation and just transition. CA100+ also recognized TotalEnergies' leadership in the energy transition, placing the Company far ahead of the Net Zero Standard for Oil & Gas.

Carbon Tracker Absolute Impact 2024 : TotalEnergies maintained its 2nd in the ranking, which evaluates the emissions targets of the 27 main Oil & Gas companies.

Ecovadis : In the 2024 Sustainability Rating, TotalEnergies obtained a 83/100 score for its Hutchinson subsidiary, a 82/100 score for Saft subsidiary (both obtained Platinum status), and a 82/100 score for its Refining-Chemicals segment, placing them into the top 1% of rated companies.

Workforce Disclosure Initiative : TotalEnergies has made further progress with a score of 89% in 2024, above the industry average (76%) and the ranking average (62%) in the WDI transparency assessment of around 140 companies' human resources management.

Britain's Most Admired Companies : In 2024, TotalEnergies received the Britain's Most Admired Companies award in its category, based on non-financial criteria such as commitment to reducing environmental impact and diversity & inclusion.

TotalEnergies' extra-financial ratings

	TotalEnergies February 2025	Ranking vs our peers(a)
MSCI	AA	2nd
SUSTAINALYTICS	Medium risk	1st (tie)
ISS ESG	B- I Prime	1st (tie)
S&P Global	54	1st

(a) Peers: ExxonMobil, Shell, BP, Chevron, ENI, Equinor.

1.3 Climate and Sustainable Energy

1.3.1 Climate impact of our strategy: our 2024 progress and 2025-2030 objectives

		2015	2023	2024 Objectives	2024 Realizations	2025 Objectives	2030 Objectives
Scope 1+2 Operated (100%) *(MtCO2e)*	Oil & Gas	vs 2015	-34%		-36%		
	Facilities	46	30.3		29.4		
	CCGT	0	4.3		4.9		
	Scope 1+2 Emissions	46	35	<38,8	34	*Enhanced objective* <37 ~~<38~~	25-30(a) ~~>-40%~~(a)
Methane Operated (100%) *(kt CH4)*		vs 64 kt in 2020	-47%	-50%	-55%	*Enhanced objective* -60% ~~-50%~~	-80%
			34		29		
Lifecycle Carbon Intensity Energy Products Sold(c) (Scope 1+2+3) *(g CO2e/MJ)*		73	-13%	-14%	-16.5%	*Enhanced objective* >-17% ~~-16%~~	-25%
Scope 3 (Category 11)(b) Mt CO2e		410(d)	351		342	<400	<400

(a) Net emissions, including Nature-based carbon sinks from 2030.
(b) Lifecycle carbon intensity of energy products sold (refer to the glossary for the definition).
(c) Biofuels chain excluded from Scope 3 Cat. 11 and reported separately for 2023 and 2024, as per ESRS methodology (refer to the glossary for the definition).
(d) In 2015, Scope 3 category 11 was published at 410 Mt CO_2e. The Company keeps this reference to assess the evolution of its Scope 3. If the Scope 3 category 11 for 2015 had been recalculated according to the IPIECA value chain methodology (published in 2016) on the gas value chain, as introduced in data disclosures from 2021, then the Scope 3 category 11 of 2015 would have been 465 Mt CO_2e, including 344 Mt CO_2e for the oil value chain and 121 Mt CO_2e for the gas value chain.

1.3.2 How TotalEnergies' 2030 objectives compare to the IEA Scenarios

Reducing GHG emissions at the operated facilities (Scope 1+2) is key to TotalEnergies' ambition to supply more energy while curbing GHG emissions. The objective of cutting net Scope 1+2 emissions from our operated activities by 40% is consistent with the reduction targets of the European Union's "Fit-for-55" program (a 37% decrease between 2015 and 2030) and the IEA's 2024 Net Zero Emissions (NZE) scenario (a 28% decrease between 2015 and 2030). The targets for lowering the lifecycle carbon intensity(1) of energy products sold (a 17% reduction by 2025 and a 25% reduction by 2030) put the Company on a trajectory close to the Announced Pledges Scenario (APS) in the IEA's World Energy Outlook 2024, which assumes that the States parties to the Paris Agreement fulfill all their net zero objectives.

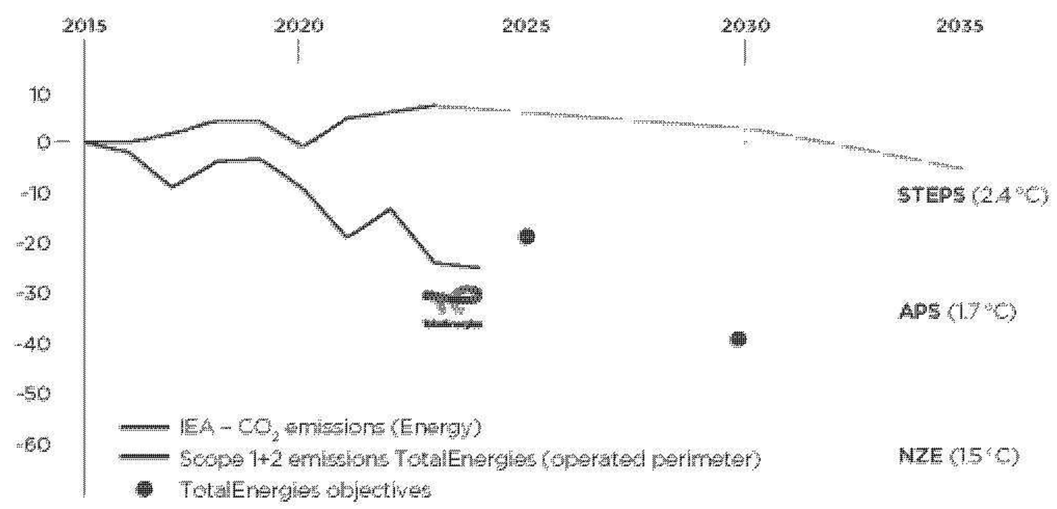
An independent third party (Wood Mackenzie) has audited the calculations made and the associated trajectories for Scope 1+2 emissions and Carbon Intensity(2).

At the end of 2024, the NGO Transition Pathway Initiative (TPI) assessed the Company's lifecycle carbon intensity(3) trajectory ("Carbon Performance"(4)) and considers it as aligned with a below 2°C scenario in 2050.

(1) Lifecycle carbon intensity of energy products sold (refer to the glossary for the definition).
(2) Lifecycle carbon intensity of energy products sold (refer to the glossary for the definition).
(3) Lifecycle carbon intensity of energy products sold (refer to the glossary for the definition).
(4) The evaluation of TotalEnergies by the Transition Pathway Initiative (TPI) is available on TPI's website.

Scope 1+2 emissions TotalEnergies operated perimeter World CO_2 emissions (all sectors) - IEA scenarios (WEO 2024[a])

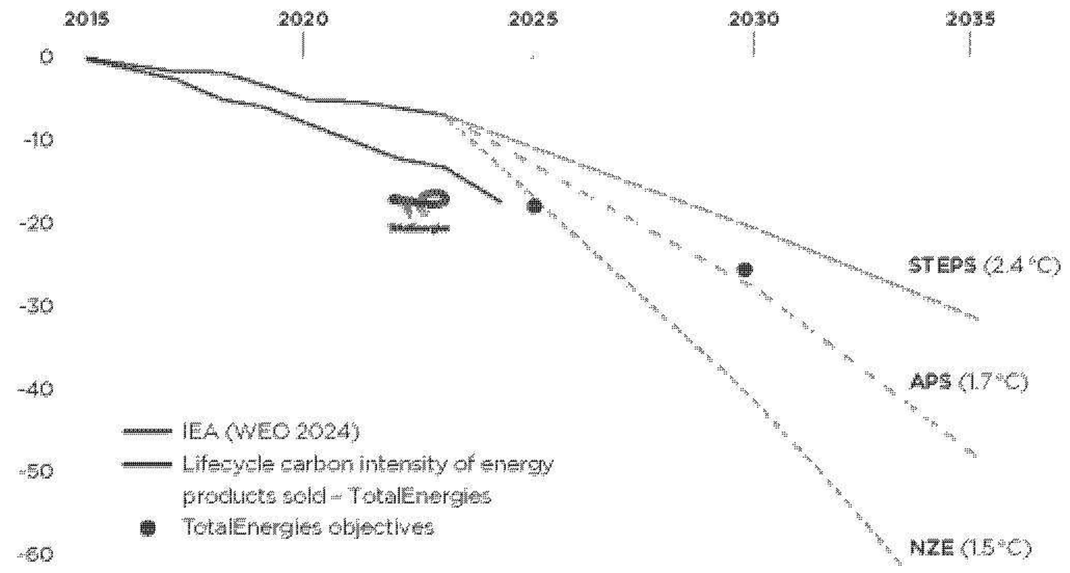
In % relative to 2015



(a) Based on the IEA World Energy Outlook 2024, License CC by 4.0. Worldwide CO_2 emissions from energy combustion and industrial processes. For TotalEnergies, emissions exclude the COVID effect in 2019, 2020 and 2021, and take into account nature-based carbon sinks projects from 2030.

Lifecycle carbon intensity of energy products sold[a] IEA Scenarios (WEO 2024)

In % relative to 2015



(a) Lifecycle carbon intensity of energy products sold (refer to definitions in point 5.2.1.3 B. for more details) and evolution of the carbon intensity of world energy, calculated as the ratio of worldwide CO_2 emissions from fossil fuels (Mt CO_2) to total primary energy supply (EJ) in the IEA World Energy Outlook 2024. The electricity production from renewable sources (wind, solar, hydro) included in these scenarios is reduced to the same fossil base, taking into account a substitution factor of 2.63 (38%) to make them comparable with the lifecycle carbon intensity of the energy products sold by TotalEnergies.

1.3.3 Reducing our emissions

1.3.3.1 Reducing our Scope 1+2 Emissions by 2030

The primary responsibility of TotalEnergies as a producer of fossil fuels is to reduce emissions on its facilities. In 2024, the Company launched the "Our 5 Levers for a Sustainable Change" initiative, which supports the commitment of all employees to improving energy efficiency and the use of low-carbon technologies in TotalEnergies' operations.

These ongoing reduction efforts have made it possible to reduce the Scope 1+2 intensity of the Upstream Oil & Gas operated assets, from 21 kg CO_2e/boe in 2015 to 17 kg CO_2e/boe in 2024[1]. These results put TotalEnergies among the players with the best intensities in the industry.

Our progress in 2024

TotalEnergies is resolutely continuing to reduce emissions from its operated assets. Thus, within the scope of its oil and gas facilities, emissions from assets operated by the Company fell by more than 36% compared to 2015 levels. In 2024, with more than 200 GHG emissions reduction projects coming to fruition, TotalEnergies reduced its emissions by 1.3 Mt of CO_2e across its operated assets.

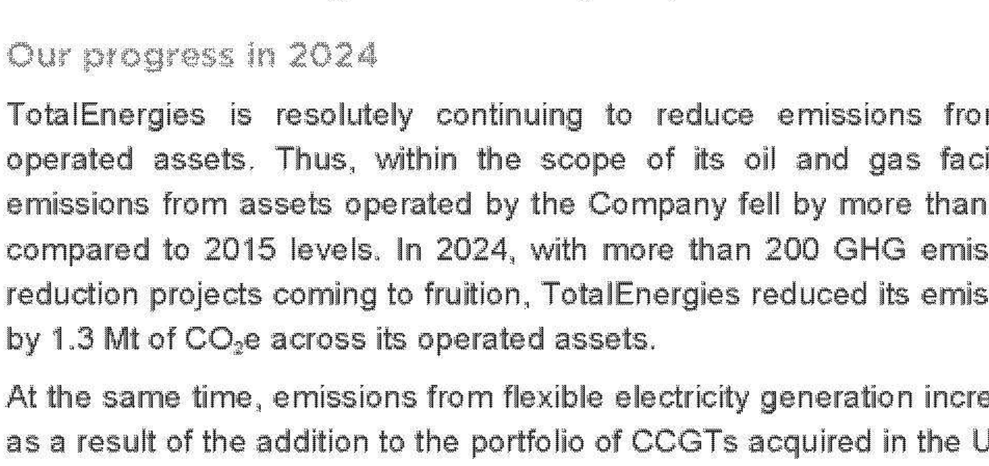
At the same time, emissions from flexible electricity generation increased as a result of the addition to the portfolio of CCGTs acquired in the United States and the United Kingdom, to support the strategy of rolling out an integrated low-carbon electricity offer. As a result, the Company's overall operated emissions have decreased by 25% compared with 2015.

Our objectives

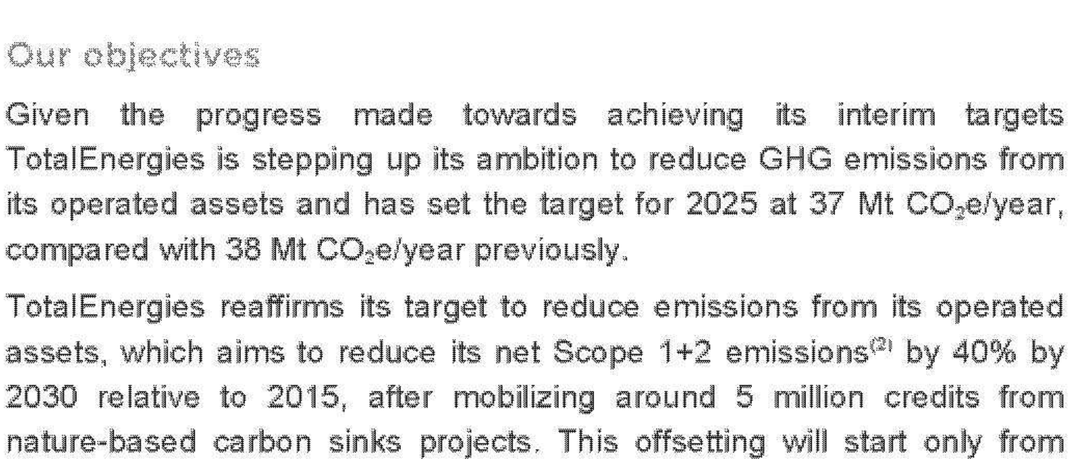
Given the progress made towards achieving its interim targets TotalEnergies is stepping up its ambition to reduce GHG emissions from its operated assets and has set the target for 2025 at 37 Mt CO_2e/year, compared with 38 Mt CO_2e/year previously.

TotalEnergies reaffirms its target to reduce emissions from its operated assets, which aims to reduce its net Scope 1+2 emissions[2] by 40% by 2030 relative to 2015, after mobilizing around 5 million credits from nature-based carbon sinks projects. This offsetting will start only from 2030 for residual emissions on the basis of a consumption of approximately 10% per year of the stock of carbon credits of the Company.

Scope 1+2 emissions of operated facilities (Mt CO_2e)



Scope 1+2 from operated facilities (Mt CO_2e): levers to reach the -40% target in 2030[a]



(a) Net of nature-based carbon sinks.
(b) NBS credits will be used from 2030.

(1) Operated Oil & Gas Upstream intensity is calculated excluding LNG plants.
(2) The calculation of net emissions includes nature-based carbon sinks projects as from 2030.

1.3.3.2 Improving the energy efficiency of our sites: Implementation of the 2023/2025 action plan

Saving energy used in TotalEnergies operations is beneficial in several ways: it contributes to the collective campaign for energy efficiency, and it helps to reduce the Company's GHG emissions and lowers its costs.

In September 2022, TotalEnergies launched a plan to accelerate energy efficiency improvements at its sites worldwide. Over the period 2023-2025 the Company is investing $1 billion to reduce its energy consumption and cut GHG emissions by 2 Mt CO_2e.

This plan has enabled the Company to accelerate the actions undertaken for several years in the Company's operating sectors, with a total of more than 170 projects completed by 2024, including more than 80 initiatives for Exploration & Production, more than 80 for Refining-Chemicals and more than 10 for Marketing & Services and Gas, Renewables & Power.

At the end of 2024, these investments amounted to around $750 million: they have reduced emissions by around 1.5 Mt CO_2e/year and generated energy savings of more than $100 million/year.

Taking into account the efficiency projects reported by the teams at the industrial sites, a second energy efficiency improvement plan will be rolled out over the period 2026-2028, for a total of $1 billion.

At Exploration & Production sites, some of the gas produced by oil reservoirs is used in gas turbines to generate the electrical power needed by equipment such as water injection pumps and treatment units. TotalEnergies has launched a project to shut down certain underused gas turbines on its operated assets. Since 2021, 74% of Exploration & Production assets have been optimized in this way, enabling a total of nine gas turbines to be shut down. This initiative has resulted in GHG savings of around 130 kt CO_2e/ year, while reducing maintenance costs and recovering additional gas. In 2024, in Angola, two gas turbines were shut down on Block 17 (Dalia and Pazflor), reducing CO_2 emissions by 29 kt CO_2e/year and saving 13 Mm^3/year of fuel gas, while in the United Kingdom, the Elgin site reduced its CO_2e emissions by 15 kt CO_2e/year by switching from two turbines to one.

In the Refining-Chemicals segment, improving energy efficiency involves optimizing heat exchangers, furnaces and the steam network. For example, at the Company's operated sites, the performance of furnaces has been improved by perfecting combustion conditions, which has led to a reduction in the associated GHG emissions.

Adapting the design of the facilities

At the Normandy refinery, the project to modernize the equipment in the reforming unit, including the furnace, an exchanger and a column, has resulted in a reduction of 75 kt CO_2e/year. In addition, the heat recovery project was commissioned at the end of 2024: this waste heat emitted by the refinery process will be used to supply the district heating network for the city of Le Havre, with an associated reduction of 18 kt CO_2e.

In the Gas, Renewables & Power segment's combined-cycle power plants (CCGT), the reduction in GHG emissions is reflected in improved efficiency and performance. In 2024, at the Pont Sur Sambre CCGT, major modifications were made to the gas turbine during a major maintenance shutdown. The same project is planned for the St Avold 8 CCGT in 2025. Over a large part of the power station fleet, high-power electric motors have been replaced by the latest generation motors with variable speed drives, which are more efficient.

1.3.3.3 Decarbonizing our operated sites through low-carbon electricity supply and electrification

Low-carbon electricity supply

In Refining-Chemicals, TotalEnergies' ambition is to provide its facilities in Europe and the United States with a 100% low-carbon electricity supply from 2025, which will be made possible by its Go Green initiative.

In Europe, up to 2.5 TWh/year will be supplied to the Refining-Chemicals industrial assets (excluding cogeneration facilities). This electricity will come partly from the European renewable portfolio, of which 0.8 TWh/year is under construction or in operation and 4.2 TWh/year is under development, and partly from the Company's aggregation trading portfolio.

In the United States, around 1.5 TWh/year will gradually be supplied to the Refining-Chemicals assets from the renewable portfolio in Texas. The Danish and Myrtle assets, which are already in service, will supply around 1 TWh/year, with the Hill project providing the remainder from 2025. This electricity will benefit the Port-Arthur and La Porte facilities.

This action to supply low-carbon electricity illustrates our "Lever 2 for a Sustainable Change" which aims to use low-carbon technologies in our own operations and will enable a reduction in emissions of more than 2 Mt CO_2e/year on the Refining & Chemicals business segment's Scope 2 compared with 2015.

Electrification of facilities

Major projects to electrify facilities have been completed or are under way at the Company's operated assets.

At the Antwerp petrochemicals site, the steam turbine driving an ethylene compressor was replaced by an electric motor at the end of 2023. At the Normandy platform, an obsolete gas furnace has been replaced by a 2 MW electric heater, reducing emissions by 4.8 kt CO_2e per year.

At the Exploration & Production subsidiary in Argentina, power purchase agreements have been put in place to increase the proportion of renewable energy to 80%, enabling the Neuquèn asset to be connected to the local electricity grid and justifying the electrification of turbocompressors from 2025, thereby reducing the asset's fuel gas consumption by 90%.

1.3.3.4 Aiming for zero methane emissions

TotalEnergies has long been committed to reducing its methane emissions by taking specific actions on each of the four sources: flaring, vents, stationary combustion and continuous real-time detection to identify any fugitive emissions.

Actions to reduce flaring

During flaring, gas combustion at the flare is incomplete, and around 2% of the gas sent to the flare is not burnt, the rest - 98% – being transformed into CO_2 after combustion. The actions to reduce flaring described below therefore directly reduce methane emissions.

Eliminating routine flaring is a priority for reducing methane and CO_2 emissions. TotalEnergies has been committed to eliminating routine flaring for new projects since 2000. A founding member of the World Bank's "Zero Routine Flaring by 2030" initiative since 2014, the Company is committed to ending this type of flaring by 2030 and to achieve this goal, has implemented several large-scale projects at its sites.

TotalEnergies is also looking to reduce other forms of flaring, and is launching projects to retrofit installations with closed flares. Closed flare systems recover and treat waste gases, reducing methane and CO_2 emissions. In 2024, the first closed flare was installed at the Tempa Rossa facility already in operation in Italy.

Several projects for closed flares on existing facilities are under study, and three have already been approved, two in Angola and one in the UK, with start-ups scheduled between 2025 and 2026. They will enable an overall reduction of 160 kt CO_2e/year.

In addition to actions on each of these sources, all new projects include strict design criteria to avoid methane emissions: no natural gas for pneumatic equipment, no continuous cold venting and systematic installation of closed flares.

In Nigeria, the OML100 asset accounted for 57% of global routine Exploration & Production flaring in 2020. The end of routine flaring on the OML100 offshore block became effective in 2023. This was the last TotalEnergies asset in Nigeria with routine flaring by design (initial design, facilities commissioned in 1993). Significant modifications were made to the facilities to send the gas produced to the Bonny LNG plant for upgrading instead of being flared. The total reduction in greenhouse gas emissions is around 330 kt CO_2e/year, including 1.3 kt CH_4/year.

In Gabon, on the operated assets of the subsidiary TotalEnergies Exploration Production, routine flaring was definitively eliminated in 2024, two years ahead of the initial schedule. To achieve this, the subsidiary adopted new operating methods and made modifications to its facilities. Firstly, at the Anguille facility, the flare system has been redesigned to allow low-pressure gas, which was previously burnt, to be redirected to the compression facilities for recovery.

At the beginning of 2024, the Ile Mandji asset saw its compression capacity increased, enabling the gas – previously routinely flared – to be sent for treatment and compression in order to be recovered. The elimination of routine flaring has reduced the subsidiary's GHG emissions by around 120 kt CO_2e/year, including more than 1 kt CH_4/year, while helping to increase production by +7% between 2023 and 2024.

Actions on vents

Venting is the release of methane into the atmosphere without combustion. TotalEnergies has reduced its vents since 2020 by rerouting the gas going to the vents to the gas export system or to the flare. Some equipment – such as pneumatic actuators – also uses methane as an instrumentation gas, and the replacement of this equipment with innovative solutions using compressed air instead of methane has significantly reduced vents.

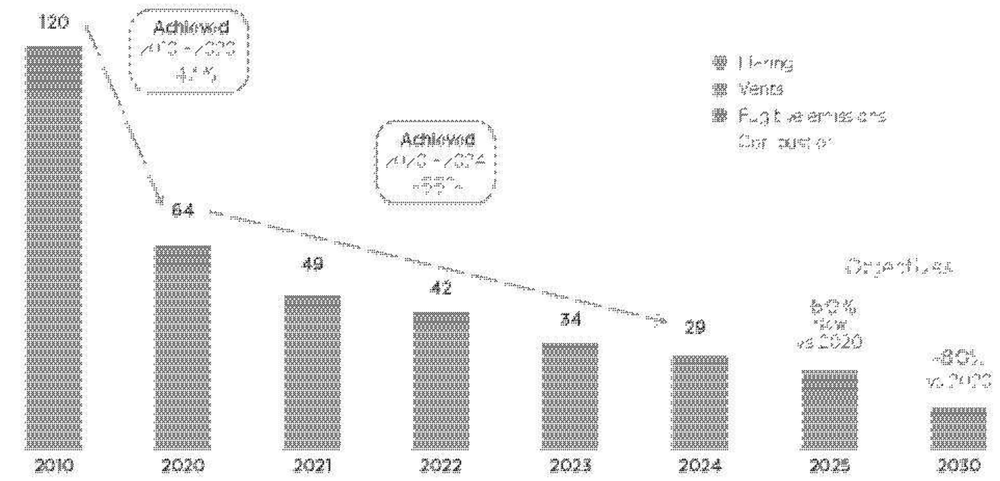
Continuous real-time detection

Leaks are monitored by annual detection and repair campaigns deployed at all upstream sites operated by TotalEnergies. This regular monitoring is complemented by the deployment of AUSEA (Airborn Ultralight Spectrometer for Environmental Application) drone detection campaigns, as well as continuous, real-time detection resources that will be installed by the end of 2025 on all operated upstream assets. The number of sensors deployed will be around 13,000 for an investment of around $50 million. As illustration, a FPSO[1] could be equipped with around 500 sensors to provide complete, accurate coverage of the entire installation.

Progress since 2010

Between 2010 and 2020, TotalEnergies reduced its operated methane emissions by almost half. Operating methane emissions decreased from 64 kt CH_4 in 2020 to 29 kt CH_4 in 2024, a 55% reduction. TotalEnergies is thus one year ahead of schedule in meeting its target of reducing its operated methane emissions by 50% between 2020 and 2025. TotalEnergies has set a new, reinforced target of -60% in 2025, compared with 2020. TotalEnergies is on the way to achieving its objective of reducing its operated methane emissions by 80% in 2030, compared with 2020.

Methane emissions on operated facilities (kt CH_4)



OGMP 2.0 Gold Standard Reporting and COP29

TotalEnergies has been assessed Gold Standard OGMP 2.0 in 2024 for the 4th consecutive year[2]. The OGMP 2.0 (Oil & Gas Methane Partnership) is the reference framework created in 2020 and piloted by the United Nations Environment Programme (UNEP) for methane reporting in the oil and gas sector. This framework encourages companies to continue improving the completeness and accuracy of their emissions reporting, for both operated and non-operated perimeters, in order to focus on reducing the most significant emissions. To date, nearly 150 companies are members across the value chain, including 65 upstream.

1.3.3.5 Building low carbon hydrogen supply for our refineries in Europe by 2030

TotalEnergies is committed to reducing the carbon footprint associated with the production, transformation and supply of energy to its customers. One of the levers identified by the company is the use of low-carbon hydrogen to decarbonize its European refineries, which would reduce their direct CO_2 emissions by up to three million tons a year by 2030.

In September 2023, TotalEnergies launched a call for tenders to use up to 500 kt/year of low-carbon hydrogen in its European refineries from 2030.

Four types of projects are being launched to help develop a European low-carbon hydrogen market:

- biohydrogen production units using biomass gas produced in TotalEnergies' biorefineries. This biohydrogen will be used in particular to produce sustainable aviation fuels (SAF);
- electrolyser projects powered by TotalEnergies renewable electrons, through:
  - either joint-venture projects between TotalEnergies and a partner;
  - or tolling contracts for electrons supplied by TotalEnergies;
- long-term third-party purchases of green hydrogen from local electrolysers or via green hydrogen imports.

(1) Floating Production Storage and Offloading unit.
(2) Refer to the UNEP report "An Eye on Methane: Report 2024."

1.3.3.6 Actively working with our partners on non-operated assets

TotalEnergies' Scope 1+2 emissions based on equity share from sites operated by its partners in 2024 represent 25 Mt CO_2e, of which 11 Mt CO_2e are included in Scope 1+2 of the ESRS perimeter. TotalEnergies is working to mobilize its partners to reduce emissions from the assets they operate.

At Exploration & Production, a dedicated team is tasked with sharing best practices with partners at non-operated assets, such as deploying an emission reduction roadmap that includes an energy assessment, reduction of methane venting and routine flaring, and improving energy efficiency, particularly for gas turbines and compressors. The projects conducted at the Company's operated sites are used to illustrate ways its partners can reduce their Scope 1+2 emissions and encourage uptake.

In addition to the existing collaboration with its partners on each of its non-operated assets, TotalEnergies has been a very active contributor to the Oil & Gas Decarbonization Charter (OGDC) initiative since its creation at the end of 2023.

80%[1] of TotalEnergies' non-operated production is operated by partners who are members of initiatives of which the Company is an active member (OGDC and OGMP 2.0). The vast majority of its partners are therefore committed to reducing methane emissions and eliminating routine flaring by 2030.

TotalEnergies industry leader through the Oil & Gas Decarbonization Charter

At COP28, a major initiative between national and international companies was launched to reduce the industry's GHG emissions: the Oil & Gas Decarbonization Charter (OGDC). Through this initiative – which for the first time brings together international oil companies (IOCs) and national oil companies (NOCs – the companies are committed to achieving net-zero operations by 2050, aiming for near-zero upstream methane emissions and eliminating routine flaring by 2030, as well as measuring and reporting progress towards these goals. Dr. Sultan Al Jaber, CEO of ADNOC and former President of COP28, is the driving force behind this initiative, which is being led by two other CEO Champions: Amin Nasser, CEO of Aramco, and Patrick Pouyanné, Chairman and CEO of TotalEnergies.

This initiative now brings together more than 55 companies representing almost 45% of the world's oil and gas production. On November 12, 2024, at the opening of COP29 in Baku, the OGDC published its first report to baseline, prioritize and track progress on emissions reductions. Over the past 12 months, the OGDC has established a governance framework and launched a survey of its signatories' emission reduction ambitions and implementation plans, in order to establish a baseline against which future progress can be measured. The OGDC has also rolled out a program called Collaborate & Share, designed to share solutions, promote peer-to-peer collaboration and encourage the adoption of best practices to reduce emissions.

Sharing best practices and AUSEA technology with partners

At the end of 2024, as part of the OGDC's Collaborate & Share program, TotalEnergies shared with OGDC members the latest information on its AUSEA campaigns and continuous methane monitoring plan, and at the end of 2025 will share the lessons learned from deploying continuous, real-time detection equipment on all its operated Upstream assets.

In addition to the OGDC, TotalEnergies actively contributes to sharing its experience with its partners by making available its cutting-edge AUSEA technology for the detection and quantification of on-site methane emissions by drone. In November 2024, TotalEnergies signed its 6th cooperation agreement with a partner, Oil India in India, to share AUSEA, following the companies Sonangol in Angola, Socar in Azerbaijan, Petrobras in Brazil, NNPC in Nigeria and ONGC in India.

These cooperation agreements, which enable to fly over installations where TotalEnergies is not a partner, complement the AUSEA campaigns on all its operated upstream sites, now regular in 2024, following the first flights in 2022, and those on non-operated assets (in Brazil, Angola and Nigeria in 2024).

1.3.4 Reducing our customers emissions

1.3.4.1 Being a partner in our customers' carbon neutrality

The Company is ambitious in its targets for direct emissions (Scope 1+2), which its controls in facilities it is operating. It is also ambitious in helping its customers reduce their emissions through its multi-energy strategy, which makes a wider range of energies available to customers, including low-carbon energies. Indeed, by offering its clients an increasingly decarbonized portfolio, TotalEnergies contributes to the energy transition and helps its clients reduce their emissions. It tracks progress through the lifecycle carbon intensity of energy products sold[2] – the decarbonization index of its sales – for which it has reduction targets for 2025 and 2030.

TotalEnergies has been leading among its peers in terms of actually achieving decarbonization of the energy products sales mix since 2015. In 2024, it maintained its progress by notching a 16.5% reduction in the lifecycle carbon intensity[3] of its energy products compared to 2015.

The 2025 target for lowering the lifecycle carbon intensity of energy products sold[4] has been strengthened: Previously at 15%, it is now targeting 17%. By 2030, the Company's two-pillar balanced transition strategy aims to result in a sales mix of energy products with the view to final use whose lifecycle carbon intensity of energy products sold[5] would be reduced by 25%, which means:

- for an equivalent quantity of energy, the carbon content of energy products would be reduced by 25% ("less emissions for same energy")
- for an equivalent quantity of emissions (Scope 1+2+3), the Company would supply 33% more energy to its customers ("more energy for same emissions").

(1) Based on 2024 SEC production from all non-operated assets and membership as of end 2024. For the purpose of this calculation, ADNOC-led operating companies in the UAE are considered OGDC members, given ADNOC is championing OGDC; also when the operator is a joint-venture that is not directly an OGDC or OGMP 2.0 member, it is treated as OGDC member if 100% of its partners are OGDC members, and as OGMP 2.0 member if 100% of its partners are OGMP 2.0 members.
(2) Lifecycle carbon intensity of energy products sold (refer to the glossary for the definition).
(3) Lifecycle carbon intensity of energy products sold (refer to the glossary for the definition).
(4) Lifecycle carbon intensity of energy products sold (refer to the glossary for the definition).
(5) Lifecycle carbon intensity of energy products sold (refer to the glossary for the definition).

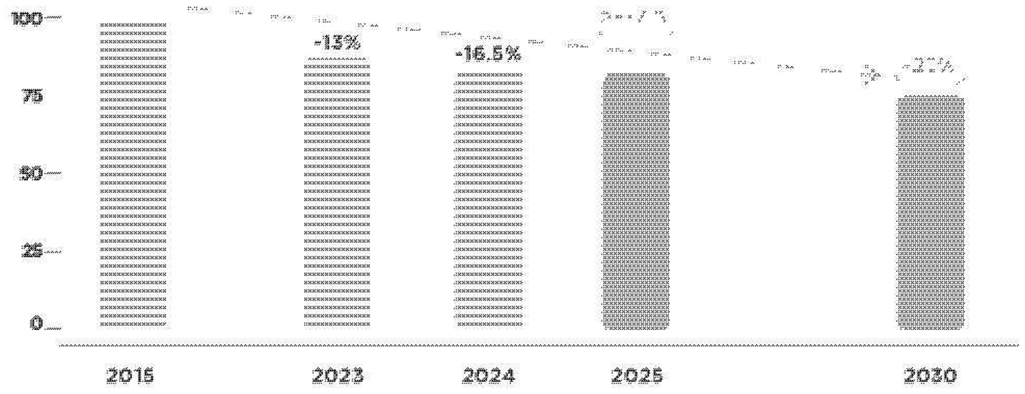
Growth in electricity shall drive more than half the reduction in TotalEnergies' lifecycle carbon intensity[1] between 2015 and 2030. Lower emissions from the Company's facilities shall contribute to 25% of the intensity[2] reduction. The other reduction factors of the lifecycle carbon intensity[3] shall be the reduction in sales of petroleum products coupled with an increase in gas production (particularly LNG) and sales of products derived from biomass.

Established in 2022, TotalEnergies OneB2B Solutions assists large companies across 35 industries in fulfilling their emissions reduction roadmaps and offers low-carbon solutions tailored to their needs from various segments of the Company, such as renewable electricity, BESS solutions, biogas, biofuels, truck charging solutions, and CCS.

In 2024, more than 400 large companies are accompanied in their transition through 850 potential projects worldwide. To date, about 7 TWh/year of low-carbon energy sales have been committed in 2030 to these industries.

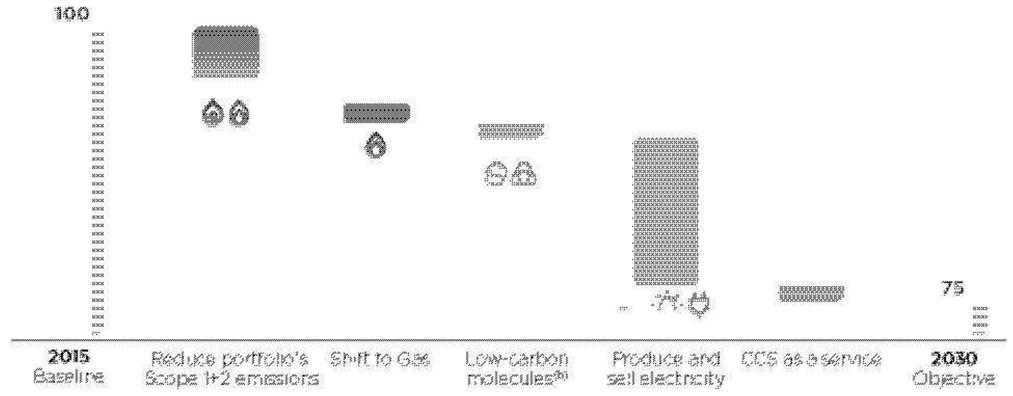
Lifecycle carbon intensity of energy products sold[a]

(base 100 in 2015)



(a) Lifecycle carbon intensity of energy products sold (refer to the glossary for the definition).

Levers to the reduction of carbon intensity[a] (2015-2030)



(a) Lifecycle carbon intensity of energy products sold (refer to the glossary for the definition).
(b) Biofuels, biogas, hydrogen and e-fuels/e-gas.

1.3.4.2 Developing electric mobility

TotalEnergies develops a network of high-power electric charging stations along motorways, major roads and in urban hubs in Europe with a target of 1,500 sites equipped with high-power charging by 2030.

The Company is also developing its charging network in a number of large cities around the world, with a portfolio of over 30,000 charging points in Paris, Amsterdam, London, Brussels and Singapore.

It also supports road haulers in the electrification of their fleet with the installation of terminals dedicated to trucks along European corridors and charging services at the depot with the supply of green electricity.

Lastly, TotalEnergies offers French customers who own an electric car an adapted electricity rate and an intelligent, controllable charging station for economical home charging. This offer includes a number of services such as monitoring their charges via their mobile application, repair assistance and even a 24/7 mobility guarantee. Finally, as electricity customers, they also benefit from access to a large network of charging stations at an advantageous rate for their roaming charging.

From the production of renewable electricity to the operation of recharging services, the Company is present across the entire electric mobility value chain.

1.3.4.3 New low-carbon energy

The energy transition also requires the development of low-carbon energy based on the conversion of biomass and waste, the use of renewable hydrogen, notably for refining or the production of synthetic molecules (e-fuels) combining hydrogen with CO_2 as a raw material. TotalEnergies is thus developing these new energies: biofuels, biogas, renewable hydrogen and synthetic fuels.

Biofuels

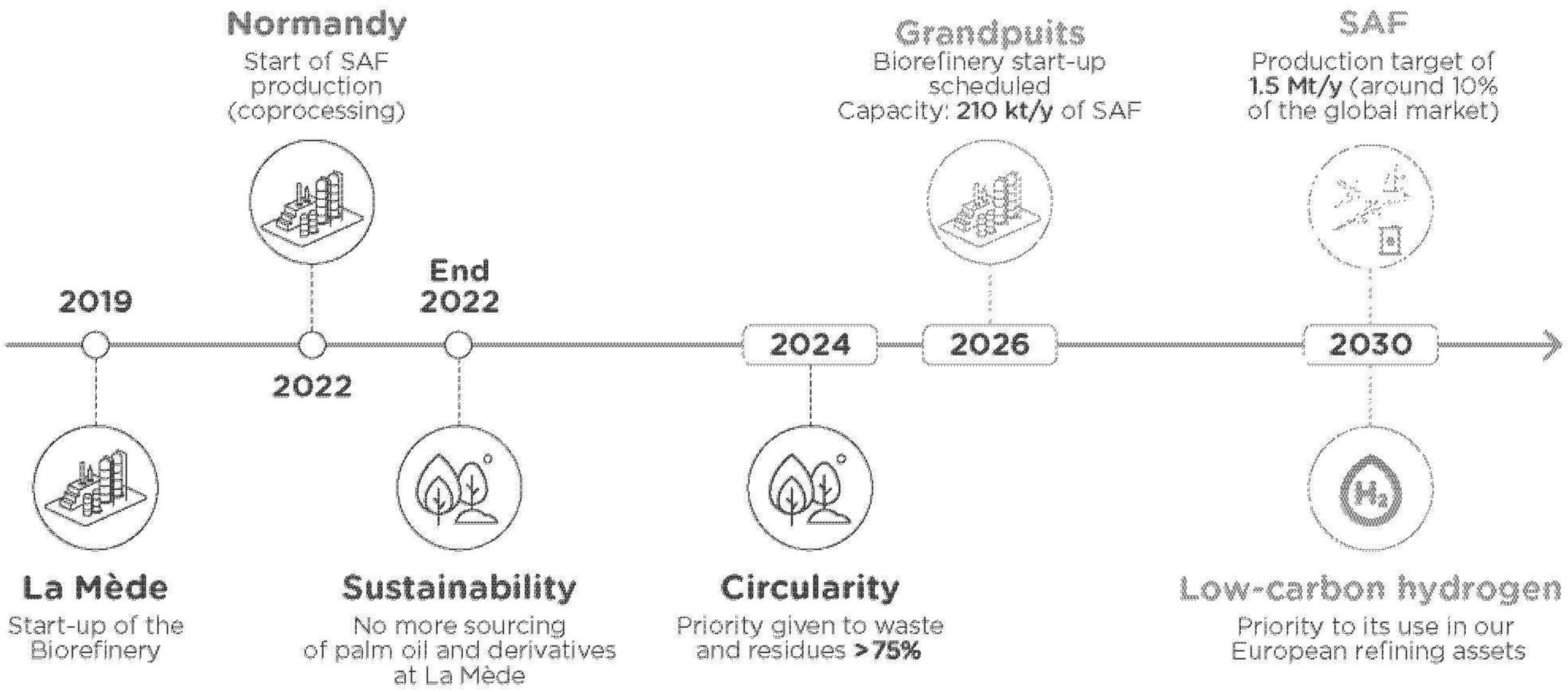
Today, biofuels emit over their life cycle more than 50% less CO_2 than their fossil fuel equivalents, making them a partial decarbonization pathway for liquid fuels[4]. While demand is emerging quickly, which should lead towards a high-margin market, access to feedstocks (plants, residues, sugar, etc.) remains a barrier to growth. Among these biofuels, TotalEnergies favors the production of Sustainable Aviation Fuel (SAF) to decarbonize the aviation industry. To avoid conflicts of land usage, TotalEnergies is developing solutions based on primarily food industry waste and residues (used oils, animal fats). As of 2024, the Company increases the share of circular feedstocks to more than 75% to produce biofuels.

Biogas

Biogas, produced from the decomposition of organic waste, is a renewable gas. Injected into gas networks in the form of biomethane, it contributes to the partial decarbonization of natural gas uses. TotalEnergies' gross production capacity continued to increase in 2024, reaching 1.2 TWh/year eq. of biomethane. The Company now intends to pursue its development through growth, mainly in Europe and the United States.

(1) Lifecycle carbon intensity of energy products sold (refer to the glossary for the definition).
(2) Lifecycle carbon intensity of energy products sold (refer to the glossary for the definition).
(3) Lifecycle carbon intensity of energy products sold (refer to the glossary for the definition).
(4) According to the European Directive 2018/2001 named RED II.

Transforming our industrial sites to produce low-carbon energy



1.3.4.4 What are the Relevant Indicators for Reducing GHG Emissions Worldwide?

TotalEnergies produces and sells liquified natural gas, which is a necessary transition fuel for building a reliable, low-carbon power system, complementing renewable energies that are intermittent by nature.

Moreover, gas helps to reduce emissions from power generation in many countries, since burning gas rather than coal to produce electricity emits half as much CO_2 for the same amount of energy produced.

In this respect, setting objectives to drastically reduce TotalEnergies' global indirect emissions (Scope 3)[1] in absolute value, without an evolution of the overall structure of energy demand, is in reality not relevant to reduce global GHG emissions.

Most of the emissions reported under Scope 3[2] by TotalEnergies correspond to the direct emissions (Scope 1) of the consumers of these products: the use of these products depends on their decisions and needs.

In this context, an absolute reduction target for Scope 3[3] for a company like TotalEnergies, without any change in energy systems and therefore without the reduction of the corresponding Scope 1 of energy users, would lead to a shift of this demand towards other suppliers, notably the national oil companies of producing countries which account for more than 70% of the world market (compared with around 1.5% for TotalEnergies).

This strategy would have no effect on lowering global greenhouse gas emissions, and therefore no positive impact on climate, and would be contrary to the interests of our Company and its shareholders.

This strategy could be counter-productive for TotalEnergies' customers, as the Company has set as a goal to ensure their energy supply security while supporting them in their own emissions reduction journey.

1.3.4.5 Enabled emissions reductions

Estimated enabled emissions reductions from LNG sales

Gas-fired power plants are a flexible mean of power generation and can be mobilized quickly, so they offer a secure backup for grids which are supplied by a growing share of intermittent renewable sources. CCGTs emit half as much GHG as coal or fuel oil-powered power plants[4], that still account for the majority of power generation capacity in some countries. Globally, coal covers 36% of production and 74% of GHG emissions associated with electricity, and gas covers 23% of production and 22% of emissions respectively[5].

LNG, which can be shipped by sea, can flexibly supply a large number of power plants. A large part of the gas sold by the Company goes to the electricity sector.

Given the positive role of gas in the transition, TotalEnergies is aiming to increase its share in its sales mix by 2030, and has made the decision not to set a gas Scope 3[6] reduction target on this value chain. When fuel-oil or coal-fired power generation is replaced by gas-fired power generation, GHG emissions fall, whereas TotalEnergies' gas Scope 3[7] increases.

(1) Scope 3 GHG emissions (GHG Protocol - Category 11). Refer to the glossary for the definition.
(2) Scope 3 GHG emissions (GHG Protocol - Category 11). Refer to the glossary for the definition.
(3) Scope 3 GHG emissions (GHG Protocol - Category 11). Refer to the glossary for the definition.
(4) IEA 2024; Life Cycle Upstream Emission Factors 2024.
(5) The rest of the electricity production is provided by hydroelectricity (15%), solar and wind (12%), nuclear (9%) as well as by fuel oil and other renewables. Figures for the year 2022 detailed in the IEA's WEO 2024.
(6) Scope 3 GHG emissions (GHG Protocol - Category 11). Refer to the glossary for the definition.
(7) Scope 3 GHG emissions (GHG Protocol - Category 11). Refer to the glossary for the definition.

The Company has estimated the enabled emissions reductions[1] to which its 2024 sales of LNG may have contributed. The calculation is based on generation mixes and emission factors, published by Enerdata and the IEA[2], for each country or region[3] and generation mean. TotalEnergies estimates that its customers' use of LNG has enabled emissions reductions by about 65 Mt CO_2e in 2024.

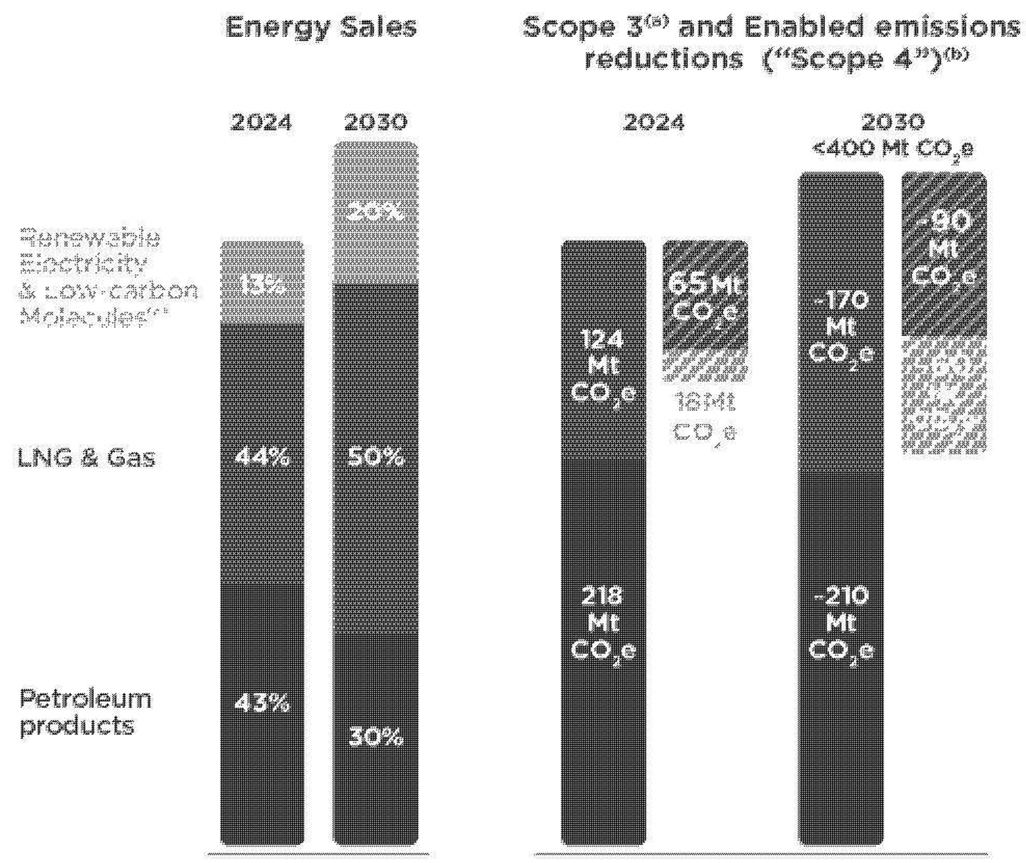
Estimated enabled emissions reductions from renewable electricity generation

A similar approach has been taken to estimate the enabled emissions reductions by renewable electricity generation: the methodology compares the emissions of the country's alternative non-renewable mix to those from solar and wind generation. The applied emission factors (published by the IEA) cover the entire life cycle of power generation[4]. Non-renewable generation mixes are based on historical data published by Enerdata[5] for each country or continent[6]. TotalEnergies estimates that its renewable power generation has enabled emissions reductions by around 18 Mt CO_2e in 2024.

Estimates for 2030

By 2030, the enabled emissions reductions could amount to 150 Mt CO_2e (around 90 Mt CO_2e for LNG sales and around 60 Mt CO_2e for renewable production), compared with a Scope 3[7] maintained below 400 Mt CO_2e. These enabled emissions reductions that will result from the customers' decision to substitute carbon-based energy products (fossil fuels, in particular coal) with less carbon-intensive energies (natural gas and renewables) will contribute to a reduction in global GHG emissions.

Scope 3[a] and enabled emissions reductions[b]



(a) Presented as full area in the graph. Scope 3 GHG emissions (GHG Protocol - Category 11). Refer to the glossary for the definition
(b) Presented as hatched area in the graph. Refer to the glossary for the definition.
(c) Biofuels, biogas, hydrogen and e-fuels/e-gas.

1.3.5 Ambition of carbon neutrality by 2050, together with society

1.3.5.1 Developing carbon capture and storage to reduce our emissions and those of our customers

The IEA's NZE scenario[8] includes the use of CCS[9] for up to 6 Gt CO_2 per year in 2050, in order to reduce some of the emissions from residual oil and gas consumption, as well as from other industrial processes (cement, lime, steel, etc.) This capacity is more than 100 times greater than the 50 Mt CO_2 per year currently captured worldwide.

TotalEnergies' CCS strategy gives priority to reducing emissions of its activities, to reduce Scope 1+2 emissions from upstream Oil & Gas assets, as well as refining and LNG plants. For example, at Snøhvit liquefaction plant in Norway, where the Company is partner alongside Equinor, around 9 Mt of native CO_2 have been stored since 2008. Similarly, the separated native CO_2 in the new NFE and NFS LNG liquefaction trains, currently under development in Qatar, will be stored by QatarEnergy. Finally, for our Ichthys LNG asset in Australia, the Company is studying a native CO_2 storage solution for start-up beyond 2030. The study of CCS solutions for its assets therefore complements the already mentioned efforts to reduce emissions, including electrification, energy efficiency and flaring reduction.

The Company also invests in CO_2 storage projects close to its own assets, which can additionally serve as a CO_2 storage solution for large industrial emitters ("Storage as a Service") which can thereby reduce their Scope 1 and secure the future of their activities. TotalEnergies is investing around $100 million per year in this business, with models that enable us to benefit from leverage. This investment will be sustained in order to contribute to a gross storage capacity of 10 Mt CO_2 per year by 2030.

Europe is at the heart of this CCS strategy. TotalEnergies is an historical operator in the North Sea, with recognized operational and geological expertise in the area. The United Kingdom, Norway and the European Union have set objectives and regulations and have provided significant financial support to promote a cross-border deployment of CCS. The Company currently developing four projects in the North Sea that will provide CO_2 storage solutions for its own assets and those of its customers.

The Company has entered the United States CCS market in 2024, with a 25% stake in the Bayou Bend project in Texas. Finally, TotalEnergies is studying the development of CO_2 storages in Malaysia, for local and regional markets, with its partners Petronas and Mitsui.

TotalEnergies is also studying the utilization of carbon in various forms (CCU[10]), such as in reaction with renewable hydrogen, to produce fuels or synthesis gas. In the United States, the Company is currently studying an industrial-scale production unit for "synthetic methane", produced from renewable hydrogen and biogenic CO_2, to be transported and marketed using existing natural gas infrastructures.

(1) Refer to the glossary for the definition.
(2) Production mix for the year 2023 provided by Enerdata (data published in January 2025) and emission factors for the year 2022 provided by IEA (data published in 2024).
(3) For this calculation, Germany, France, Belgium, Luxembourg and the Netherlands have been considered as a single electricity and gas system. For France, the emission factors published by RTE have been considered.
(4) Combustion-associated emission factors and upstream emission factors published in 2024 by the IEA for the year 2022.
(5) Enerdata data published in January 2025 for the year 2023.
(6) For this calculation, Europe has been considered as a single electrical network.
(7) Scope 3 GHG emissions (GHG Protocol - Category 11). Refer to the glossary for the definition.
(8) World Energy Outlook 2024.
(9) Carbon Capture & Storage.
(10) Carbon Capture & Utilization.

1.3.5.2 Offsetting residual emissions with nature-based carbon sinks

Natural areas preservation and restoration can be a lever for achieving net zero emissions worldwide by 2050.

Only in 2030 will TotalEnergies begin voluntary offsetting its residual emissions via NBS (Nature Based Solutions) carbon credits and will offset only Company's Scope 1+2 residual emissions.

TotalEnergies is working to build a high-quality portfolio and are paying close attention to the integrity and permanence of the emissions reductions and sequestration achieved by the activities financed in this way.

The Company is in favor of strengthening a global framework of trust to further reinforce robust and recognized voluntary crediting mechanisms.

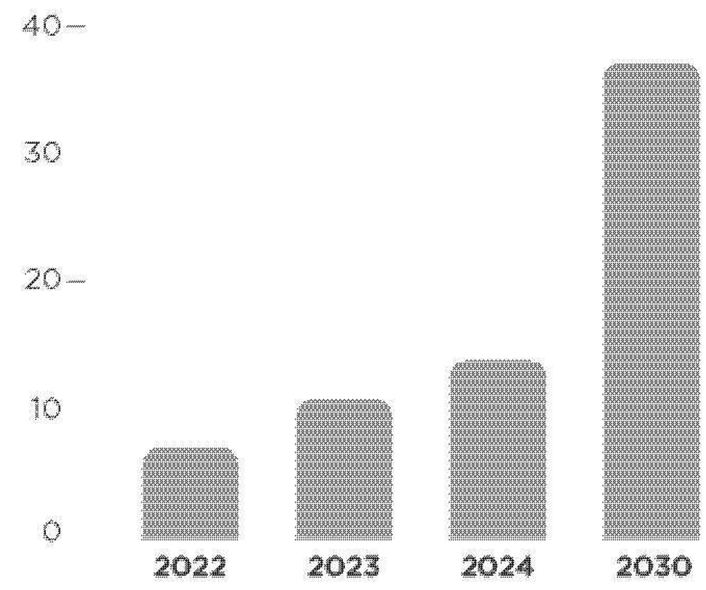
TotalEnergies is investing in forestry, regenerative agriculture and wetlands protection projects. Its strategy aims to combine and balance the value of people's financial revenue from agriculture and forestry and the value of the benefits to soil, biodiversity, the water cycle and the production of carbon credits. When that approach is successful, the local standard of living improves and degradation of the land diminishes – as do emissions. This search for balance among different practices makes a just transition possible.

At 2024 year-end, the Company's stock of credits stood at 13.7 million carbon credits certified by the main international standards such as Verified Carbon Standard (VCS or Verra), ACR (American Carbon Registry) or ANREU.

The annual budget allocated to these projects is $100 million. The cumulative budget pledged to date for all concluded operations amounts to nearly $770 million over their cumulated lifespan, for an expected cumulative volume of verified credits of 37 million in 2030 and 53 million in 2050, taking into account methodological revisions for certification and technical updates. Between 2025 and 2030, TotalEnergies will continue to develop new projects in order to build up a stock of carbon credits of around 50 million by 2030.

In this context and based on a consumption rate of 10% of the stock per year from 2030, TotalEnergies would consume around 5 million credits per year from 2030 onwards.

Cumulated credits generated from 13 sanctioned projects by the end of 2024 *(million credits)*



1.3.5.3 Innovating to accelerate the energy transition

Each year, TotalEnergies spends more than 1 billion dollars on R&D and innovation, and employs more than 3,500 people.

R&D at TotalEnergies

In 2024, 68% of TotalEnergies' R&D budget was devoted to new energies (renewable electricity, low-carbon molecules), batteries and reducing the environmental footprint of the Company (methane, CCUS, reducing energy consumption, water, biodiversity, etc.). This shift in research and innovation towards low-carbon energies is at the core of TotalEnergies' transition.

The creation of the OneTech branch, in September 2021, illustrates the dynamic undertaken by the General Management to mobilize teams and meet TotalEnergies' new challenges as part of its transition strategy.

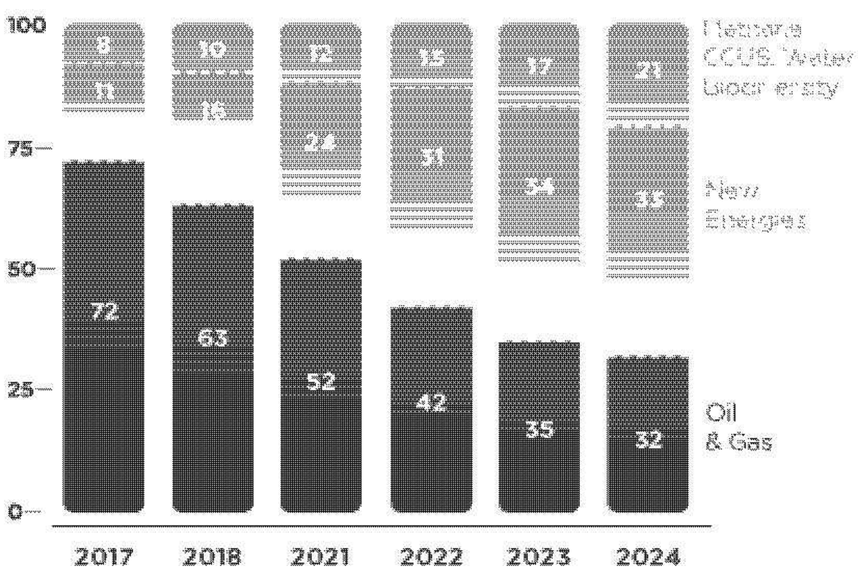
OneTech's mission is to provide all the technical and R&D expertise that TotalEnergies needs to implement its strategy.

One of the missions of the OneTech segment, is to provide low-carbon energy solutions, reduce CO_2 emissions and improve the energy efficiency of TotalEnergies' projects right from the design stage and anticipate innovative technologies with the Company partners.

Reducing our emissions through digital technology

TotalEnergies' Digital Factory brings together 300 developers, data scientists and other digital experts, with the mission of developing digital solutions to optimize TotalEnergies' industrial tools (environmental impact, availability, costs) and support the Company's development in low-carbon energies.

Budget allocation R&D[a] (%)



(a) R&D budget excluding Hutchinson.

1.4 Our approach to sustainable development

Energy is at the heart of one of the great challenges of the 21st century: saving our planet from the threat of climate change while enabling the majority of mankind to escape from poverty. The climate challenge and energy transition are inseparable from other major world challenges such as poverty, hunger, environmental degradation, biodiversity loss, the preservation of water, ethics and corruption: these are the 17 U.N. Sustainable Development Goals. It is not enough to decarbonize energy. It is also necessary to meet in a responsible way the growing needs for affordable and sustainable energy of a rising global population. This is TotalEnergies' purpose: to provide as many people as possible with energy that is more reliable, more affordable and more sustainable. And this is why the Company aims at placing Sustainability in all its dimensions at the heart of its strategy, its projects and its operations and at establishing the benchmark for endorsement of the Sustainable Development Goals.

To do so, it relies on the action principles at the heart of its business model, Safety, Respect for Each Other, Zero tolerance towards corruption and fraud, Transparency in its engagement with society.

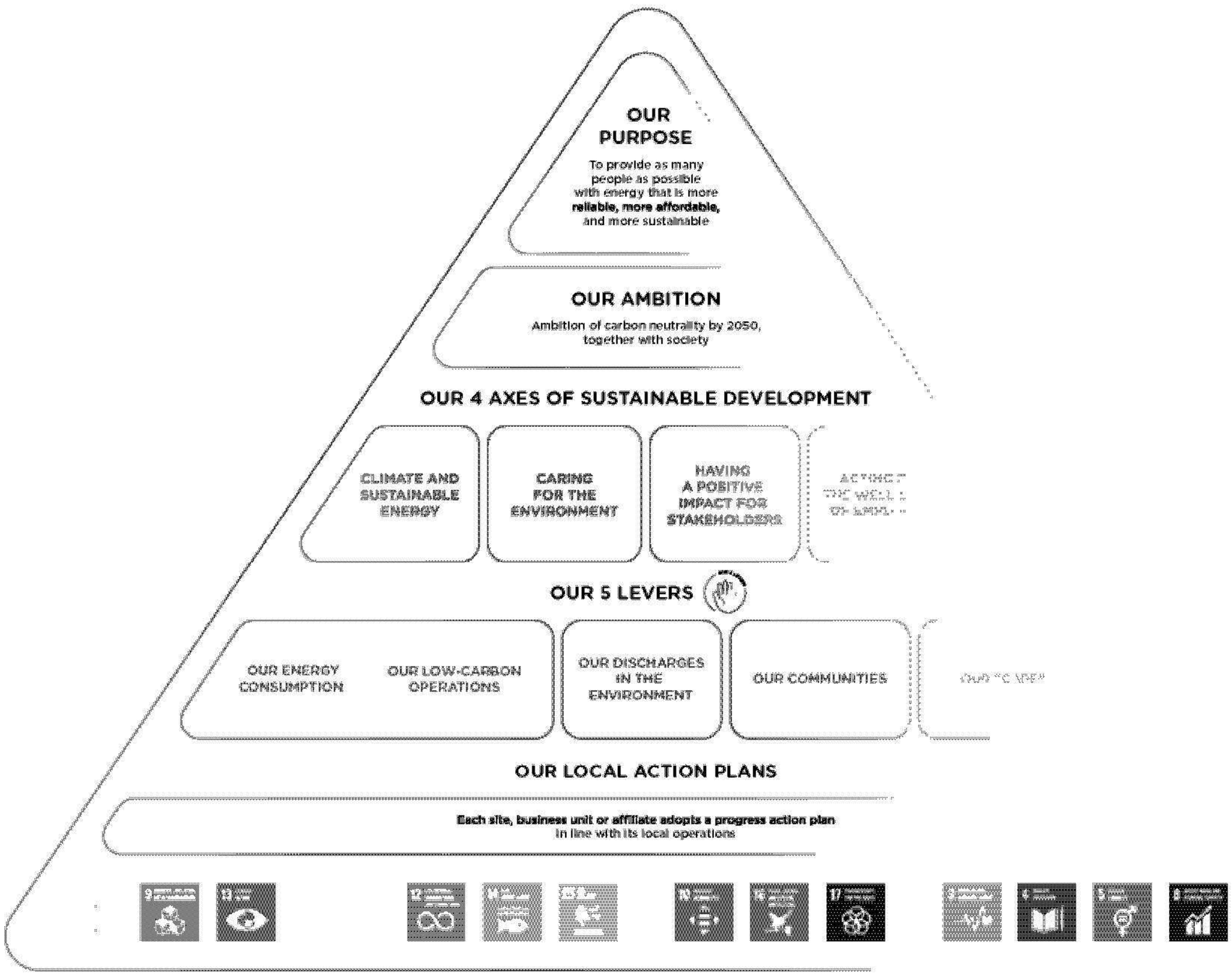
TotalEnergies' commitment to contribute to the Sustainable Development Goals is based on 4 axes:

- climate and sustainable energy;
- caring for the environment;
- acting for the well-being of our employees;
- having a positive impact for stakeholders.

In 2024, to make these commitments a reality, the Company has identified 5 "Levers for a Sustainable Change" to bring about collective change in our behaviors. Requiring the commitment of all employees, these five Levers aim to minimize energy consumption and discharges into the environment from its projects and operations, to promote renewable energies and low-carbon technologies to reduce emissions, both in its projects and operations and to its customers and suppliers, to maintain a constructive dialogue with its stakeholders and to pay attention to others in the workplace.

They support TotalEnergies' Sustainab'ALL approach for which the Company has mobilized its 100,000 employees through the progress plans defined at each of its sites. During workshops, more than 27,000 employees took part in 2022 in setting up indicators related to the SDGs. In 2023, nearly 250 of the Company's most important sites, business units, divisions or affiliates[1] representing 94.4% of employees, defined a local action plan with objectives to be achieved at their perimeter by 2025. Their implementation continued in 2024.

TotalEnergies' approach to sustainable development



TARGETS AND PROGRESS INDICATORS

Whether with regard to safety, health, climate, the environment or shared growth, TotalEnergies manages its operations with the aim of working in a sustainable, active and positive manner in all of the Company's host countries. The Company was one of the first in the industry to publish measurable improvement targets in these areas.

	Targets	Status
The diversity of its employees and management is crucial to the Company's competitiveness, capacity for innovation, and its attractiveness.	Women to account for **30%** of Executive Committee members and of the G70[a] by 2025 Women to account for **30%** of senior executives by 2025 and **30%** of senior managers by 2025 – Non-French nationals to account for **45%** of senior executives and non-French nationals to account for **40%** of senior managers	**22.2%** of Executive Committee members and **33.3%** of the G70 are women in 2024 **29.5%** of senior executives are women and **25.8%** of senior managers are women in 2024 – **38.6%** of senior executives are non-French nationals and **36.4%** of senior managers are non-French nationals in 2024

(a) Senior executives with the most important responsibilities.

(1) Excluding Hutchinson.

Safety/Health

Protecting the safety of its employees, stakeholders and facilities is a priority for TotalEnergies, as is protecting the health of all people directly or indirectly involved in its activities.

SAFETY

Targets	Facts
– Avoiding the occurrence of a major industrial accident	– No major industrial accidents in 2024
– Zero fatal accidents	– 1 fatality in 2024
– Continuously decrease the TRIR and achieve a TRIR of 0.60 by 2025. The 2024 target was 0.62	– A TRIR[a] of 0.55 in 2024

HEALTH

Target	Facts
– Protecting the health of employees at work	– 99% of employees with specific occupational risks received regular medical monitoring in 2024[b]

(a) TRIR (Total Recordable Incident Rate): number of recorded incidents per million hours worked.
(b) Data provided by the WHRS.

Climate

TotalEnergies is resolutely committed to reducing GHG emissions from its operated facilities

Targets	Facts
2030 worldwide targets (Scope 1+2)	
– Reduce GHG emissions (**Scope 1+2**) from operated facilities from 46 Mt CO_2e in 2015 to less than 37 Mt CO_2e by 2025. By 2030, the target is a reduction of at least 40% of the net emissions[a] compared to 2015 for its operated activities, *i.e.*, 25 Mt CO_2e to 30 Mt CO_2e	– A GHG emission reduction (Scope 1+2) from operated facilities from 46 Mt CO_2e in 2015 to **34 Mt CO_2e** in 2024
– Reduce **methane emissions**[b] from operated facilities by 60% between 2020 and 2025, and by 80% between 2020 and 2030	– Methane emissions[2] already reduced by 50% between 2010 and 2020 and by **55%** between 2020 and 2024
– Maintain the **intensity of methane emissions** at less than 0.1% of commercial gas produced at Upstream operated oil & gas facilities	– A methane intensity of **0.1%** for Upstream operated oil & gas facilities
– Reduce **routine flaring**[c] (Upstream oil & gas operations) to less than 0.1 Mm^3/d by 2025, with the goal of eliminating it by 2030	– More than **93%** reduction in routine flaring between 2010 and 2024
2030 worldwide targets (Scope 3[d])	
– Maintain **Scope 3[d] GHG** emissions to a level lower than 400 Mt CO_2e by 2025 and 2030	– Scope 3[d] emissions limited to **342 Mt CO_2e** in 2024, below the 2015 level – A decrease of the Scope 3[d] GHG emissions from the petroleum products sold worldwide in **38%** in 2024 compared to 2015
2030 worldwide target (carbon intensity[e])	
– Reduce the **lifecycle carbon intensity**[e] **of energy products sold** by more than 25% compared to 2015. By 2025, the target reduction is at least 17% (**Scope 1+2+3**)	– A decrease of the carbon intensity[e] of energy products sold of **16.5%** between 2015 and 2024

(a) The calculation of net emissions takes into account projects of nature-based carbon sinks like forests, regenerative agriculture and wetlands.
(b) Excluding biogenic methane.
(c) Routine flaring, as defined by the working group of the Global Gas Flaring Reduction program within the framework of the World Bank's Zero Routine Flaring initiative. Perimeter excluding Iraq.
(d) Scope 3 GHG emissions (GHG Protocol - Category 11). Refer to the glossary for the definition.
(e) Lifecycle carbon intensity of energy products sold (refer to the glossary for the definition).

Environment

TotalEnergies' goal is to improve the environmental performance of its operated facilities.

ENVIRONMENT MANAGEMENT SYSTEM

Target	Facts
– Have the environment management systems of environmentally material sites[a] certified to the ISO14001 standard	– **100%** of the **82** sites material for the environment certified to the ISO14001 standard in 2024

AIR

Target	Facts
– Decrease sulfur dioxide (SO_2) emissions into the air by **75%** between 2015 and 2030, a target that amounts to not exceeding 15 kt emitted in 2030	– **71%** reduction in SO_2 emissions into the air between 2015 and 2024

WATER

Targets	Facts
– Reduce the freshwater withdrawal of the sites located in water stress area by **20%** between 2021 and 2030	– **6%** of reduction in freshwater withdrawal in water stress area in 2024(base WRI Aqueduct 2030 V4.0)
– Limit the hydrocarbon content of water discharges to below **30 mg/l** for offshore sites	– **93%** of the Company's oil sites met the target for the quality of offshore discharges in 2024
– Limit the hydrocarbon content of water discharges to below **1 mg/l** for onshore and coastal sites by 2030	– **82%** of the Company's oil sites met the target for the quality of onshore discharges in 2024

WASTE

Target	Facts
– Recycle more than **70%** of the waste from sites operated by the Company's subsidiaries (excluding digestate from biogas units)	– **71%** of the waste produced by sites operated by the Company's subsidiaries was recycled in 2024

(a) Production sites of the subsidiaries of the Exploration & Production segment, sites producing more than 250 kt/y in the Refining & Chemicals and Marketing & Services segments, as well as gas-fired power plants in the Integrated Power segment, operated by the Company.

Biodiversity

Aware of the need to preserve biodiversity, ecosystems and protect nature, TotalEnergies has adopted an ambition in terms of biodiversity.

Commitments	Facts
– Implement a net zero deforestation policy in new projects on new sites approved from 2022 onwards	– In 2024, **30 ha** net deforestation (156 ha gross deforestation and 186 ha compensated). Projects to compensate have generated a positive balance of reforested area of 8 ha since 2023
– Implement the biodiversity ambition in the 4 areas presented in point 5.2.4.3 of chapter 5	– No oil and gas exploration or production activity in the area of natural sites listed on the UNESCO World Heritage List
	– No exploration activity in oil fields under sea ice in the Arctic
	– **5** biodiversity action plans carried out or in preparation in 2024 for projects located in protected areas[a] or aligned with the International Finance Corporation PS6 standard
	– **77** biodiversity action plans initiated on sites material for the environment[b] at the end of 2024 (2025 objective reached at 100%).
	– **230** cumulated citations since 2020 in scientific publications of biodiversity data sets produced by the Company and shared in the database of the Global Biodiversity Information Facility (GBIF) database

(a) Sites located in an IUCN I to IV or Ramsar convention protected area.
(b) Production sites of the subsidiaries of the Exploration & Production segment, sites producing more than 250 kt/y in the Refining & Chemicals and Marketing & Services segments, as well as gas-fired power plants in the Integrated Power segment, operated by the Company.

BUSINESS ETHICS COMMITMENTS

TotalEnergies operates in many different countries with disparate and complex economic, social and cultural environments, where governments and civil society have especially high expectations of the Company as an exemplar. Within this context, TotalEnergies strives to act as a vehicle for positive change in society by helping to promote ethical principles in every region where it operates.

Accordingly, TotalEnergies is committed to respecting internationally recognized human rights wherever it operates, especially the Universal Declaration of Human Rights, the Fundamental Conventions of the International Labour Organization (ILO), the U.N. Guiding Principles on Business and Human Rights, the OECD Guidelines for Multinational Enterprises and the Voluntary Principles on Security and Human Rights (VPSHR).

Furthermore, TotalEnergies is fully committed to fighting corruption and has adopted a policy of zero tolerance in that area.

In addition to that commitment, it lends active support to initiatives promoting greater transparency. TotalEnergies publishes in its Universal Registration Document an annual report covering the payments made by the Company's extractive companies (fully consolidated entities) to governments and the full list of its consolidated entities, together with their countries of incorporation and operations.

TotalEnergies publishes a report based on the EITI (Extractive Industries Transparency Initiative) guidelines in November 2020 designed to promote transparency in the trade of raw materials. In accordance with the EITI framework, of which it has been a member since 2002, TotalEnergies advocates for the disclosure by countries of their petroleum contracts and licenses.

FIGHTING TAX EVASION

With a presence in about 120 countries, the Company carries out its operations in a constantly changing environment and is subject to an increasingly complex set of tax regulations which may raise risks related to their articulation and their interpretation.

In this context, TotalEnergies has developed a responsible tax approach based on clear principles of action and rigorous governance rules as set out in its tax policy statement, which is available to the public on the website of TotalEnergies.

TotalEnergies publishes a tax transparency report on its corporate website which discloses detailed information on the taxes paid in its main countries of operation, in order to provide its stakeholders with a better understanding of the Company's tax position pursuant to the recommendations of the Global Reporting Initiative and the World Economic Forum.

Tax Policy of the Company

Tax payments of TotalEnergies represent a substantial part of its economic contribution to the countries in which it operates.

Mindful of its responsibility, the Company is committed to paying its fair share of taxes to the host countries of its operations, in compliance with applicable laws and conventions and in accordance with its Code of Conduct.

The structuring of our investments worldwide is driven by our business operations and the regulatory framework.

Our tax policy's prime focus is certainty and sustainability in the long term. We thus believe that artificial or aggressive tax planning mostly derives short term tax benefits and is not compatible with a sustainable approach.

We apply the arm's length principle for the determination of our intercompany transfer prices and we pay our income taxes in the countries where we create value, in compliance with applicable laws and regulations.

It is the Company's long-term commitment not to create subsidiaries in countries generally acknowledged as tax havens and to repatriate or liquidate existing subsidiaries, where feasible.

Government authorities may offer tax incentives to support business segments, create employment or foster their economic development. The Company may only claim incentives that are aligned with its business strategy, relate to investments with genuine economic substance and meet the requirements set by host countries.

The Company takes a responsible approach to the management and control of taxation issues, relying on well-documented and controlled processes.

The management of tax risks is fully integrated in the Company's global risk governance process. As part of this process, the VP Tax, under the authority of the Chief Financial Officer, oversees the implementation of the tax policy and reports on a regular basis to the Board's Audit Committee on TotalEnergies' tax position. The tax function is made up of a network of qualified and regularly trained in-house tax experts at the corporate level, in the business segments and in the affiliates.

Transparency is an essential factor in building a trust-based relationship with our stakeholders. As a permanent member of the Extractive Industries Transparency Initiative (EITI) since its formation in 2003, TotalEnergies fully supports initiatives for greater transparency and accountability. We encourage governments to ensure that the tax reporting obligations they will impose upon multinational groups are consistent, coordinated and proportionate.

We engage with a broad range of stakeholders, and especially with tax authorities, in a timely, transparent and professional manner which is the basis of a constructive and long-term relationship. In France, the country of its headquarters, TotalEnergies has been part of the cooperative compliance program upon its inception in 2019, thus pursuing greater transparency, dialogue and trust in its relationship with the French tax administration.

As regards advocacy relating to tax matters, TotalEnergies follows the rules set forth under its Code of Conduct and its Advocacy Directive, both available to the public on the Company's website. The Company is committed to fighting any form of corruption and does not intervene in the functioning or financing of the political life in its host regions. It undertakes to convey messages to the authorities that are consistent with its stated positions and strategies and to be transparent about such messages, whether they are positive or defensive, notably with regard to the Company's support for the objectives of the Paris Agreement relating to the fight against climate change.

The Company publishes in its Universal Registration Document an annual report covering the payments made by its extractive subsidiaries to governments as well as the full list of its consolidated subsidiaries, together with their countries of incorporation and of operations. The Company also issues a tax transparency report, which provides additional information on the taxes paid in its main countries of operations on a country-by-country basis. This report aims to offer more detailed information on the Company's tax position.

In compliance with its goal to foster a global responsible tax environment and encourage best practices, the Company endorsed the Responsible Tax Principles developed by the B Team, a non-profit organization bringing together business leaders and representatives of civil society with the aim of promoting a sustainable form of economic and social development.

The present tax policy is included in the Company's Universal Registration Document. It is reviewed by the Audit Committee and approved by the Board of Directors.

VOLUNTEERING PROGRAM

In 2018, the Company introduced a worldwide employee community volunteering program called *Action!*, designed to give its employees the time and opportunity to do more in favor of the development of its host territories. *Action!* lets volunteer employees devote up to three workdays a year to local community projects.

By the end of 2024, the program had been implemented in one hundred countries. Approximately 57,000 inclusive projects have been carried out by close to 24,000 employees since the program's launch.

ACTIONS TO PROMOTE THE LINK BETWEEN THE NATION AND THE ARMED FORCES AND SUPPORT COMMITMENT TO THE RESERVES

Since 2005, TotalEnergies has been associated with the French Ministry of the Armed Forces as part of an agreement to support the military reserve policy. This agreement has been renewed regularly, most recently in March 2022 for a further five years (2022-2027).

The aim of this agreement is on the one hand to confirm the Company's support for the military reserve policy by granting its employees who are operational reservists special facilities to enable them to carry out their periods of reserve activity, and on the other hand to establish a climate of trust, based on dialogue, between the employer and the Ministry of the Armed Forces.

At a time when the French Defense Code required employers to grant their reservists eight working days to carry out periods of reserve service, without any obligation to maintain their pay, TotalEnergies, through its agreement, granted reservists thirteen working days per year, on full pay, as well as maintaining their social security and welfare benefits.

For the Ministry of the Armed Forces, these agreements with employers are one of the important levers used to achieve the objective, set by the government after the 2015 attacks, of doubling the number of operational military reservists.

These agreements send a positive signal to:

- the Armed Forces, who count on companies to support them in their efforts to mobilize operational reservists,
- and the small but young and highly motivated and dynamic reservist population. TotalEnergies has around one hundred reservists, forty of whom are on operational reserve duty.

ADVOCACY AND SECTOR INITIATIVES IN SUPPORT OF THE ENERGY TRANSITION

Support for government action and climate sectorial initiatives and disclosures

TotalEnergies supports the commitments made by governments to combat global warming as part of the Paris Agreement and publishes its positions on its corporate website (heading Sustainability). This site also groups together TotalEnergies' positions and commitments in favour of human rights, the fight against corruption and the environment. TotalEnergies' interest representation actions in France, Europe and the United States are listed by theme and by year, to promote complete transparency.

During COP29, TotalEnergies' CEO participated as CEO Champion in a round table of the Oil and Gas Decarbonization Charter (OGDC). This industry initiative - launched at COP28 - brings together 55 national and international Oil & Gas companies representing almost 45% of the world's oil production. The signatories' objectives are to eliminate routine flaring by 2030, aim for near-zero upstream methane emissions by 2030, and to be Net Zero on Scope 1+2 operated emissions by 2050.

At the invitation of the United Nations Environment Programme (UNEP), TotalEnergies' CEO also took part at the OGMP 2.0 CEO Forum and invited all Oil & Gas companies to join OGMP 2.0, which is a reference framework for methane reporting piloted by UNEP.

In Europe, TotalEnergies supports the "Fit-for-55" package and specifically some of its key components, such as the broader use of carbon pricing, the large-scale expansion of renewable energies, deployment of infrastructure and the development of fuels and renewables for the transportation industry. TotalEnergies' responses to the European Commission's public consultations on climate are public and may be viewed online.

Review of associations

TotalEnergies is an active participant in both national and international business and industry associations. Since 2019, the Company has been publishing its six principles on its responsible commitment to climate change within industry associations.

Our 6 key principles:

1. TotalEnergies recognizes the link established by science between human activities, in particular the use of fossil fuels, and climate change.

2. TotalEnergies recognizes the Paris Agreement as a major step forward in the fight against global warming and supports the initiatives of the implementing States to fulfill its aims.

3. TotalEnergies supports the implementation of carbon pricing mechanisms.

4. TotalEnergies supports policies, initiatives and technologies aimed at promoting the development of renewable energies and sustainable bioenergies (biofuels, biogas) as well as energies and technologies aimed at decarbonizing industrial processes and transportation.

5. TotalEnergies promotes the role of natural gas as a transition fuel, in particular as a replacement for coal. TotalEnergies supports policies aimed at measuring and reducing methane emissions aiming for zero methane emissions.

6. TotalEnergies supports the carbon offset mechanisms necessary to achieve carbon neutrality, through organized and certified markets ensuring the quality and sustainability of carbon credits. TotalEnergies promotes a policy of reducing greenhouse gas emissions.

Results of the review of associations published in 2024

The Review of industry associations report was published in 2024. It can be found on TotalEnergies' website.

Every two years, TotalEnergies records memberships in industry associations. 1,107 industry associations and chambers of commerce have been covered for 2023 and for which the list is available on the Company's website.

In the review published in 2024, the Company has selected and evaluated 116 associations out of 1,107, representing more than 63% of the total amount of fees and memberships. It was found that 2 associations are "partially aligned" with the Company's six key principles on climate-related topics: Texas Oil and Gas Association (TXOGA) and International Air Transport Association (IATA).

With regard to TXOGA, since 2021 TotalEnergies has been paying close attention to the positions taken by this association, particularly concerning US methane regulations and their lack of support for the Paris Agreement. Nevertheless, the Company has noted their support for the EPA's (Environmental Protection Agency) efforts to measure methane emissions in the Permian Basin.

TotalEnergies is not a member of IATA, but is a strategic partner for technology projects (SAF). However, the inclusion of this association in the previous Company's reviews of associations and the positions taken by this association against the carbon tax led TotalEnergies to keep it in its selection for the review of associations, in order to continue to monitor it closely.

In the review published in 2024, in the field of energy, the majority of the new associations to which the Company's entities have joined relate to renewable energies and low-carbon technologies. TotalEnergies is already preparing the next review of associations with regard to its six principles on climate-related topics and it will be published in 2026.

Collective initiatives supported by TotalEnergies

Axes	Name of the initiative	Perimeter
ENERGY & CLIMATE	3x Renewables	Worldwide
	Oil and Gas Decarbonization Charter	Worldwide
	OGMP 2.0	Worldwide
	Aiming For Zero Methane	Worldwide
	TCFD	Worldwide
ACTING FOR THE WELL-BEING OF EMPLOYEES	Global Deal	Worldwide
	Women's Empowerment Principles - Equality Means Business (UNGP)	Worldwide
	Closing the gender gap - a call to action (WEF)	Worldwide
	ILO Global Business and Disability Network Charter	Worldwide
	The Valuable 500	Worldwide
	Manifesto for the inclusion of people with disabilities in economic life	France
	Inclusion and Diversity Pledge (ERT)	Europe
	Charter - Autre Cercle	France
	Elles bougent	France
CARING FOR THE ENVIRONMENT	Act4Nature International	Worldwide
	CEO Water Mandate	Worldwide
	Circular economy commitment AFEP	Worldwide
	UN Global Compact Ocean Stewardship Coalition	Worldwide
	UNESCO - Ocean Decade (via Corporate Data Group)	Worldwide
HAVING A POSITIVE IMPACT FOR STAKEHOLDERS	The Voluntary Principles on Security and Human Rights (VPSHR)	Worldwide
	The United Nations Guiding Principles on Business and Human Rights as endorsed by the UN Human Rights Council in 2011	Worldwide
	The United Nations Global Compact Principles	Worldwide
	The B Team Responsible Tax Principles	Worldwide
	Partnering Against Corruption Initiative (PACI)	Worldwide
	Extractive Industries Transparency Initiative (EITI)	Worldwide
	Le Collectif des entreprises pour une économie plus inclusive	France

1.5 Our investment policy

TotalEnergies' investment policy is designed to support the deployment of its balanced energy transition strategy. It is anchored on two pillars: investments for the maintenance and growth of oil and gas production, mainly LNG, on the one hand, and investments for the growth of low-carbon activities, mainly electricity from renewable sources, on the other hand.

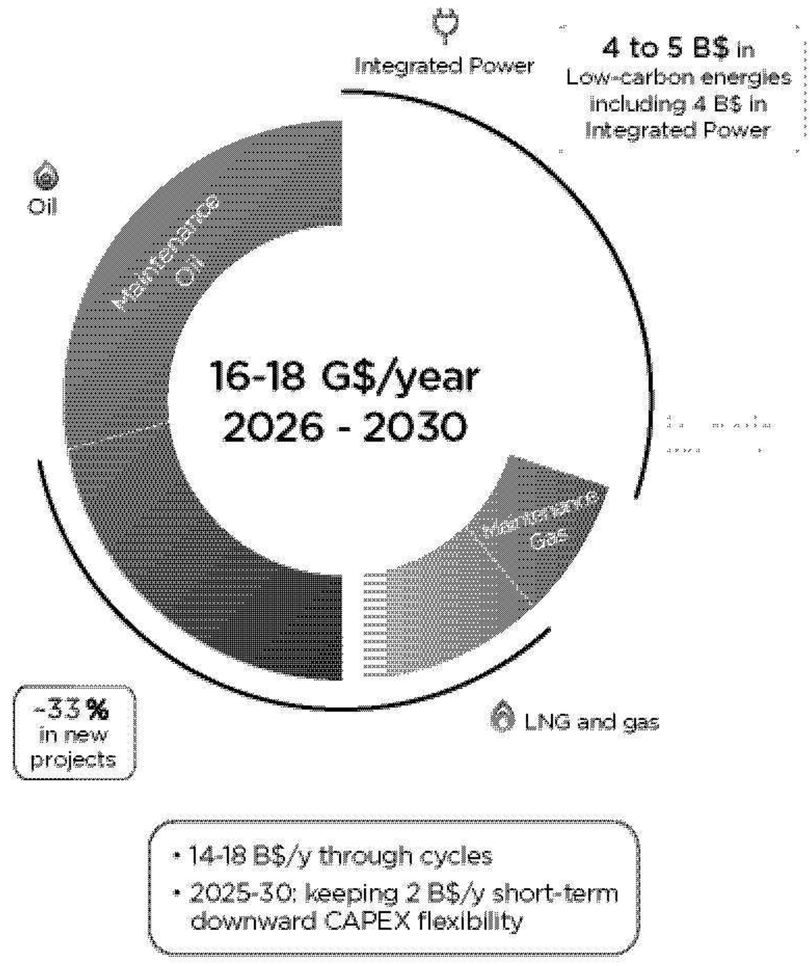
The Company is maintaining an annual capital expenditure target of $16-18 billion over the next 5 years. Since several years, TotalEnergies has consistently maintained a significant investment effort in low carbon energies, mainly in low-carbon electricity.

However, the Company maintains a downward flexibility of $2 billion per year in case of a sharp decrease of prices. Through cycles, TotalEnergies expects net investments of between $14 billion and $18 billion per year.

- Net investments in low-carbon energies are expected to amount to 4 to 5 billion dollars a year. They include investments in Integrated Power (approximatively $4 billion), low-carbon molecules (including biofuels, biogas, recycled plastic, biopolymers, synthetic fuels, hydrogen and CCS) as well as the nature-based carbon sinks projects allowing, from 2030, to contribute to reduction of the Company's carbon footprint,
- One third of the net TotalEnergies' net investments are expected to be dedicated to developing new low-cost, low-emission oil and gas projects, contributing to the 3% growth in hydrocarbon production between 2024 and 2030. These investments are expected to be allocated in particular to strengthening its LNG production capacity and supporting its oil production, in a context of continued growth in global demand.

In 2024, the Company has invested a total of $17.8 billion, including $4.8 billion in low-carbon energies, mainly in electricity ($4 billion). In 2025, TotalEnergies plans to maintain the same level of investment of $4 billion in Integrated Power, for a total net investment amount of $17 to $17.5 billion.

A disciplined and sustainable capital investment strategy



1.5.1 Main investments carried out over the period 2022-2024

Gross investments *(M$)*	2024	2023	2022
Exploration & Production	9,225	12,378	10,646
Integrated LNG	3,912	3,410	1,249
Integrated Power	5,328	5,497	5,226
Refining & Chemicals	1,896	2,149	1,391
Marketing & Services	1,190	1,273	1,186
Corporate	199	153	104
Total	21,750	24,860	19,802

Net investments[a] *(M$)*	2024	2023	2022
Exploration & Production	8,853	7,526	10,027
Integrated LNG	3,536	3,159	472
Integrated Power	3,869	4,945	3,521
Refining & Chemicals	1,538	1,922	1,281
Marketing & Services	(138)	(859)	914
Corporate	171	144	88
Total	17,829	16,837	16,303

Acquisitions net of assets sales[a] *(M$)*	2024	2023	2022
Acquisitions	4,646	6,428	5,872
Disposals	(3,240)	(7,717)	(1,421)
Other operations with non-controlling interests	–	–	–
Total	1,406	(1,289)	4,451

Organic investments[a] *(M$)*	2024	2023	2022
Exploration & Production	9,060	10,232	7,507
Integrated LNG	2,169	2,063	519
Integrated Power	2,355	2,582	1,385
Refining & Chemicals	1,711	2,040	1,319
Marketing & Services	951	1,065	1,035
Corporate	177	144	87
Total	16,423	16,126	11,852

(a) Refer to the glossary for definitions and additional information on alternative performance measures (APM, Non-GAAP measures) and to point 1.9 for reconciliation tables.

Organic investments in 2024

In the Integrated Power segment, organic investments were mainly allocated to solar and wind power plant construction projects, particularly in the United States, France, Spain and the United Kingdom.

In the Integrated LNG segment:

- organic investments mainly concerned LNG production projects under construction for which the final investment decision has been taken (such as NFE and NFS in Qatar, Rio Grande LNG in the United States and Marsa LNG in Oman), as well as the development of LNG projects in operation (Ichthys LNG and Gladstone LNG in Australia) and projects under consideration (such as Papua LNG in Papua New Guinea);
- in hydrogen and biogas, organic investments were mainly dedicated to the financing of the joint-venture TEH2 (80% TotalEnergies, 20% Eren) as well as the development of biomethane unit projects under construction or development in France and Poland.

In the Exploration & Production segment:

- most of the organic investments were allocated to the development of new hydrocarbon production facilities, the maintenance of existing facilities, infill well projects for assets already in production as well as exploration activities. Development investments particularly concerned the Tyra project in Denmark which restarted in March 2024, Anchor in the United States, commissioned in August 2024, Fenix in Argentina, commissioned in September 2024, and Mero 3 in Brazil, which came on stream October 2024, as well as the major projects under construction such as Tilenga and Kingfisher in Uganda and the associated cross-border EACOP pipeline project in Uganda/Tanzania, Mero 4, Sépia 2 and Arapu 2 in Brazil, Ballymore in the United States, Kaminho in Angola and GranMorgu in Suriname;
- in Exploration, TotalEnergies pursued its exploration and appraisal program, particularly in Namibia, to continue organically feeding its project portfolio;
- in CCS, TotalEnergies invested in partnership in the development of CO_2 storage projects located in the North Sea and which are ready to receive CO_2 (Northern Lights, in Norway), under construction (Northern Endurance in the UK) or under study (such as Aramis in the Netherlands and Bifrost in Denmark);
- in projects of nature-based carbon sinks projects, the Company continued its investments, particularly in inclusive forestry and agricultural management projects.

In the Refining & Chemicals segment, organic investments were dedicated on the one hand to safety and maintenance of the installations (including major shutdowns) and to the energy efficiency program and, on the other hand, to the development of new facilities. In particular, they were devoted to the construction, in partnership with the Saudi Arabian Oil Company, of Amiral, a world-scale petrochemical complex in Saudi Arabia, for which the final investment decision was taken in December 2022. They were also dedicated to projects intended to improve plants' competitiveness, particularly in Europe, and to the further development of the project to transform the Grandpuits refinery into a zero-crude platform focusing on new energies and low-carbon activities, which is expected to represent a total investment of more than €500 million by 2025.

In the Marketing & Services segment, organic investments were mainly dedicated to the maintenance of the worldwide network of service stations. TotalEnergies also increased the proportion of its investments dedicated to the deployment of charging infrastructure for electric mobility, mainly in Europe.

Acquisitions in 2024

In 2024, TotalEnergies' finalized acquisitions amounted to approximately $4.6 billion (compared to $6.4 billion in 2023 and $5.9 billion in 2022).

TotalEnergies stepped up its development in electricity, in particular with:

- the acquisition of three gas-fired power plants representing 1.5 GW of electrical generation capacity in Texas for $635 million;
- the acquisition of West Burton Energy (UK), owner and operator of a 1.3 GW combined-cycle gas turbine (CCGT) power plant, for an enterprise value of £450 million;
- the acquisition of interests in offshore wind farm projects in the North Sea;
- the acquisition in Germany of Kyon Energy, one of the main developers of battery storage projects, and of renewable energy aggregator Quadra Energy.

In the Integrated LNG segment, TotalEnergies:

- strengthened its integration in the Texas gas value chain by acquiring assets from Lewis Energy Group in the Eagle Ford basin;
- acquired SapuraOMV Upstream, an independent gas producer and operator in Malaysia.

In Exploration & Production, TotalEnergies increased its stake in the giant Moho field offshore the Republic of Congo by 10%, while divesting two mature assets.

Divestments in 2024

TotalEnergies completed asset sales amounting to approximately $3.2 billion in 2024 (compared to $7.7 billion in 2023 and $1.4 billion in 2022). They included in particular:

- in the Integrated Power segment, the implementation of its capital reallocation strategy, including in particular the sale of 25.5% of the Seagreen offshore wind farm, the sale of 50% of a 2 GW portfolio of renewables in Texas, and the sale of 50% of the West Burton CCGT;
- in the Exploration & Production segment, the sale of a 15% interest in the Absheron gas field in Azerbaijan and the sale of the Brunei subsidiary for $259 million;
- in the Refining & Chemicals segment, the sale of its 36.36% stake in the Natref refinery in South Africa and the disposal of Lavéra petrochemical assets, France;
- in the Marketing & Services segment, the sale of its 50% interest in Total PARCO Pakistan Limited and the completion of the sale of the entire service station network in Germany to Alimentation Couche-Tard.

Net investments thus amounted to $17.8 billion in 2024 (compared to $16.8 billion in 2023 and $16.3 billion in 2022).

1.5.2 Major planned investments

In accordance with its growth strategy in the Integrated Power segment, TotalEnergies plans to continue its development in the electricity value chain and particularly in renewables with construction projects for solar and wind power plants and the acquisition of flexible capacities. In particular, the Company intends to pursue its investment efforts, notably in solar and wind power projects in the United States, wind power projects in Brazil in partnership with Casa dos Ventos, and plans to finalize the acquisition of German renewable projects developer VSB Group in 2025.

In the Integrated LNG segment, TotalEnergies plans in particular to continue investments dedicated to major LNG production projects for which the final investment decision has already been taken (mainly North Field East and North Field South in Qatar, Rio Grande LNG in the United States and Marsa LNG in Oman) as well as the development of LNG production projects that are in operation (notably Ichthys LNG and Gladstone LNG in Australia).

In the Exploration & Production segment, investments in the development of oil and gas projects are expected to be dedicated essentially to the Tilenga and Kingfisher projects in Uganda and the associated EACOP cross-border oil pipeline project in Uganda/Tanzania, as well as to major development projects under way for which the final investment decision has already been taken (GGIP Phase 1 in Iraq, Mero 4, Atapu 2 and Sépia 2 in Brazil, Ballymore in the US, Kaminho in Angola and GranMorgu in Suriname). In addition, TotalEnergies intends to pursue its exploration program, particularly in Namibia, and short-cycle development projects, particularly in West Africa and the North Sea.

In downstream, investments of the Refining & Chemicals segment are expected to be mainly dedicated, on the one hand, to facility safety and maintenance (including major shutdowns) and the energy efficiency program and, on the other, to the continuation of the project to transform the Grandpuits refinery (France) into a zero-crude platform as well as the construction, in partnership with the Saudi Arabian Oil Company, of Amiral, a world-scale petrochemical complex in Saudi Arabia.

Investments in the Marketing & Services segment are expected to be mainly allocated, on the one hand, to the maintenance of the global network of service stations and, on the other, to the development of the European electric mobility network.

1.5.3 Financing mechanisms

TotalEnergies self-finances most of its investments with cash flow from operating activities and may occasionally access the bond market. Certain subsidiaries or specific projects may be financed through external financing, notably in the case of joint-ventures. These include Ichthys LNG in Australia, Satorp in Saudi Arabia, Mozambique LNG, Cameron LNG and Rio Grande LNG in the United States and Hanwha TotalEnergies Petrochemical Co. in South Korea.

As part of certain project financing arrangements, TotalEnergies SE has provided guarantees. These guarantees ("Guarantees given on borrowings") as well as other information on TotalEnergies' off-balance sheet commitments and contractual obligations appear in Note 13 to the Consolidated Financial Statements (refer to point 8.7 of chapter 8). TotalEnergies believes that neither these guarantees nor the other off-balance sheet commitments of TotalEnergies SE or any other TotalEnergies company have, or could reasonably have in the future, a material effect on TotalEnergies' financial position, income and expenses, liquidity, investments or financial resources.

1.6 Innovation for the transition strategy of TotalEnergies

1.6.1 OneTech

The OneTech branch was created in September 2021 as one of the means of execution for the transition strategy of TotalEnergies.

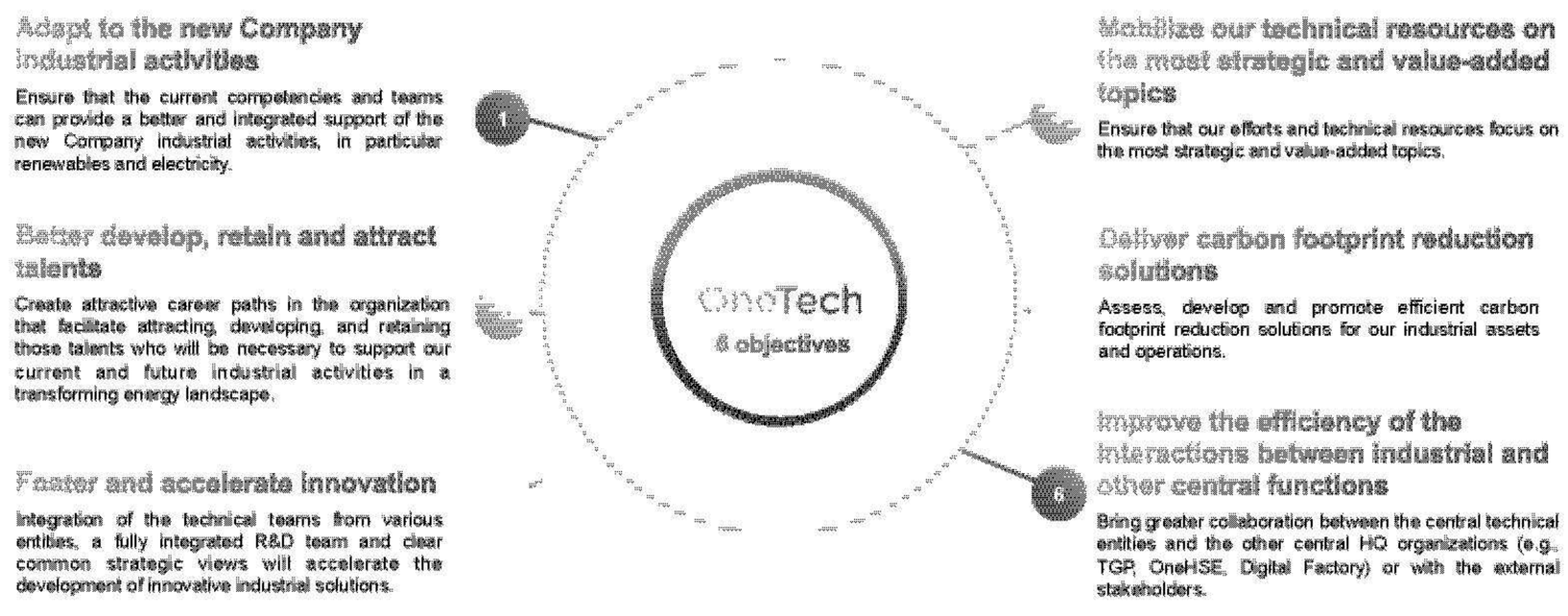
The industrial successes and technological advances of TotalEnergies have always been based on the values of the Company, in particular on its pioneering spirit, appetite for performance and on the technical and scientific skills of its teams, which are widely recognized by its peers and partners.

OneTech's mission is to provide all the technical and R&D expertise that TotalEnergies needs to implement its strategy.

OneTech supports TotalEnergies' various activities on a daily basis towards operational excellence and innovation with more than 3,000 engineers, technicians and researchers spread over various sites in Europe (France, Belgium and Denmark) and in R&D centers internationally.

OneTech pursues six objectives

OneTech: engine of the transformation



The centralization of teams within OneTech provides clarity for stakeholders, with easier identification of the technical or R&D contact on each subject for the entire Company.

A DEDICATED ORGANIZATION

OneTech's organization is structured around three functional hubs: an Industrial hub, a Research & Development hub and a Support Functions hub.

- The Industrial Hub consists of:
  - the Customer Lines division, the entry point within OneTech for internal customers of the operational branches, coordinates the operational and technical support of OneTech and the mobilization of the resources of the associated Technical Lines that the business segments need. It also carries out technical evaluations of new business opportunities and studies for the preparation of new developments of business unit assets. A team within this division is dedicated to the development and implementation of projects to reduce the carbon footprint of the Company's assets. This division includes an entity responsible for deploying new digital solutions to improve the efficiency of the Company's industrial operations. The deployment concerns in particular the solutions developed by the Digital factory to accelerate the digital transformation of the Company (refer to point 1.6.3),
  - the Technical Lines division, which includes the areas of expertise, is the core of the technical and industrial know-how. It brings together within common teams, all the specialists and players in the same technical field, thus promoting synergies between the Company's sites, as well as the sharing of experience, best practices, innovative solutions, knowledge and know-how. This direction has put in place a dedicated framework to accelerate innovation and address industrial problems directly linked to the gradual improvement of operations at the Company's sites by identifying and testing mature technological innovations to be deployed in less than a year.
- the Research & Development (R&D) hub consists of the R&D division, which brings together all the Company's R&D activities under a single entity. This hub designs and operates the Company's R&D in response to the needs of business units, anticipates with partners to explore and de-risk new avenues and innovative technologies and then develop prototypes with the Industrial hub once the proof of concept has been demonstrated. It also develops skills and technological intelligence to capture new business opportunities and emerging technologies in support of TotalEnergies' strategy.

1.6.2 R&D, lever of the transition strategy

To prepare for the future, the Company invested more than $1 billion in R&D, industrial innovation, digital developments in 2024.

The Company invested $805 million in 2024 in its own and its subsidiaries' R&D (compared to $774 million in 2023 and $762 million in 2022) with a dedicated workforce of more than 3,500 researchers.

In support of its transition strategy, TotalEnergies has significantly reoriented its R&D in recent years. Compared to 28% in 2017, TotalEnergies has decided to devote 68% of the 2024 R&D budget to low-carbon energy (renewables, biomass, batteries, etc.) and to reducing the environmental footprint through CCUS and sustainable development programs.

According to the different scenarios studied by TotalEnergies, the Company's ambition of carbon neutrality by 2050, together with society, requires not only the large-scale deployment of proven technologies such as solar photovoltaics, wind power and biofuels but also technological breakthroughs and the development of completely new industrial value chains such as hydrogen, synthetic fuels and carbon capture and storage. The Company is also investing in digital expertise and artificial intelligence (AI) through the development of solutions to accelerate its transition (refer to point 1.7.3) and that of its customers.

TotalEnergies' transition strategy requires agile R&D, committed to innovation. R&D activities thus break down according to the principles that underpin the growth strategy, the Company's ambition and its commitment to sustainable development.

The R&D hub is organized along five lines in a single division:

- the **Power R&D** line focuses on renewable energy production, integrated energy system design and optimization of modes of distributed operation to balance renewable energy. The challenge is to reduce the production costs of low-carbon energy, decarbonize assets, and develop new processes and services. To accelerate the implementation of R&D programs, TotalEnergies has joined forces with the Technical University of Denmark to create a center of excellence in low-carbon energies. This center has three missions: the construction of a new generation hybrid electricity platform, research collaborations on next generation wind technologies and floating wind power, and multi-energy training for employees;
- the **CO_2 & Sustainability R&D** line develops innovative and competitive technologies focusing on increasingly sustainable solutions. These projects concern the capture, storage and use of CO_2, for sustainable synthetic fuels and the development of low environmental footprint technologies for the entire liquefied natural gas chain, biogas and the hydrogen sector. The work undertaken on water and soil management and the quantification of greenhouse gas emissions contribute to the deployment of technologies with a low-carbon footprint. The development of AUSEA[1] by R&D in partnership with the CNRS (the French National Center for Scientific Research) and the University of Reims is an example of the development of innovative and competitive technologies which reinforces the pioneering role of the Company in technologies for reducing methane emissions. This miniature drone-mounted sensor is capable of detecting and quantifying methane and carbon dioxide emissions and at the same time identifying the sources of these emissions. This innovative technology has been deployed on the Upstream oil and gas installations operated by the Company and beyond its own operated assets within the framework of cooperation agreements;
- the **Fuels & Lubricants R&D** line supports the transformation of the world of transport, new forms of mobility and industry, by developing products to increase the performance of electrical systems and combustion engines and reduce the environmental footprint of existing solutions. TotalEnergies has recently developed an innovative coolant that can be in direct contact with battery cells, allowing more efficient battery cooling than fluids currently on the market. Building on this innovation, TotalEnergies has joined forces with the automotive supplier Valeo, a preferred partner of manufacturers around the world, for its expertise in associated thermal systems in order to design and dimension the best integration of this fluid in the battery pack of electric vehicles and to optimize its performance and reduce the carbon footprint of EVs;

(1) Airborne Ultralight Spectrometer for Environmental Application: technology for detecting methane by drone.

- the **Downstream Processes & Polymers R&D** line pilots and operates research work on the development of sustainable aviation fuels (SAF), the separation of polymers and their recycling with a view to the circular economy and decarbonization of Refining-Chemical industrial units. The development of SAF is a major focus of R&D projects carried out for the decarbonization of the aviation sector. This axis covers the entire value chain, from raw materials to product specifications including conversion processes. Modeling plays a key role in optimizing this entire chain to maximize SAF production. To respond to the challenges of decarbonization of the aviation sector, TotalEnergies has signed a partnership with Safran in 2021 and a partnership with Airbus in early 2024, including an R&D component to accelerate the development of innovative technological solutions;
- the **Upstream R&D** line aims to improve the operational efficiency of exploration and production activities, both in terms of reducing GHG emissions and cutting costs in line with its strategy of portfolio optimization. To respond to the major challenge of geological storage of CO_2, TotalEnergies has partnered with INRIA (National Institute for Research in Digital Science and Technology) to develop new digital simulation tools to improve the geological characterization of reservoirs and thus monitor the CO_2 to be injected and stored in them. This set of tools combining high-performance computing, geoscience, seismic imaging and ultra-complex mathematical modeling is expected to make it possible to better understand the behavior of carbon stored in deep reservoir rocks and to predict its evolution and changes to the reservoir in the very long term;
- transversally and in addition to the five R&D lines, the **Anticipation and Portfolio Performance** division carries out prospecting activities for the Company on emerging subjects while seeking to capture technologies that could be disruptive. It also carries out an exploratory activity of innovative solutions and technologies for the Company's existing and future businesses. This division also manages the R&D portfolio for maximum operational efficiency and value creation.

Beyond OneTech's five R&D lines, the Hutchinson and Saft Groupe (Saft) subsidiaries carry out R&D specific to their activities.

- Hutchinson R&D develops solutions with high technological content that meet the challenges of future mobility with an emphasis on sustainable development, lightweighting and electrification. These multi-market solutions are based on five areas of expertise: NVH (Noise Vibration Harshness), Waterproofing, Thermal management, Materials and structures for extreme conditions of use and also Power transmission. The objective is to improve customer performance in terms of sustainable development, safety, energy efficiency and comfort.

  In 2024, a new range of sustainable materials was launched under the Revea® brand. In particular, sealing solutions for bodywork have been developed, offering recycled material rates reaching 40% by weight on piece, a performance without equivalent on the market.

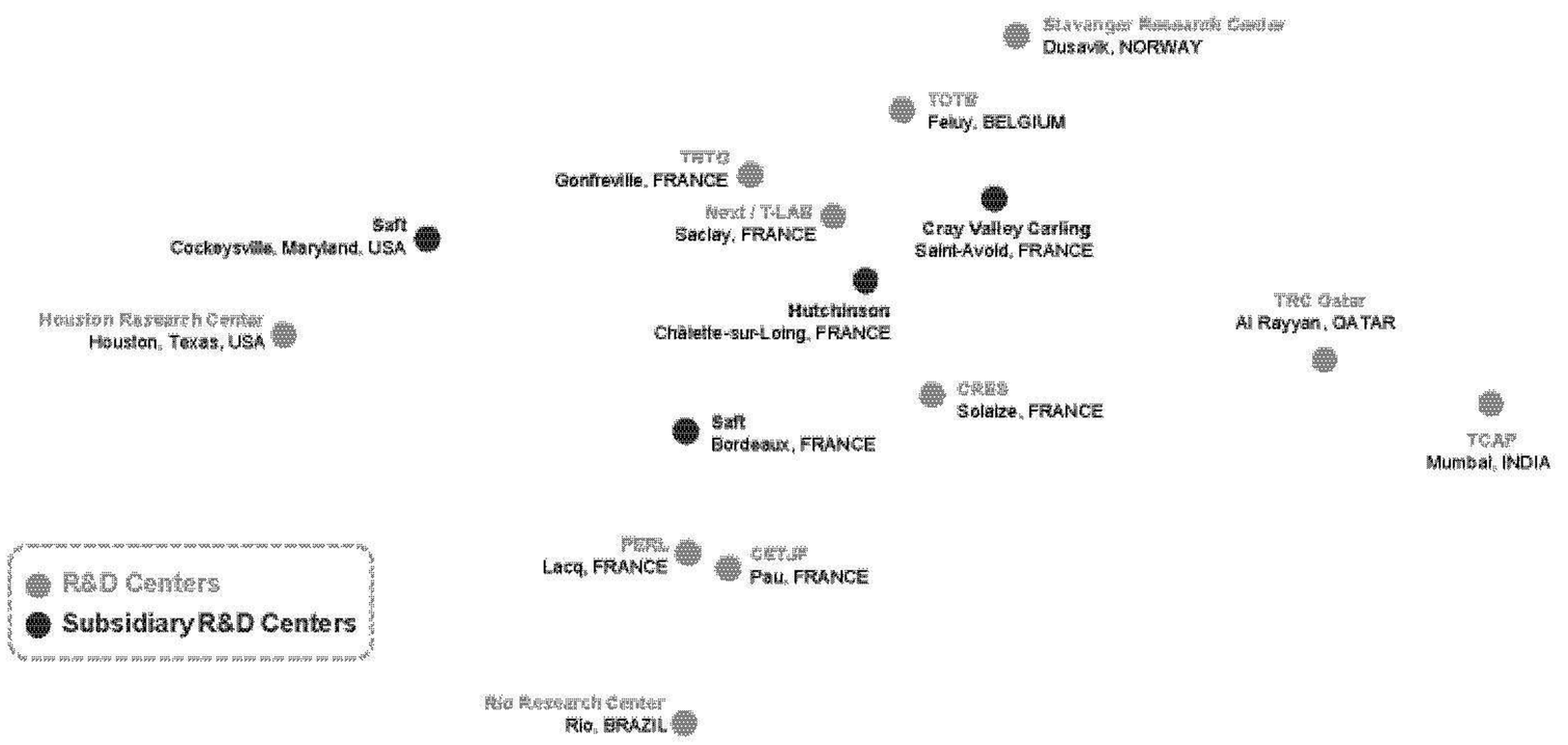
  In weight reduction domain, Hutchinson has succeeded in imposing itself on the future A350F (cargo version) market with composite reinforcement rods integrated into the aircraft primary structure. This first achievement on an extremely demanding application opens the door to other opportunities.

  In electrification, new fire-resistant materials have been developed to meet the increased requirements linked to the risks of batteries thermal runaway.
- Saft conducts research to develop ever safer and more efficient batteries, particularly in the field of mobility and storage of renewable energies, using artificial intelligence, big data.and digital twins[1]. In 2024, Saft continued to work on the development of a new type of smart battery that is more efficient for stationary and mobile storage. This technology represents a real breakthrough in the field of mobile and stationary energy storage. Furthermore, the alliance launched in 2023, supported by France 2030 and bringing together six partners from the academic and industrial worlds under the coordination of Saft, continues to develop batteries for new solid-state lithium-ion technologies for applications requiring high energy or high power, while offering appropriate safety performance. The program also takes into account issues related to lifecycle analysis and battery recycling in order to help reduce national dependence on critical materials.

To accelerate the Company's transition strategy, R&D activities are carried out relying on its talented people in its 15 R&D centers around the world and its pilot sites, all in a process of open innovation with industrial partners, start-ups and the best research and innovation ecosystems. TotalEnergies mobilizes nearly 1,000 partners per year.

In addition, the Company implements an active intellectual property policy to protect its innovations, maximize their use and differentiate its technology. In 2024, the Company filed more than 250 patent applications.

15 TotalEnergies research centers around the world



(1) Virtual replica of a physical object, used to monitor, simulate, and optimize its performance.

1.6.3 Digital acceleration as a performance lever

In early 2020, TotalEnergies opened a digital factory in Paris that brings together 300 developers, data scientists and other experts, to accelerate the Company's digital transformation. TotalEnergies' goal is to leverage the capabilities of digital tools to create value in all of its businesses.

The Digital Factory aims to develop the digital solutions that the Company needs to improve its operations in terms of both availability and cost, provide its customers with new services, particularly in managing and optimizing energy use, extend its reach to new distributed energies, and reduce its environmental impact. Its ambition is to generate as much as $1.5 billion in value per year for the company by 2025 through additional revenue and reductions in operating or investment expenses. Since 2020, more than 90 solutions have been created and are gradually being deployed in the relevant operational entities of the Company. More than 250 deployments have already been carried out.

1.7 Our strengths

The Company has many assets to implement its integrated and balanced multi-energy strategy and lead its corporate project. It relies on its integrated model, on a set of intangible resources and rationalized and efficient industrial assets, on its operational excellence, as well as on its global presence and its local roots.

TotalEnergies considers dialogue with its stakeholders as an essential dimension of the responsible conduct of its activities and the taking into account of long-term sustainable development issues in its strategy and policies. It also considers that transparency is an essential principle of action to build relationships of trust with its stakeholders and place the Company in a process of continuous progress.

1.7.1 Our integrated multi-energy model

TotalEnergies' model of value creation is based on integration across the energy value chain, from exploration and production of oil, gas and electricity to energy distribution to the end customer, and including refining, liquefaction, petrochemicals, trading, and energy transportation and storage.

This integrated business model enables the Company to capitalize on synergies among the various businesses while responding to volatility infeed stock prices. Thanks to this business model, the Company's Upstream activities, which are more dependent on the price of oil, can complement its Downstream activities, which – at the bottom of the cycle – enable the Company to generate value-added untapped by the Upstream part of the business. With this integration of its operations across the entire value chain, the Company can manage the bottom of the cycle more effectively and capture margins when the market improves.

TotalEnergies is applying this integrated model to the new electricity and renewables businesses within Integrated Power in which the Company has positioned itself, as the second pillar of its growth, in association with the historic Oil & Gas pillar. The Company can leverage those businesses with the know-how and resources inherent in its business model, including a global brand and presence, technical expertise (e.g., in offshore operations and trading) and partnerships with governments and local communities.

Accelerating growth in electricity and renewables will strengthen TotalEnergies' model of value creation and diversify the Company's geographical risk profile. That transition enables to cement the sustainability and resilience of TotalEnergies' value creation model.

This integrated multi-energy model based on two pillars of growth constitutes a differentiation compared to its peers in the energy sector.

1.7.2 Our essential intangible resources

OUR EMPLOYEES

Our employees are at the heart of our performance. Their expertise, commitment and ability to innovate are essential to our success. We invest in the training and development of our teams to maintain a high level of competence and operational excellence (refer to point 5.3.1 of chapter 5).

OUR PARTNERSHIPS AND OUR ABILITY TO ESTABLISH THEM

Almost all Upstream projects and an increasing number of projects of other business segments of TotalEnergies are carried out through partnerships (including joint-ventures) in all regions in which the Company operates. In some countries, particularly in Africa, legislation and/or authorities condition the presence of TotalEnergies on the establishment of a joint-venture with a local company.

Those partnerships, such as licenses, permits and contracts under which TotalEnergies' companies hold interests, are essential assets. Whether it is to continue to develop in LNG or in the production of renewable electricity, partnerships with States or local authorities are decisive. The Company also selectively develops projects through strategic partnerships with local players (such as the partnership with Casa Dos Ventos in Brazil). It also establishes strategic partnerships with technological leaders to develop innovative solutions and progress in the energy transition.

It is thanks to the technical expertise of the women and men of the Company and their ability to manage large projects that TotalEnergies has been able to establish these trusted partnerships which are an essential resource for the pursuit of its corporate project.

A STRONG IDENTITY

TotalEnergies brand enjoys worldwide recognition and a solid reputation in the energy sector. This notoriety strengthens the confidence of customers, partners and investors, and supports the ambition of the Company which is implementing a balanced multi-energy strategy for the benefit of the energy transition. The Company is thus recognized among the best players in its category by the main extra-financial rating agencies. It is also the Major most included in investment funds integrating ESG parameters.

OUR ABILITY TO INNOVATE AND DEVELOP KNOW-HOW AND TECHNOLOGIES

Innovation is at the heart of the Company strategy. OneTech branch supports on a daily basis the various activities of TotalEnergies towards operational excellence and innovation with more than 3,000 engineers, technicians and researchers spread across different sites in Europe (in France, in Belgium and in Denmark) as well as in international R&D centers.

In 2024, more than 250 patent application were filed. They complete the portfolio of patents, know-how and innovative technologies that the Company holds.

The 300 developers, data scientists and other experts of the Digital Factory that opened in 2020 contribute to the emergence of these technologies to accelerate the Company's digital transformation. Since 2020, more than 90 digital solutions, half of which integrate artificial intelligence, have been created and have been gradually deployed in the relevant operational entities of the Company to improve its industrial operations in terms of both availability and cost, provide its customers with new services, particularly in managing and optimizing energy use, or even extend its reach to new distributed energies, and reduce its environmental impact.

1.7.3 Our operational excellence

Energy is an industrial sector that demands state-of-the-art know-how and complex facilities that are both flexible and reliable.

ACKNOWLEDGED TECHNICAL EXPERTISE

Thanks to the technical expertise wielded by the Company's women and men and their ability to manage large-scale projects, TotalEnergies has been able to forge trust-based partnerships with the world's primary producing countries and global consumers. The Company's expertise allows it to provide convincing support to its customers and partners in even the most demanding fields, such as liquefied natural gas, electricity, offshore wind and renewables, deep offshore, refining and petrochemicals, where the Company has developed platforms that are among the industry's top performers.

HIGH-PERFORMANCE INDUSTRIAL STREAMLINED ASSETS

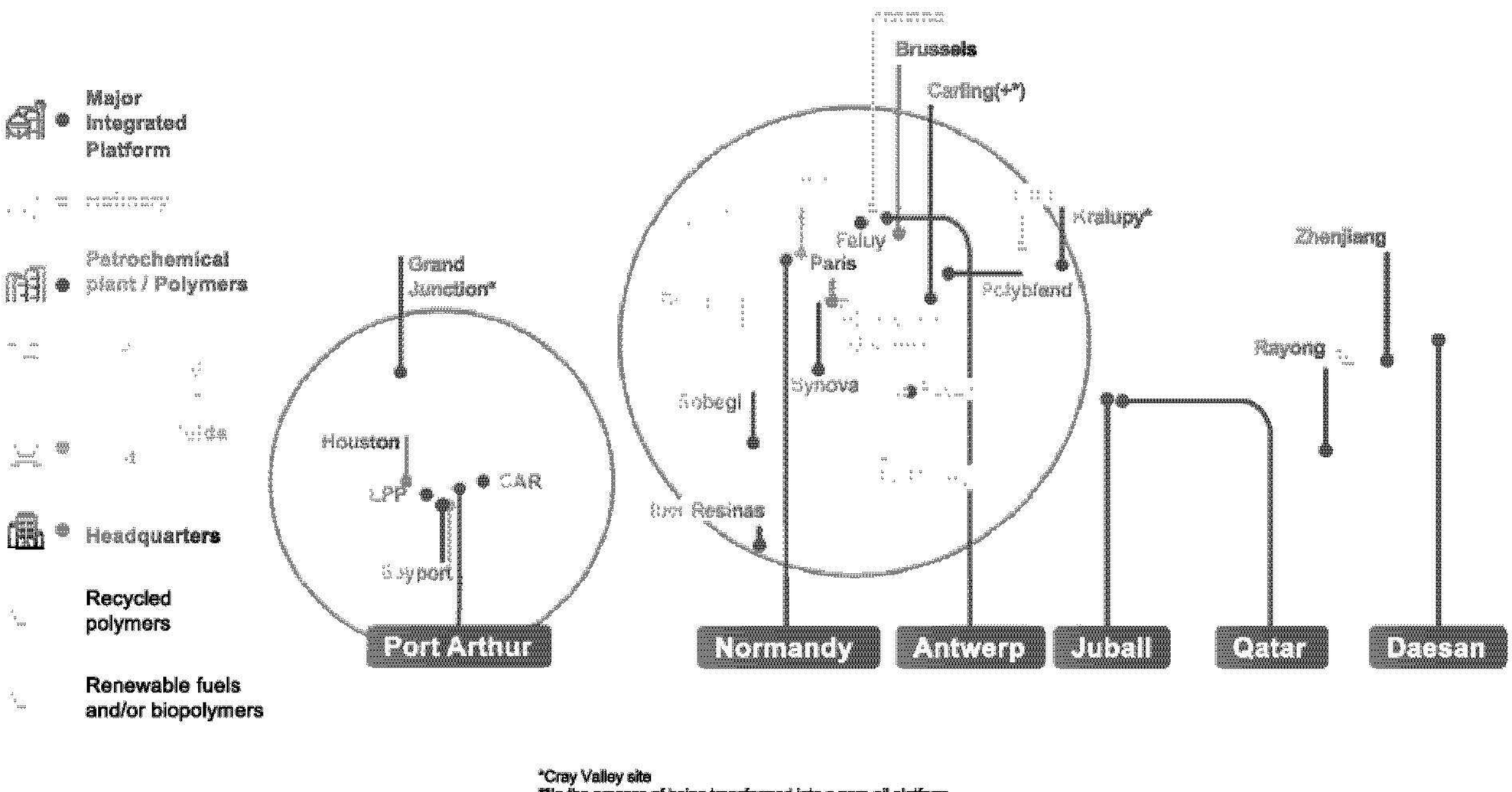
TotalEnergies boasts streamlined, high-performance industrial assets portfolio that enable its resilience in its traditional businesses. Moreover, the flexibility of those assets allows the Company to adapt to changing markets. Its refining and petrochemicals operations are structured around six major integrated complexes (Port Arthur in the United States, Normandy and Antwerp in Europe, Jubail and Qatar in the Middle East and Daesan in South Korea), which provide opportunities for synergies and enhance value creation between those two businesses. The Antwerp facility is the Company's largest refining and petrochemicals complex in Europe.

To meet a growing global demand and respond to market trends, the Company has upgraded and adapted its sites to focus production on higher-value-added products that meet the most stringent environmental standards. TotalEnergies has also invested in making its petrochemicals sites more flexible so they can use the most advantageous feedstocks. Most of those sites can now process both naphtha and ethane, to ensure a reliable, cost-competitive supply.

The La Mède biorefinery aims to meet the growing demand for biofuels. Operational as of July 2019, it has a capacity of 500 kt/y of HVO-type[1] biodiesel. The HVO technology the Company has selected is French, developed by IFP Énergies nouvelles and marketed by its Axens subsidiary. It produces a biofuel similar to fossil fuels that can be blended into regular fuels in any proportion and has no adverse effect on engines.

TotalEnergies is ramping up its renewable electricity generation capacity – solar, wind and hydroelectricity – to satisfy the surge in electric power needs responsibly.

Main sites of Refining & Chemicals at year-end 2024



*Cray Valley site
**In the process of being transformed into a zero-oil platform

(1) Hydrotreated vegetable oil.

As part of its strategy, TotalEnergies plans to convert its refinery in Grandpuits, France, into a zero-crude platform. By 2024, following an investment totaling more than €500 million, the complex will focus on four new industrial activities: production of renewable diesel mainly for the aviation industry, production of bioplastics, plastics recycling and operation of two photovoltaic solar power plants.

Moreover, the Company is moving ahead with projects to convert its deep offshore oil production complexes into offshore wind power platforms, a strategy that is wholly aligned with its goal of profitable growth in renewables & electricity.

TotalEnergies can also take specific steps to support the conversion of its industrial sites through additional projects that can be conducted at the same time:

- a forward-looking project, led by the relevant segment based on an analysis of market trends, with the goal of modifying a given site's industrial infrastructure in order to restore a long-term competitiveness of the Company;
- a Voluntary Agreement for Economic and Social Development (CVDES), implemented to support the site and its ecosystem (subcontractors, stakeholders, etc.) during this period of change.

1.7.4 A global footprint, with local roots

A GLOBAL PRESENCE

TotalEnergies has an industrial and retail presence in about 120 countries spanning five continents.

Three regions in particular are the long-standing cornerstones of TotalEnergies' strategy: Europe, the Company's decision-making center; the Middle East, where TotalEnergies is recognized as a preferred partner among producing countries and national companies; and Africa, with its substantial oil and gas production and Company-branded service stations.

The deep geographic roots of the Company and its partnerships built over time are real strengths for accelerating its operational ambitions and moving into the new businesses of renewables and electricity. Over the past few years, this historic presence has been supplemented by strong development on the American continent through our presence in Upstream in Brazil and LNG in the United States. In addition, TotalEnergies reinforced its presence on the American continent with major acquisitions in Brazil and the United States since 2022.

That global footprint yields the benefits that accrue from economies of scale for the Company's industrial, marketing and retail operations, and also enables a detailed knowledge of end markets, giving TotalEnergies a competitive advantage in addressing the manifold needs of its customers worldwide.

CUSTOMER PROXIMITY ACROSS THE WORLD

To cement its strong bond with its customers – both businesses and consumers – the Company strives to focus on close, effective and direct customer relationships. Beyond its sales of products and services, TotalEnergies aims to draw on its retail networks to make its Company-branded service stations "true community hubs," with a comprehensive array of services for users that encompass every form of energy and respect the environment.

In its renewables & electricity businesses, TotalEnergies intends to become integrated across the entire value chain and develop direct, personalized relationships with business and residential customers alike through the use of digital technology.

TotalEnergies is recognized for its know-how in customer service in France. In 2024, TotalEnergies' Consumer Services division won the "Best Customer Service of the year 2025" award, for the sixteenth year in the category Services to motorists[1], which makes the Company the most awarded company of this competition. TotalEnergies Electricité et Gaz France once again finished on the podium of multi award-winners brands in the field of Customer Experience in 2024 with the Trophée Qualiweb 2024 award for digital customer relations, in the Customer service category; the Customer service award of the year 2025 in the category of energy supplier for businesses[2] (3rd consecutive year), after also winning the Customer service award of the year 2025 in the category of energy supplier for individuals[3].

SUSTAINABLE VALUE CREATION ALONGSIDE REGIONS AND COMMUNITIES

TotalEnergies' success in building and expanding partnerships worldwide can also be attributed to its strategy of generating value at the local level as part of its growth model. That commitment – carried out systematically and professionally – is a major competitive asset. Whether they target continued growth in LNG or renewable electricity generation, the partnerships with governments and local communities serve a critical function.

The Company maintains a comprehensive, integrated policy, rooted in dialogue with communities and public and private stakeholders, for supporting local growth and in-country value. It forges synergies among the various sources of value generation for host countries (employment, subcontracting, infrastructure, support for local industry, socioeconomic development projects, education, energy access, etc.) by capitalizing on the Company's industrial expertise. TotalEnergies intends to maintain this approach over the long term to ensure that its presence in these regions and the major projects it develops to create shared prosperity.

THE ABILITY TO COPE WITH GEOPOLITICAL UNCERTAINTY

In the face of political and geopolitical uncertainty, including tensions sparked by war and conflict, TotalEnergies intends to conduct its operations by leveraging its skills and expertise to benefit each host country, in compliance with applicable legislation and all international economic sanctions that may be in effect. The Company also ensures that the amount of capital invested in the most sensitive countries to remain at a level that limits its exposure in each country.

(1) Category Services to motorists - BVA study. Viséo CI.
(2) BVA Xsight study – Viséo CI.
(3) BVA Xsight study – Viséo CI.

1.7.5 An ongoing dialogue with our stakeholders

In TotalEnergies' view, dialogue with its internal and external stakeholders is essential for the Company to conduct its business responsibly and integrate the long-term challenges of sustainable development in its strategy and policies.

This dialogue contributes to the identification of the main risks and impacts of the Company's activities, and more broadly to a better understanding of changing trends and the main societal expectations of each of the major categories of stakeholders. It is also a prerequisite to ensuring that the Company is firmly integrated in its host regions, as well as an effective tool for identifying ways to generate value at the local level.

TotalEnergies believes that transparency is an essential principle of action in building a trust-based relationship with its stakeholders and ensuring that the Company is on a path of continuous improvement.

For many years, TotalEnergies has been ensuring that it reports on its performance based on the various reporting frameworks commonly used in extra-financial matters. In addition, the Company continues to refer to the standards of the GRI (Global Reporting Initiative) and SASB (Sustainability Accounting Standards Board), and includes in its reporting the "Core" indicators proposed by the World Economic Forum[1] (refer to chapter 11), and the recommendations of the TCFD (Task Force on Climate-related Financial Disclosures) for its climate reporting. TotalEnergies also responds to the CDP water and climate questionnaires.

Wanting to provide the performance indicators to its stakeholders, TotalEnergies publishes additional information on its website on the pages dedicated to its sustainable development approach.

TotalEnergies has structured its dialogue processes with its stakeholders at different levels of the Company, through relays within the organization, requirements included in internal reference frameworks, the deployment of a methodology for conducting local dialogue and a dedicated attention to the professionalization of the teams responsible for fostering that dialogue.

Those measures are designed to develop a long-term, trust-based relationship founded on principles of respect, attentiveness, constructive dialogue, proactive engagement and transparency, consistent with the legitimate need for confidentiality as appropriate. They also ensure that stakeholder warnings or grievances to be gathered and addressed quickly and that potential controversial situations defused.

At a corporate level, each group of stakeholders (employees, employee representatives, customers, investors, shareholders and the financial sector, government officials, suppliers, academics, NGOs and civil society, and the media) has a single point of contact at the corporate level, responsible for responding to their requests, keeping them informed and maintaining an ongoing dialogue in formats appropriate to each concern.

Those stakeholder liaisons also provide advice and support to Company subsidiaries when needed. The One MAESTRO framework *(Management and Expectations Standards Toward Robust Operations)* provides that subsidiaries should conduct a stakeholder mapping and engage in a structured, ongoing process of dialogue with stakeholders to keep them informed, hear and address their concerns and expectations, report on mitigation actions or compensation, measure their satisfaction and identify ways the subsidiaries can improve their community outreach. This commitment to local dialogue puts special emphasis on residents and communities located near Company facilities.

1.8 Our governance

1.8.1 A committed Board of Directors

A MOBILIZED BOARD OF DIRECTORS SERVING THE COMPANY'S AMBITION

The Board of Directors defines TotalEnergies' strategic vision and supervises its implementation in accordance with the corporate interest of the Corporation, by taking into consideration the social and environmental challenges of its business activities.

It approves investments or divestments for amounts greater than 3% of shareholders' equity and it is informed of those greater than 1%. The Board may address any issue related to the Company's operations. It monitors the management of both financial and extra-financial matters and ensures the quality of the information provided to shareholders and financial markets.

The Board of Directors is assisted by the four committees it has created: the Audit Committee, the Governance and Ethics Committee, the Compensation Committee, and the Strategy & CSR Committee. The duties of the Board of Directors and of the Committees are described in point 4.1.2 of chapter 4.

The composition of the Board of Directors reflects the diversity and complementary of experience, skills, nationalities and cultures that are critical to addressing the interests of all of the Company's shareholders and stakeholders.

Composition as of March 19, 2025

14	1	82%	5.9 years	45.5%	7
directors	Lead Independent Director	independent directors[a]	Average years of service on the Board	of women[b]	nationalities represented

(a) Excluding the director representing employee shareholders and the directors representing employees, in accordance with the recommendations of the AFEP-MEDEF Code (point 10.3). For more information, refer to point 4.1.1.4 in chapter 4.
(b) Excluding the directors representing employees in accordance with Article L. 225-27-1 of the French Commercial Code and the director representing employee shareholders in accordance with Articles L. 225-23 and L. 22-10-5 of the French Commercial Code.

(1) Measuring Stakeholder Capitalism Towards Common Metrics and Consistent Reporting of Sustainable Value Creation, White paper, September 2020.

Complementary skills to meet strategic challenges of the Company

The Governance and Ethics Committee conducts its work within the framework of a formal procedure so as to ensure that the directors' skills are complementary and their backgrounds are diverse, to maintain an overall proportion of independent members that is appropriate to the Corporation's governance structure and shareholder base, to allow for a balanced representation of women and men on the Board, and to promote an appropriate representation of directors of different nationalities. These principles underpin the selection process for directors.

As part of a process undertaken for several years, the composition of the Board of Directors has changed significantly since 2010 to achieve better balance between men and women, and an openness to more international profiles.

Skills of the directors

	Patrick Pouyanné	Jacques Aschenbroich	Marie-Christine Coisne-Roquette	Lise Croteau	Mark Cutifani	Marie-Ange Debon	Romain Garcia-Ivaldi	Glenn Hubbard	Maria van der Hoeven	Emma de Jonge	Anelise Lara	Jean Lemierre	Dierk Paskert	Angel Pobo	Total	Total (%)
Corporate management	✓		✓	✓	✓	✓					✓	✓	✓		9	64%
International	✓		✓	✓	✓	✓	✓	✓	✓			✓	✓		10	71%
Finance, accounting, economics	✓	✓	✓	✓		✓	✓	✓			✓	✓	✓		10	71%
Risk management			✓	✓		✓			✓		✓	✓	✓		7	50%
Governance	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓		12	86%
Climate - sustainable development	✓	✓	✓	✓	✓	✓		✓	✓		✓	✓	✓		11	79%
Industry	✓	✓	✓	✓	✓	✓	✓			✓	✓		✓		10	71%
Energy	✓		✓	✓		✓	✓		✓	✓	✓		✓	✓	10	71%
Public affairs, geopolitics	✓	✓	✓		✓	✓		✓	✓		✓	✓	✓		10	71%

The skills of directors are detailed in points 4.1.1.1 and 4.1.1.5 of chapter 4.

A Board committed to meeting the Company's strategic priorities, with dedicated and involved directors

10
meetings of the Board of Directors
97.9% attendance

1
executive session chaired by the Lead Independent Director

7
meetings of the Audit Committee
100% attendance

5
meetings of the Governance and Ethics Committee
100% attendance

3
meetings of the Compensation Committee
100% attendance

3
meetings of the Strategy & CSR Committee
88.9% attendance

Main activities of the Board of Directors in 2024

Risks/Audit

CSRD training session

Double materiality analysis: methodologies and IRO

Update on the Company's risk management system and the missions of the TotalEnergies Risk Management Committee (TRMC) - presentation of the work carried out by the TRMC

Presentation of the update to the Vigilance plan and the implementation report

Update on the 2023 internal audit

Presentation of the 2024 health, safety and environment audit plan and review of the fiscal year 2023

Review of cybersecurity audits carried out in 2023 and the first half of 2024

Update on the call for tenders for the selection of sustainability auditors and recommendation to the Board of Directors

Dispute relating to Climate

Strategy/Climate/Environment

The Company's 5-year plan

Strategic outlook for Exploration & Production

Strategic outlook for Gas, Renewables & Power activities

Strategic outlook for Refining & Chemicals' activities

Strategic outlook for Marketing & Services' activities

The company's strategic environment: changes in energy markets (supply, demand) and benchmarking of major companies' strategies

TotalEnergies' communication in France: current situation and action plan - make better recognized the Company's work in the energy transition and its leadership in the Oil&Gas sector

Presentation of the Sustainability and Climate Strategy to investors

Sustainability & Climate – Progress Report 2024, reporting on the progress made in the implementation of the Corporation's ambition with respect to sustainable development and energy transition and its related targets by 2030

Investor Day 2024 presentation - Strategy & Outlook

Major investments/divestments

Approval of the Atapu 2 and Sépia 2 deep offshore oil projects in Brazil

Approval of investment in Suriname (EP offshore)

Update on EP project in Angola (block 20)

Acquisition of gas assets in Malaysia

Information on the acquisition of the VSB Group, a leading German renewable energy developer

Answers to shareholders' written questions

Governance - Business conduct

Evaluation of the functioning of the Board

Report of the Lead Independent Director on his mandate

Lead Independent Director's look-back at the roadshows

Review of voting results at the Shareholders' Meeting of May 24, 2024, recommendations from leading voting consultants, votes cast by major shareholders and lessons to be drawn from them

Changes in the composition of the Board of Directors and its Committees

Update on the succession plans

Examination of the Company's ethics and compliance policy

Training of Directors on the CSRD

Information of the Audit Committee on compliance by relevant persons with the provisions of the Financial Code of Ethics

Amendment of the Audit Committee's rules of procedure to incorporate the new legal requirements resulting from the Order of December 6, 2023 transposing the CSRD Directive into French law

Approval of the URD chapter on corporate governance

Market Abuse Regulation - Closed period

Social issues and human resources

Review of equality policy between men and women in the workplace and in terms of pay

Review of the employee engagement survey (TotalEnergies Survey 2024) and lessons to be drawn from it

World plan for the allocation in 2024 of 100 free shares per eligible employee

2024 Capital increase reserved for employees

2024 performance share plan

Determination of the compensation for the Chairman and Chief Executive Officer and directors for the 2023 fiscal year

Compensation policy for the Chairman and Chief Executive Officer and directors for the 2024 fiscal year

A UNIFIED MANAGEMENT STRUCTURE, TAILORED TO THE COMPANY'S REQUIREMENTS

Management of the Corporation is assumed either by the Chairperson of the Board of Directors (who then holds the title of Chairman and Chief Executive Officer), or by another person appointed by the Board of Directors with the title of Chief Executive Officer. It is the responsibility of the Board of Directors to choose between these two forms of management under the majority rules described above.

At its meeting on December 16, 2015, the Board of Directors decided to reunify the positions of Chairperson and Chief Executive Officer of the Corporation as from December 19, 2015. Since that date, Mr. Pouyanné has held the position of Chairman and Chief Executive Officer of TotalEnergies SE. After his term of office as director was renewed at the Shareholders' Meeting on May 28, 2021, and then at the Shareholders' Meeting on May 24, 2024, for a three-year period, the Board of Directors reappointed Mr. Pouyanné as Chairman and Chief Executive Officer for the same period, expiring at the end of the 2027 Shareholders' Meeting called to approve the financial statements for fiscal year 2026.

The Board of Directors, at its meeting held on September 21, 2023, after having reaffirmed its support to the quality and the relevance of the strategy implemented, had considered that it was highly desirable that Mr. Patrick Pouyanné, Chairman and Chief Executive Officer, continues to drive this strategy's deployment at the helm of the Company. On the proposal of the Governance and Ethics Committee, it therefore unanimously decided to propose the renewal of the mandate of Mr. Patrick Pouyanné to the Shareholders' Meeting to be held on May, 24 2024. In the frame of the balanced governance implemented since 2015, it also unanimously decided to propose the renewal of the mandate of Mr. Jacques Aschenbroich, who has held the position of Lead Independent Director since May 2023.

Unified management form

The discussions held with the Governance and Ethics Committee in the best interests of the Corporation had led to a firm proposal to continue to combine the functions of Chairman and Chief Executive Officer. Indeed, this management form of the Corporation is considered to be the most appropriate for dealing with the challenges and specificities of the energy sector, which is facing major transformations. More than ever, this context requires agility of movement, which the unity of command reinforces, by giving the Chairman and Chief Executive Officer the power to act and increased representation of the Corporation in its strategic negotiations with States and partners of the Company.

Balance of power

The unity of the power to manage and represent the Corporation is also particularly well regulated by the Corporation's governance.

The balance of power is established through the quality, complementarity and independence of the members of the Board of Directors and its four Committees, as well as through the Articles of Association and the Board's Rules of procedure, which define the means and prerogatives of the Lead Independent Director, notably:

- in his relations with the Chairman and Chief Executive Officer: contribution to the agenda of Board meetings or the possibility of requesting a meeting of the Board of Directors and sharing opinions on major issues;
- in his contribution to the work of the Board of Directors: chairing meetings in the absence of the Chairman and Chief Executive Officer, or when the examination of a subject requires his abstention, evaluation and monitoring of the functioning of the Board, prevention of conflicts of interest, and dialogue with the directors and Committee Chairpersons;
- in his relations with shareholders: the possibility, with the approval of the Chairman and Chief Executive Officer, of meeting with them on corporate governance issues, a practice that has already been used on several occasions.

The balance of power within the governance bodies, in addition to the independence of its members, is further strengthened by the full involvement of the directors, whose participation in the work of the Board and its Committees is exemplary. The diversity of their skills and expertise also enables the Chairman and Chief Executive Officer to benefit from a wide range of contributions.

In addition, the Board's rules of procedure provide that any investment or divestment transactions contemplated by the Company involving amounts in excess of 3% of shareholders' equity must be approved by the Board, which is also kept informed of all significant events concerning the Corporation's operations, in particular investments and divestments in excess of 1% of shareholders' equity.

Lastly, the Corporation's Articles of Association provide the necessary guarantees of compliance with good governance practices in the context of a unified management structure. In particular, they provide that the Board may be convened by any means, including orally, or even at short notice depending on the urgency of the matter, by the Chairman or by one third of its members, including the Lead Independent Director, at any time and as often as the interests of the Corporation require.

THE LEAD INDEPENDENT DIRECTOR, REFLECTING A BALANCED DISTRIBUTION OF POWER

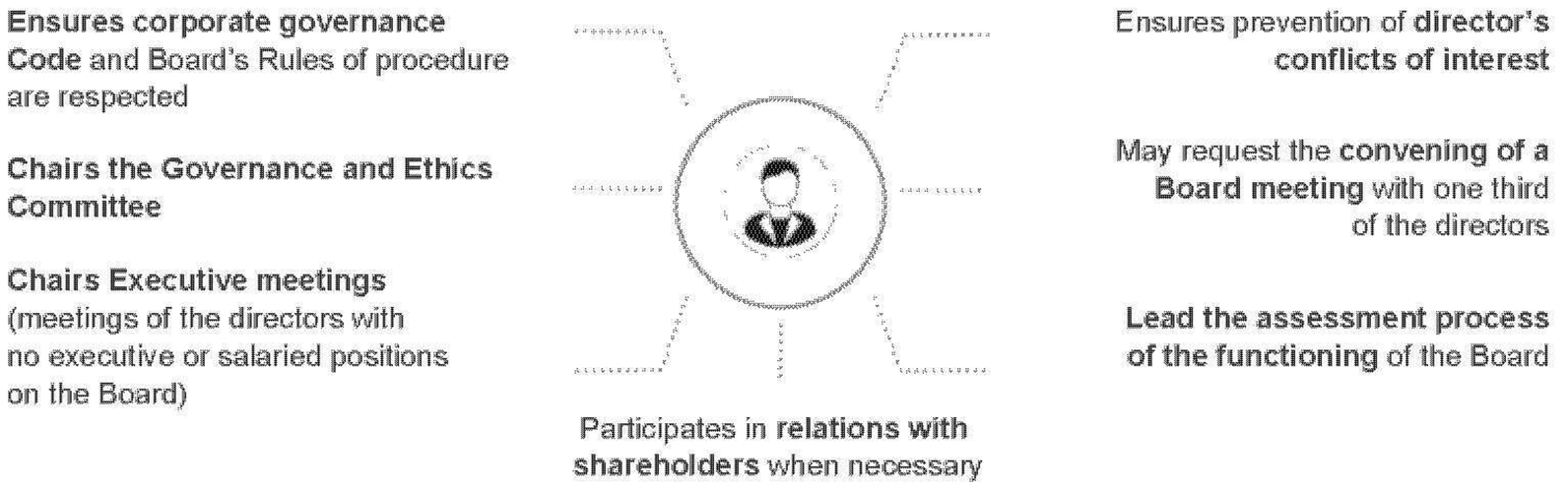
Listening to investors and stakeholders, the Board of Directors pays special attention to the balance of power within the Company. It is in this context that the Board of Directors in 2015 amended the provisions of its rules of procedure to provide for the appointment of a Lead Independent Director in the event that the positions of Chairman of the Board of Directors and Chief Executive Officer are combined.

The Lead Independent Director's duties, resources and prerogatives which are described in the Rules of Procedure of the Board are extensive:

- the Chairman and Chief Executive Officer and the Lead Independent Director are the shareholders' dedicated contacts on issues that fall within the remit of the Board of Directors. In his relations with shareholders, the Lead Independent Director has the possibility, with the approval of the Chairman and Chief Executive Officer, to meet with shareholders on corporate governance issues, a practice that has already been used on several occasions;
- in his relations with the Chairman and Chief Executive Officer, the Lead Independent Director contributes to the agenda of Board meetings and has the possibility to request a meeting of the Board of Directors and to share opinions on major issues;
- in his contribution to the work of the Board of Directors, the Lead Independent Director chairs meetings in the absence of the Chairman and Chief Executive Officer, or when the examination of a subject requires his abstention. He is in charge of the assessment and monitoring of the functioning of the Board, the prevention of conflicts of interest, and dialogue with the directors and Committee Chairpersons.

Since 2016, the Lead Independent Director has organized executive sessions with the directors who do not hold executive or salaried positions on the Board of Directors, during which the directors may discuss the Company's strategic challenges and working practices. The directors are also in regular contact with the members of the management team, including members of the Executive Committee during Board meetings and operational managers during Company site visits. Through those interactions between directors and managers, the directors gain a practical understanding of the Company's activities.

The duties of the Lead Independent Director



A COMPENSATION POLICY OF THE EXECUTIVE DIRECTOR ALIGNED WITH THE COMPANY'S STRATEGIC TARGETS

The compensation awarded to the Chairman and Chief Executive Officer is indexed to key performance indicators used to measure the success of the Company's strategy.

In order to determine a compensation aligned with the Company's performance, the variable portion of the Chairman and Chief Executive Officer's compensation takes into account both quantifiable targets (financial, Safety and GHG emission evolution parameters) and qualitative criteria (personal contribution).

Conscious of the importance of climate challenges, the Board of Directors decided, starting in 2019, to change the criteria for determining the variable portion of the Chairman and Chief Executive Officer's compensation, in particular by integrating a quantifiable criterion related to the change in GHG emissions (Scope 1+2) from operated facilities.

This criterion supplements those introduced in 2016 to better take into account the achievements of Corporate Social Responsibility (CSR) and HSE targets of the Company. The granting of performance shares, a long-term component of the Chairman and Chief Executive Officer's compensation, also includes criteria linked to the taking into account of climate issues. The criteria retained by the Board of Directors make it possible to reflect the progress of the Company in the implementation of its transition strategy. For illustration, the performance shares granted in 2024 were submitted, among others, to a criterion of reduction of lifecycle carbon intensity of energy products sold and to a criterion linked to the change in the methane emissions from operated facilities of the Company.

The Board of Directors has a proactive approach to this issue. Refer to point 4.3. of chapter 4.

1.8.2 An Executive Committee entrusted with implementing the Company's transition strategy

The Executive Committee, under the responsibility of the Chairman and Chief Executive Officer, is the decision-making body of the Company.

It implements the strategic vision defined by the Board of Directors and authorizes the corresponding capital expenditures, subject to the Board of Directors' approval for investments exceeding 3% of shareholders' equity and any significant transaction outside the scope of the Company's stated strategy, and subject to the Board's review for investments involving amounts exceeding 1% of shareholders' equity.

The Executive Committee meets as often as necessary and generally twice a month.

1.8.3 An operational structure built around the Company's business segments

As of December 31, 2024, the Company's organization was based on five business segments:

- an Exploration & Production segment that encompasses the activities of exploration and production of oil and natural gas, conducted in about 50 countries;
- an Integrated LNG segment covering the integrated gas chain (including upstream and midstream LNG activities) as well as biogas, hydrogen and gas trading activities;
- an Integrated Power segment covering electricity generation, storage, electricity trading and B2B-B2C distribution of gas and electricity;
- a Refining & Chemicals segment constituting a major industrial hub comprising the activities of refining, petrochemicals and specialty chemicals. This segment also includes the activities of oil supply, trading and marine shipping;
- a Marketing & Services segment including the global activities of supply and marketing in the field of petroleum products.

The Corporate segment includes the functional and financial activities of a holding company. The Holding's corporate entities include in particular Finance, Security, People & Social Engagement, Communications and Strategy & Sustainability divisions.

TotalEnergies SE is the parent company. It acts as a holding company and drives the Company's strategy.

The Company's operations are conducted through subsidiaries that are directly or indirectly owned by TotalEnergies SE and through interests in joint-ventures that are not necessarily controlled by TotalEnergies. TotalEnergies SE has three secondary establishments in France, located in Lacq, Pau and Paris.

Corporate name: TotalEnergies SE

Headquarters: 2, place Jean Millier, La Défense 6, 92400 Courbevoie, France

Registered in Nanterre: RCS 542 051 180

LEI (Legal Entity Identifier): 529900S21EQ1BO4ESM68

EC Registration Number: FR 59 542 051 180

Date of incorporation: March 28, 1924

Term of the Corporation: extended for 99 years from March 22, 2000

Fiscal year: from January 1 to December 31 of each year

APE Code (NAF): 7010Z

totalenergies.com

The scope of consolidation of TotalEnergies SE as of December 31, 2024, consisted of 1,441 companies, including 199 equity companies. The principles of consolidation are described in Note 1.1 to the Consolidated Financial Statements and the list of companies included in the scope of consolidation can be found in Note 18 to the Consolidated Financial Statements (refer to point 8.7 of chapter 8).

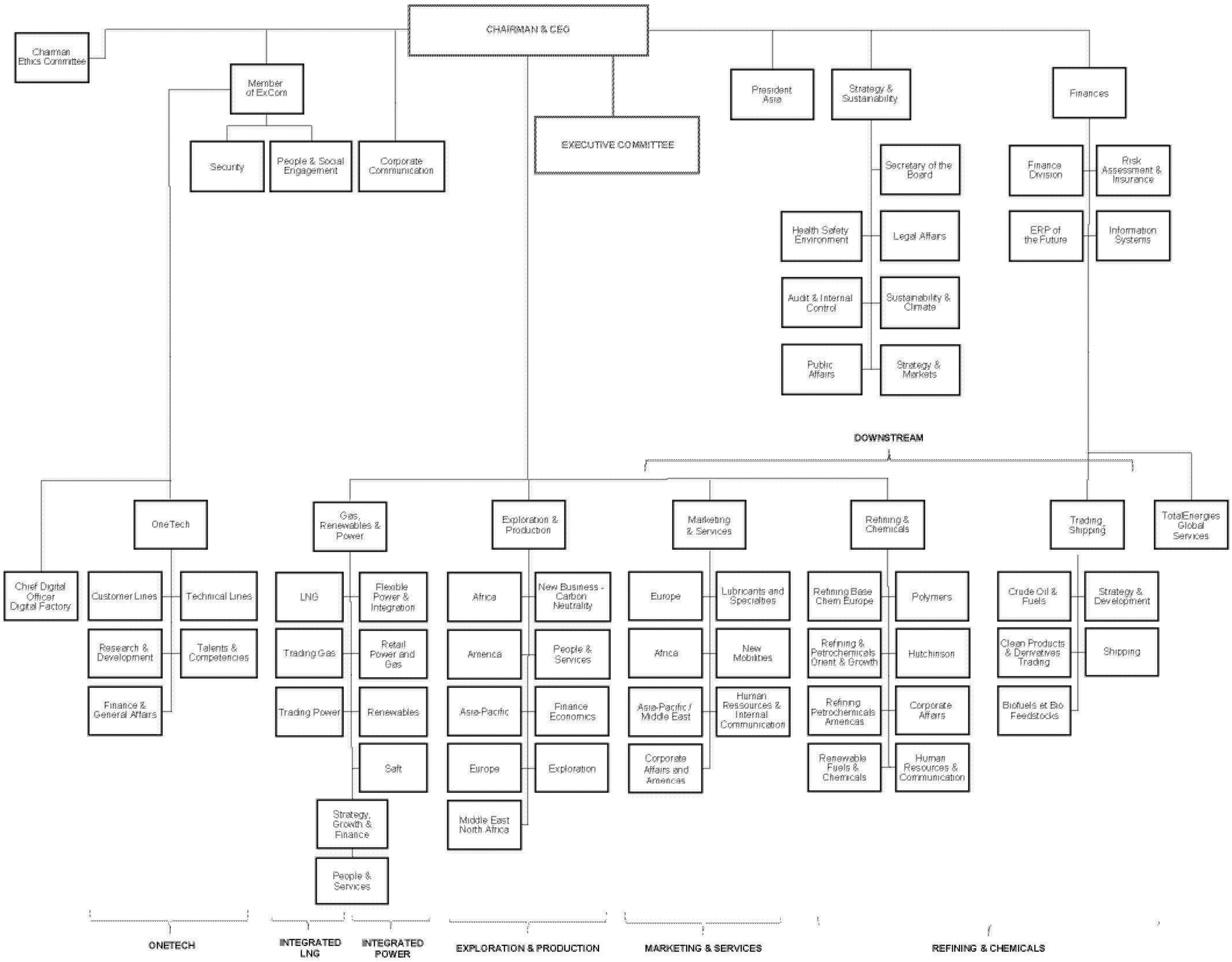
The situation of the direct subsidiaries and shareholdings of TotalEnergies SE, and in particular those with a gross value exceeding 1% of the Corporation's share capital, is shown in the table of subsidiaries and interests in point 10.4.1 of chapter 10.

TotalEnergies holds interests in a limited number of companies that issue financial instruments in France or abroad or whose financial instruments are listed in France or abroad. These companies are mainly the Company's financing vehicles (TotalEnergies Capital, TotalEnergies Capital International) or the operational subsidiaries in its business segments, in particular in Africa, such as TotalEnergies EP Gabon(1). TotalEnergies also holds minority interests in other companies. The changes in the composition of the Company in 2024 are explained in Note 2 to the Consolidated Financial Statements (refer to point 8.7 of chapter 8).

During fiscal year 2024, TotalEnergies SE did not acquire any other interest in companies with their registered office in France representing more than one twentieth, one tenth, one fifth, one third or one half of the capital of these companies or obtained control of such companies.

(1) TotalEnergies EP Gabon is a company under Gabonese law, listed on Euronext Paris. TotalEnergies holds 58.28%, the Republic of Gabon holds 25% and the public holds 16.72%.

Organisation chart as of January 1, 2025



1.8.4 Risk management system

TotalEnergies implements a comprehensive risk management system that is an essential factor in the deployment of its strategy. This system relies on an organization at Company level and in the business segments, on a continuous process of identifying and analyzing risks in order to determine those that could prevent the achievement of the goals as well as the analysis of management systems.

The Executive Committee is responsible for identifying and analyzing internal and external risks that could impact the achievement of the Company's objectives. For this purpose, it is assisted by the TotalEnergies Risk Management Committee (TRMC), which makes sure that the Company has mapped the risks to which it is exposed and that efficient risk management systems are suitable.

The TRMC relies notably on the work done by the business segments and functional divisions. The business segments are responsible for defining and implementing a risk management policy suited to their specific activities. However, the handling of certain cross-functional risks is more closely coordinated by the respective functional divisions.

Regarding commitments, General Management exercises operational control through the Executive Committee's approval of investments and expenses that exceed defined thresholds. The Risk Committee (Corisk) is tasked with reviewing these projects in advance, and in particular, with verifying the analysis of the various associated risks.

The Board of Directors' Audit Committee is responsible for monitoring the effectiveness of the risk management systems as well as of the internal audit. The audit plan, based on an analysis of risks and the risk management systems, is submitted annually to the Executive Committee and the Audit Committee.

For a detailed description of how the internal control and risk management procedures are structured, refer to point 3.3 of chapter 3.

1.9 Our financial performance

1.9.1 Overview of the 2024 fiscal year

In 2024, TotalEnergies reported adjusted net income of $18.3 billion and cash flow of $29.9 billion in a softer environment mainly affected by a sharp decline in refining margins, after two exceptional years. 2024 IFRS net income was $15.8 billion (€14.6 billion). The Company achieved nearly a 15% return on average capital employed in 2024, the best among the majors for the third consecutive year. TotalEnergies continued to implement its balanced growth strategy in a disciplined manner by investing $17.8 billion in 2024, of which one third was in new Oil & Gas projects and $4.8 billion in low-carbon energies, including $3.9 billion in Integrated Power. With $8 billion in share buybacks[1], payout reached 50% of cash flow. TotalEnergies ended the year 2024 with gearing[2] below 10%, highlighting the Company's strong financial health.

In 2024, TotalEnergies achieved five major projects start-ups (Mero-2 and Mero-3 in Brazil, Anchor in the United States, Fenix in Argentina and Tyra in Denmark) that support 2025 production growth of more than 3%. Exploration & Production generated adjusted net operating income of $10 billion and cash flow of $17 billion. During the year, the Company sanctioned major oil projects in Suriname, Brazil and Angola, driving an outstanding reserves replacement ratio (157%) and a proved reserves life index greater than 12 years as of December 31, 2024, reflecting the depth of TotalEnergies' Upstream portfolio. In 2024, TotalEnergies confirmed its low cost and low emission Oil & Gas model, with operating costs below $5/boe and GHG emissions[3] and notably methane emissions down 3% and 15%, respectively, over the year.

For full-year 2024, Integrated LNG segment generated adjusted net operating income and cash flow of $4.9 billion. The Company enriched its portfolio in 2024 with the launch of Marsa LNG in Oman, Ubeta in Nigeria, the Sapura OMV acquisition in Malaysia and the acquisition of dry gas assets in the Eagle Ford basin in Texas. Moreover, TotalEnergies continued to successfully market its LNG volumes by signing several new medium-term sales contracts (6 Mt/year) in Asia, mostly Brent-indexed.

Full-year 2024 cash flow of Integrated Power segment totaled $2.6 billion, up 19% year-on-year and in line with annual Company guidance, and with a ROACE of 10%. Net electricity production increased 23% year-on-year to 41 TWh and contributed to reducing the average lifecycle carbon intensity of all energy products sold by the Company to its clients (-17% vs. 2015). During 2024, TotalEnergies continued to deploy its differentiated Integrated Power model in key targeted markets through strategic acquisitions: Quadra Energy and VSB that strengthen the Company's position in Germany, and gas-fired power plants in the United States and the United Kingdom that further enhance the Company's flexible generation capacity. Thanks to its portfolio, TotalEnergies anticipates growing power production to more than 50 TWh in 2025, equivalent to 10% of its hydrocarbon production.

Full-year 2024, Downstream adjusted net operating income was $3.5 billion, down from 2023 levels due to a sharp decline (-44%) in European refining margins and downgraded operations in some units. Importantly, cash flow remained above $6 billion, demonstrating the resilience of the Company's integrated Downstream model.

In view of the free cash flow[4] growth outlook and share buybacks executed in 2024 (5% of the share capital), the Board of Directors will propose at the Shareholders' Meeting to be held on May 23, 2025, the distribution of a final 2024 dividend of €0.85/share, resulting in an increase of 7% for the 2024 dividend to €3.22/share, compared to the 2023 dividend. Furthermore, the Board of Directors confirmed a shareholder return policy for 2025 targeting >40% CFFO payout, which will combine interim dividends increasing by 7.6% to €0.85/share and $2 billion of share buybacks per quarter, a level which will be pursued under reasonable market conditions.

(1) Including coverage of employees share grant plans.
(2) Refer to the glossary for definitions and additional information on alternative performance measures (APM, Non-GAAP measures) and to point 1.9 for reconciliation tables.
(3) Scope 1+2 of Oil & Gas operated activities.
(4) Refer to the glossary for definitions and additional information on alternative performance measures (APM, Non-GAAP measures) and to point 1.9 for reconciliation tables.

1.9.1.1 Key figures from TotalEnergies' consolidated financial statements[1]

Consolidated data in millions of dollars, except for effective tax rate, earnings per share, number of shares and percentages.

(in M$)	2024	2023	2022
Adjusted EBITDA[a]	43,143	50,030	71,578
Adjusted net operating income from business segments	20,566	25,107	38,475
Exploration & Production	*10,004*	*10,942*	*17,479*
Integrated LNG	4,869	*6,200*	*11,169*
Integrated Power	2,173	*1,853*	*975*
Refining & Chemicals	2,160	*4,654*	*7,302*
Marketing & Services	1,360	*1,458*	*1,550*
Contribution of equity affiliates to adjusted net income	2,669	3,000	8,254
Effective tax rate[b]	39.4%	37.5%	40.9%
Adjusted net income (TotalEnergies share)[a]	18,264	23,176	36,197
Adjusted fully diluted earnings per share *($)*[c]	7.77	9.40	13.94
Adjusted fully diluted earnings per share (€)[d]	7.18	8.70	13.24
Fully diluted weighted-average shares *(millions)*	2,315	2,434	2,572
Net income (TotalEnergies share)	15,758	21,384	20,526
Organic investments[a]	16,423	18,126	11,852
Acquisitions net of assets sales[a]	1,406	(1,289)	4,451
Net investments[a]	17,829	16,837	16,303
Cash flow from operations excluding working capital (CFFO)[a]	29,917	35,946	45,729
Debt adjusted cash flow (DACF)[a]	30,614	36,451	47,025
Cash flow from operating activities	30,854	40,679	47,367

(a) Refer to the glossary for definitions and additional information on alternative performance measures (APM, Non-GAAP measures) and to point 1.9 for reconciliation tables.
(b) Effective tax rate = (tax on adjusted net operating income) / (adjusted net operating income – income from equity affiliates – dividends received from investments – impairment of goodwill + tax on adjusted net operating income).
(c) In accordance with IFRS rules, adjusted fully diluted earnings per share is calculated from the adjusted net income less the interest on the perpetual subordinated bonds.
(d) Average €-$ exchange rate: 1.0824 for 2024.

1.9.1.2 Environment - liquids and gas price realizations, refining margins

	2024	2023	2022
Brent *($/b)*	80.8	82.6	101.3
Henry Hub *($/Mbtu)*[a]	2.4	2.7	6.5
TTF *($/Mbtu)*[b]	11.0	13.1	40.5
JKM *($/Mbtu)*[c]	11.9	13.8	33.8
Average price of liquids *($/b)*[d][e]			
Consolidated subsidiaries	77.1	76.2	91.3
Average price of gas *($/Mbtu)*[d][e]			
Consolidated subsidiaries	5.54	6.64	13.15
Average price of LNG *($/Mbtu)*[d][f]			
Consolidated subsidiaries and equity affiliates	9.80	10.76	15.90
European Refining Margin Marker (ERM) *($/t)*[d][g]	39.5	71.0	92.3

(a) HH (Henry Hub), a pipeline located in Erath, Louisiana, USA, serves as the official delivery point for New York Mercantile Exchange (NYMEX) futures contracts. It is widely used as a price reference for natural gas markets in North America. The hub is operated by Sabine Pipe Line LLC and is connected to four intrastate and nine interstate pipelines, including the Transcontinental, Acadian and Sabine pipelines.
(b) TTF (Title Transfer Facility) is a virtual trading point in the Netherlands for transferring rights in respect of physical gas. It is the most liquid and widely used price benchmark for the natural gas markets in Europe. TTF is operated by Gasunie Transport Services (GTS), the owner and operator of the national transmission network in the Netherlands. It is traded in €/MWh.
(c) JKM (Japan-Korea Marker) measures spot LNG trading prices in Asia. It is based on the prices reported in spot market trades and/or bids and offers of LNG collected after the close of the Asian trading day at 16:30 Singapore time.
(d) Does not include oil, gas and LNG trading activities, respectively.
(e) Sales in $ / Sales in volume for consolidated affiliates.
(f) Sales in $ / Sales in volume for consolidated and equity affiliates.
(g) This market indicator for European refining, calculated based on public market prices ($/t), uses a basket of crudes, petroleum product yields and variable costs representative of the European refining system of TotalEnergies.

(1) Refer to the glossary for definitions and additional information on alternative performance measures (APM, Non-GAAP measures) and to point 1.9 for reconciliation tables.

1.9.1.3 Production

Hydrocarbon production[a]	2024	2023	2022
Hydrocarbon production (*kboe/d*)	2,434	2,483	2,765
Oil (including bitumen) (*kb/d*)	1,314	1,388	1,307
Gas (including Condensates and associated NGL) (*kboe/d*)	1,120	1,095	1,458
Hydrocarbon production (*kboe/d*)	2,434	2,483	2,765
Liquids *(kb/d)*	1,468	1,550	1,519
Gas (*Mcf/d*)	5,211	5,028	6,759
Hydrocarbon production excluding Novatek (*kboe/d*)	2,434	2,483	2,437

(a) Company production = E&P production + Integrated LNG production.

Hydrocarbon production was 2,434 thousand barrels of oil equivalent per day in 2024, up 2% year-on-year (excluding the Canada disposal representing 3.5%) and was comprised of:

- +3% due to start-ups and ramp-ups, including Mero-2 and Mero-3 in Brazil, Absheron in Azerbaijan, Bloc 10 in Oman, Tommeliten Alpha in Norway, Akpo West in Nigeria, Fenix in Argentina and Anchor in the United States;
- +1% due to higher availability of production facilities;
- +1% portfolio effect related to entry into the producing fields of SARB Umm Lulu in the United Arab Emirates and Ratawi in Iraq and to the acquisition of interests in the Eagle Ford shale gas plays in Texas;
- -3% due to the natural field declines.

1.9.1.4 Analysis of business segments

Exploration & Production

Hydrocarbon production	2024	2023	2022
EP *(kboe/d)*	1,947	2,034	2,296
Liquids *(kb/d)*	1,408	1,492	1,466
Gas *(Mcf/d)*	2,880	2,900	4,492
EP excluding Novatek (*kboe/d*)	1,947	2,034	2,025

Results *(in M$ except the effective tax rate)*	2024	2023	2022
Adjusted net operating income	10,004	10,942	17,479
including adjusted income from equity affiliates	*742*	*539*	*1,335*
Effective tax rate[a]	47.8%	50.0%	50.8%
Organic investments[b]	9,060	10,232	7,507
Acquisitions net of cessions[b]	(207)	(2,706)	2,520
Net investments[b]	8,853	7,526	10,027
Cash flow from operations excluding working capital (CFFO)[b]	17,049	19,126	26,080
Cash flow from operating activities	17,388	18,531	27,654

(a) Effective tax rate = (tax on adjusted net operating income) / (adjusted net operating income – income from equity affiliates – dividends received from investments – impairment of goodwill + tax on adjusted net operating income).
(b) Refer to the glossary for definitions and additional information on alternative performance measures (APM, Non-GAAP measures) and to point 1.9 for reconciliation tables.

Exploration & Production adjusted net operating income was $10,004 million in 2024, down 9% year-on-year, driven by lower oil prices that were partially compensated by increased production and higher gas realizations.

Cash flow from operations excluding working capital (CFFO) was $17,049 million in 2024, down 11% year-on-year, mainly driven by lower oil and gas prices and by the impact of the disposal of the Canadian oil sands assets.

Integrated LNG

Hydrocarbon production for LNG	2024	2023	2022
Integrated LNG *(kboe/d)*	487	449	469
Liquids *(kb/d)*	60	58	53
Gas *(Mcf/d)*	2,331	2,128	2,267
Integrated LNG excluding Novatek (*kboe/d*)	487	449	413

Liquefied Natural Gas *(in Mt)*	2024	2023	2022
Overall LNG sales	39.8	44.3	48.1
*incl. Sales from equity production**	*15.5*	*15.2*	*17.0*
incl. Sales by TotalEnergies from equity production and third party purchases	*34.7*	*40.1*	*42.8*

* The Company's equity production may be sold by TotalEnergies or by the joint-ventures.

For full-year 2024, LNG sales were down 10% in a context of lower demand for LNG in Europe.

Results *(in M$)*	2024	2023	2022
Average price of LNG ($/Mbtu)*			
Consolidated subsidiaries and equity affiliates	9.80	10.76	15.90
Adjusted net operating income	4,869	6,200	11,169
including adjusted income from equity affiliates	*1,978*	*2,103*	*5,637*
Organic investments[a]	2,169	2,063	519
Acquisitions net of assets sales[a]	1,367	1,096	(47)
Net investments[a]	3,536	3,159	472
Cash flow from operations excluding working capital (CFFO)[a]	4,903	7,293	9,784
Cash flow from operating activities	5,185	8,442	9,604

* Sales in $ / Sales in volume for consolidated and equity affiliates. Does not include LNG trading activities.
(a) Refer to the glossary for definitions and additional information on alternative performance measures (APM, Non-GAAP measures) and to point 1.9 for reconciliation tables.

For full-year 2024, Integrated LNG adjusted net operating income was $4,869 million, down 21% compared to 2023, mainly due to lower average LNG selling prices and low market volatility during the first three quarters that impacted gas trading results.

Cash flow from operations excluding working capital (CFFO) for Integrated LNG segment was $4,903 million, down 33% year-on-year for the same reasons.

Integrated Power

	2024	2023	2022
Net power production *(TWh)*[a]	**41.1**	**33.4**	**33.2**
of which power production from renewables	*26.0*	*18.9*	*10.4*
of which power production from gas flexible capacities	15.1	*14.5*	*22.8*
Portfolio of power generation net installed capacity *(GW)*[b]	**21.5**	**17.3**	**12.0**
of which renewables	*15.1*	*13.0*	*7.7*
of which gas flexible capacities	6.5	*4.3*	*4.3*
Portfolio of renewable power generation gross capacity *(GW)*[b][c]	**97.2**	**80.1**	**69.0**
of which installed capacity	*26.0*	*22.4*	*16.8*
Clients power - BtB and BtC *(Million)*[b]	6.1	5.9	6.1
Clients gas - BtB and BtC *(Million)*[b]	2.8	2.8	2.7
Sales power - BtB and BtC *(TWh)*	50.7	52.1	55.3
Sales gas - BtB and BtC *(TWh)*	98.6	100.9	96.3

(a) Solar, wind, hydroelectric and gas flexible capacities.
(b) End of period data.
(c) Includes 20% of Adani Green Energy Ltd's gross capacity, 50% of Clearway Energy Group's gross capacity effective third quarter 2022 and 49% of Casa dos Ventos' gross capacity effective first quarter 2023.

For the full-year 2024, net power production was up 23%, at 41 TWh. Notably, production from renewables increased 38% and accounted for more than 60% of the electricity generated.

Gross installed renewable power generation capacity reached 26 GW at year-end 2024, up 16%.

Results *(in M$)*	2024	2023	2022
Adjusted net operating income	2,173	1,853	975
including adjusted income from equity affiliates	–	*137*	*201*
Organic investments[a]	2,355	2,582	1,385
Acquisitions net of assets sales[a]	1,514	2,363	2,136
Net investments[a]	3,869	4,945	3,521
Cash flow from operations excluding working capital (CFFO)[a]	2,555	2,152	970
Cash flow from operating activities	2,972	3,573	66

(a) Refer to the glossary for definitions and additional information on alternative performance measures (APM, Non-GAAP measures) and to point 1.9 for reconciliation tables.

Integrated Power adjusted net operating income and cash flow from operations excluding working capital (CFFO) were $2,173 million and $2,555 million respectively in 2024, up nearly 20% year-on-year and in line with growth in the business. These results demonstrate the relevance of the integrated model, with all segments of the value chain contributing to achieving annual guidance (> $2.5 billion CFFO).

Downstream (Refining & Chemicals and Marketing & Services)

Results *(in M$)*	2024	2023	2022
Adjusted net operating income	3,520	6,112	8,852
Organic investments[a]	2,662	3,105	2,354
Acquisitions net of assets sales[a]	(1,262)	(2,042)	(159)
Net investments[a]	1,400	1,063	2,195
Cash flow from operations excluding working capital (CFFO)[a]	6,079	8,171	10,069
Cash flow from operating activities	6,709	9,914	11,787

(a) Refer to the glossary for definitions and additional information on alternative performance measures (APM, Non-GAAP measures) and to point 1.9 for reconciliation tables.

Refining & Chemicals

Refinery throughput and utilization rate[a]	2024	2023	2022
Total refinery throughput *(kb/d)*	1,472	1,436	1,472
France	*422*	*414*	*348*
Rest of Europe	*605*	*592*	*623*
Rest of world	*446*	*431*	*501*
Utilization rate based on crude only[b]	83%	81%	82%

(a) Includes refineries in Africa that are reported in the Marketing & Services segment for 2022 and 2023.
(b) Based on distillation capacity at the beginning of the year, excluding the African refinery SIR (divested) from 3rd quarter 2024 and the African refinery Natref (divested) during the 4th quarter 2024.

Petrochemicals production and utilization rate	2024	2023	2022
Monomers *(kt)*	5,082	4,896	5,005
Polymers *(kt)*	4,433	4,130	4,549
Steam crackers utilization rate**	79%	69%	76%

* Olefins.
** Based on olefins production from steam crackers and their treatment capacity at the start of the year, excluding Lavera (divested) from 2nd quarter 2024.

Refining throughput was up 2% year-on-year in 2024 reflecting a slightly higher refinery utilization rate given the major turnaround schedule of the year.

Over 2024, the utilization rate based on crude was 83%, below the annual objective of 85% due to unplanned shutdowns notably at the Normandy and Donges platforms, in France as well as at the Port-Arthur refinery in the United States.

Petrochemicals production was up 4% year-on-year in 2024 for monomers and 7% for polymers due to an increase in the rate of use of crackers.

Results *(in M$)*	2024	2023	2022
European Refining Margin Market (ERM) ($/t)*	39.5	71.0	92.3
Adjusted net operating income	2,160	4,654	7,302
Organic investments[a]	1,711	2,040	1,319
Acquisitions net of assets sales[a]	(173)	(118)	(38)
Net investments[a]	1,538	1,922	1,281
Cash flow from operations excluding working capital (CFFO)[a]	3,760	5,853	7,704
Cash flow from operating activities	3,808	7,957	8,663

* This market indicator for European refining, calculated based on public market prices ($/t), uses a basket of crudes, petroleum product yields and variable costs representative of the European refining system of TotalEnergies. Does not include oil trading activities.
(a) Refer to the glossary for definitions and additional information on alternative performance measures (APM, Non-GAAP measures) and to point 1.9 for reconciliation tables.

In 2024, for Refining & Chemicals, adjusted net operating income and cash flow from operations excluding working capital (CFFO) were both down, amounting to $2,160 million and $3,760 million, respectively, reflecting lower refining margins in Europe and the Rest of the World.

Marketing & Services

Sales *(in kb/d)**	2024	2023	2022
Total Marketing & Services sales	1,342	1,375	1,468
Europe	*752*	*776*	*824*
Rest of world	*591*	*599*	*644*

* Excludes trading and bulk refining sales.

Sales of petroleum products were down by 2% in full-year 2024 mainly due to seasonality of European fuel demand partially offset by better sales in the Aviation and Lubricants business.

Results *(in M$)*	2024	2023	2022
Adjusted net operating income	1,360	1,458	1,550
Organic investments[a]	951	1,065	1,035
Acquisitions net of assets sales[a]	(1,089)	(1,924)	(121)
Net investments[a]	(138)	(859)	914
Cash flow from operations excluding working capital (CFFO)[a]	2,319	2,318	2,365
Cash flow from operating activities	2,901	1,957	3,124

(a) Refer to the glossary for definitions and additional information on alternative performance measures (APM, Non-GAAP measures) and to point 1.9 for reconciliation tables.

Marketing & Services adjusted net operating income was $1,360 million for the full-year 2024, decreasing 7% year-on-year mainly because of the cession in Germany and Benelux.

Cash flow from operations excluding working capital (CFFO) is stable at $2,319 million.

1.9.1.5 TotalEnergies' Results

A. Adjusted net operating income from the business segments

Adjusted net operating income from the business segments was $20,566 million in 2024, compared to $25,107 million in 2023 mainly due to lower oil & gas prices and lower refining margins and to low market volatility impacting gas & LNG trading.

B. Adjusted net income[1] (TotalEnergies share)

Adjusted net income (TotalEnergies share) was $18,264 million in 2024. For the full-year 2024, these items amounted to ($2,506) million, consisting mainly of:

- +$1.4 billion in capital gains, notably from the partial sale of distribution networks in Belgium and Luxembourg and the total sale in the Netherlands for the Marketing & Services segment. This amount includes the revaluation of retained and equity-accounted securities in Belgium and Luxembourg;
- -$2.0 billion in impairments and exceptional provisions mainly related to the Company's minority interests in SunPower and Maxeon in the Integrated Power sector and those related to the exit from blocks 11B/12B and 5/6/7 in South Africa for the Exploration & Production segment;
- -$0.3 billion in stock effects for the Refining & Chemicals and Marketing & Services segments;
- -$0.9 billion in fair value changes, mainly due to the revaluation of internal derivative instruments. The negative adjustment in 2024 should be viewed in the context of positive adjustments recorded in 2022 and 2023, totaling a positive sum of $202 million over these 3 years;
- -$0.6 billion in other items, mainly impacts from the infra-marginal rent contribution in France and deferred tax adjustments related to rate changes.

TotalEnergies' average tax rate was 39.4% in 2024 versus 37.5% in 2023, notably due to the higher weight of Exploration & Production in Company results.

C. Adjusted earnings (TotalEnergies share) per share

Adjusted diluted net earnings per share were $7.77 in 2024, based on 2,315 million weighted average diluted shares, compared to $9.40 in 2023.

As of December 31, 2024, the number of diluted shares was 2,270 million.

TotalEnergies repurchased[2] 121 million shares for cancellation in 2024 for $8 billion.

D. Acquisitions - asset sales

Completed acquisitions were $4,646 million in 2024, mainly related to Sapura OMV in Malaysia and interests in dry gas fields operated by Lewis Energy in the Eagle Ford in Texas, the acquisitions of a 20% interest from Lewis Energy Group in the Dorado (Eagle Ford) gas field in Texas, the German renewable energy aggregator Quadra Energy, 1.5 GW of flexible gas capacity in Texas, 1.3 GW of flexible gas capacity in the United Kingdom as well as interest in offshore wind in Germany in 2023 and in The Netherlands in 2024.

Completed divestments were $3,240 million in 2024 related to the farm down of renewable and flexible assets in the United States, the sale of a 50% interest in the West Burton plant in the United Kingdom as well as the sales of TotalEnergies EP Brunei, TotalEnergies' interest in Total PARCO in Pakistan and a minority interest in the Natref refinery in South Africa, as well as to the closing of the retail network transaction with Alimentation Couche-Tard in Belgium, Luxemburg and the Netherlands, the sale of a 15% interest in Absheron in Azerbaijan, the farm down of the Seagreen offshore wind farm in the United Kingdom, and the sale of petrochemical assets in Lavera, France.

E. Net cash flow

TotalEnergies' net cash flow (or free cash flow)[3] was $12,088 million in 2024 compared to $19,109 million in 2023, reflecting the $6,029 million decrease in CFFO and the $992 million increase in net investments to $17,829 million in 2024.

2024 cash flow from operating activities was $30,854 million versus CFFO of $29,917 million, which reflects positive variation from a working capital release of $1 billion.

F. Profitability

Return on equity was 15.8% for the twelve months ended December 31, 2024.

(1) Refer to the glossary for definitions and additional information on alternative performance measures (APM, Non-GAAP measures) and to point 1.9 for reconciliation tables.
(2) Including coverage of employees share grant plans.
(3) Refer to the glossary for definitions and additional information on alternative performance measures (APM, Non-GAAP measures) and to point 1.9 for reconciliation tables.

(in M$)	January 1, 2024 to December 31, 2024	January 1, 2023 to December 31, 2023
Adjusted net income (TotalEnergies share)[a]	18,586	23,450
Average adjusted shareholders' equity	117,835	115,006
Return on equity (ROE)	**15.8%**	**20.4%**

(a) Refer to the glossary for definitions and additional information on alternative performance measures (APM, Non-GAAP measures) and to point 1.9 for reconciliation tables.

Return on average capital employed[a] was 14.8% for the twelve months ended December 31, 2024.

(in M$)	January 1, 2024 to December 31, 2024	January 1, 2023 to December 31, 2023
Adjusted net operating income[a]	19,974	24,684
Average capital employed	135,174	130,517
Return on average capital employed[a] (ROACE)	**14.8%**	**18.9%**

(a) Refer to the glossary for definitions and additional information on alternative performance measures (APM, Non-GAAP measures) and to point 1.9 for reconciliation tables.

1.9.1.6 TotalEnergies SE statutory accounts

Net income for TotalEnergies SE, the parent company, amounted to €15,275 million in 2024, compared to €11,232 million in 2023.

1.9.1.7 Proposed dividends and shareholder return policy

PROPOSED DIVIDEND

The Board of Directors, at its meeting on February 4, 2025, after having closed the financial statements for fiscal year 2024, decided to propose at the Shareholders' Meeting to be held on May 23, 2025, the distribution of an ordinary dividend amounting to €3.22/share for fiscal year 2024 compared to the ordinary dividend of €3.01/share for fiscal year 2023, *i.e.*, an increase in 7.0%. As a consequence, taking into account these three interim dividends of €0.79/share previously decided by the Board of Directors, the final ordinary dividend for fiscal year 2024 amounts to €0.85/share.

SHAREHOLDER RETURN POLICY

Shareholder Return for 2024

The Board of Directors, at its meeting on February 4 2024, after having closed the financial statements for fiscal year 2024, decided to propose at the Shareholders' Meeting to be held on May 23, 2025, the distribution of an ordinary dividend amounting to €3.22/share for fiscal year 2024 compared to the ordinary dividend of €3.01/share for fiscal year 2023, *i.e.*, an increase in 7.0%. As a consequence, taking into account these three interim dividends of €0.79/share previously decided by the Board of Directors, the final ordinary dividend for fiscal year 2024 amount to €0.85/share.

Following the Board of Directors' meeting on October 2, 2024, TotalEnergies confirmed its shareholder distribution guidance to more than 40% of CFFO through cycles. Thanks to the clear and disciplined investment policy and the perspective for +$10 billion of free cash flow[1] growth by 2030 (versus 2024 at same price deck), the Board of directors had taken the following decisions:

- in 2024, execute $8 billion in share buybacks[2], corresponding to approximately 5% of the Corporation's capital. Anticipated shareholder return is above 45% of 2024 cash flow;
- in 2025, continue share buybacks of $2 billion per quarter assuming reasonable market conditions, and increase the dividend per share by at least 5% based on the 2024 share buybacks.

The implementation of these decisions set the return to shareholders to 50% of 2024 cash flow.

The Board of Directors, at its meeting on February 6, 2024, after having closed the financial statements for fiscal year 2023, decided to propose at the Shareholders' Meeting to be held on May 24, 2024, the distribution of an ordinary dividend amounting to €3.01/share for fiscal year 2023 compared to the ordinary dividend of €2.81/share for fiscal year 2022, *i.e.*, an increase in 7.1%. As a consequence, taking into account these three interim dividends of €0.74/share previously decided by the Board of Directors, the final ordinary dividend for fiscal year 2023 amount to €0.79/share.

In 2023, at its meeting on February 7, the Board of Directors indicated a shareholder return policy for 2023 targeting a pay-out between 35-40%, which will combine an increase in interim dividends of more than 7% to €0.74/share and share buybacks of $2 billion in the first quarter. In addition, in view of the growth in structural cash flow forecast and the share buybacks carried out in 2022 (5% of the share capital), the Board of Directors proposed to the Shareholders' Meeting the distribution of a final 2022 ordinary dividend of €0.74/share, an increase of 6.4% for the ordinary 2022 dividend to €2.81/share, plus the special dividend of €1/share paid in December 2022.

Following the Board of Directors' meeting on September 27, 2023, TotalEnergies announced to expect to distribute about 44% of its CFFO in 2023 to its shareholders and to increase shareholder distribution guidance to more than 40% of CFFO beyond 2023. Confident in the strong fundamentals of the Company, the clear and disciplined investment policy, and the solid potential for cash generation growth in the coming years, the Board of directors had taken the following decisions:

- in 2023, allocate $1.5 billion of the Canadian assets' divestment proceeds to share buybacks, to reach $9 billion for the year. The Company expected to return about 44% of CFFO to shareholders in 2023,
- increase the shareholder distribution guidance to more than 40% of CFFO through the cycles keeping net investments between $16-18 billion per year over 2024-28 to implement the transition of the Company.

(1) Refer to the glossary for definitions and additional information on alternative performance measures (APM, Non-GAAP measures) and to point 1.9 of chapter 1 for reconciliation tables.
(2) Including coverage of employees share grant plans.

The implementation of these decisions set the return to shareholders to 46% of 2023 cash flow.

In 2022, at its meeting on February 9, 2022, the Board of Directors decided to propose to the Shareholders' Meeting the distribution of a final dividend of €0.66/share for the fiscal year 2021, equal to the previous three interim dividends paid for this fiscal year 2021, thus setting the dividend for 2021 at €2.64/share. The Board of Directors, at its meetings on April 2022, July 2022 and October 2022 decided to distribute a first, a second and a third interim dividends for the fiscal year 2022, respectively, 5% higher than the interim dividends and the proposed final dividend for fiscal 2021, i.e. €0.69/share. In addition to this 5% increase for the interim dividends for the fiscal 2022, the Board of Directors decided to distribute an exceptional interim dividend of €1 per share in December 2022 and to maintain the share buyback program at $7 billion. The implementation of these decisions sets the return to shareholders to 37.2% of 2022 cash flow.

Shareholder return policy for 2025

In the view of the free cash flow[1] growth outlook and share buybacks executed in 2024 (5% of the share capital), the Board of Directors, at its meeting on February 4, 2025, confirmed a shareholder return policy for 2025 targeting >40% CFFO payout, which will combine an increase in interim dividends of 7.6% to €0.85/share and $2 billion of share buybacks per quarter, a level which is pursued under reasonable market conditions, in line with the following cash flow allocation priorities:

- a sustainable ordinary dividend through cycles, that was not cut during the Covid crisis, and whose increase is supported by free cash flow growth;
- disciplined investments to support of a strategy balanced between the various energies;
- maintaining a strong balance sheet;
- buybacks to share surplus cash flow generated at high prices.

1.9.1.8 Annual 2025 Sensitivities*

	Change	Estimated impact on adjusted net operating income	Estimated impact on cash flow from operations excluding working capital (CFFO)
Dollar	+/- $0.1 per €	-/+ $0.1 B	~ $0 B
Average liquids sales price**	+/- $10/b	+/- $2.3 B	+/- $2.8 B
European gas price - TTF	+/- $2/Mbtu	+/- $0.4 B	+/- $0.4 B
European Refining Margin Marker (ERM)	+/- $10/t	+/- $0.4 B	+/- $0.5 B

* Sensitivities are revised once per year upon publication of the previous year's fourth quarter results. Sensitivities are estimates based on assumptions about TotalEnergies' portfolio in 2025. Actual results could vary significantly from estimates based on the application of these sensitivities. The impact of the $-€ sensitivity on adjusted net operating income is essentially attributable to Refining & Chemicals.

** In a 70-80$/b Brent environment.

1.9.1.9 Alternative Performance Measures (Non-GAAP measures)

A. Adjustment items to net income (TotalEnergies share)

(M$)	2024	2023	2022
Net income (TotalEnergies share)	**15,758**	**21,384**	**20,526**
Special items affecting net income (TotalEnergies share)	(1,219)	(1,105)	(17,310)
Gain (loss) on asset sales	1,372	2,047	1,391
Restructuring charges	(27)	(56)	(42)
Impairments	(1,976)	(2,166)	(15,743)
Other*	(588)	(930)	(2,916)
After-tax inventory effect: FIFO vs. replacement cost	(339)	(699)	501
Effect of changes in fair value	(948)	12	1,138
Total adjustments affecting net income	(2,506)	(1,792)	(15,871)
Adjusted net income (TotalEnergies share)	18,264	23,176	36,197

* Other adjustment items for net income for the year 2024 amounted to ($588) million consisting mainly of the inframarginal rent contribution in France and deferred tax adjustments related to rate changes.

B. Reconciliation of consolidated net income to adjusted net operating income

(M$)	2024	2023	2022
Consolidated net income (a)	**16,031**	**21,510**	**21,044**
Net cost of net debt (b)	(1,360)	(1,108)	(1,278)
Special items affecting net operating income	(1,249)	(1,384)	(17,559)
Gain (loss) on asset sales	1,372	2,047	1,450
Restructuring charges	(27)	(56)	(55)
Impairments	(1,978)	(2,297)	(15,759)
Other	(616)	(1,078)	(3,195)
After-tax inventory effect: FIFO vs. replacement cost	(386)	(694)	531
Effect of changes in fair value	(948)	12	1,138
Total adjustments affecting net operating income (c)	(2,583)	(2,066)	(15,890)
Adjusted net operating income (a - b - c)	19,974	24,684	38,212

(1) Refer to the glossary for definitions and additional information on alternative performance measures (APM, Non-GAAP measures) and to point 1.9 of chapter 1 for reconciliation tables.

C. Reconciliation of adjusted EBITDA with consolidated financial statements

- Reconciliation of net income (TotalEnergies share) to adjusted EBITDA

(in M$)	2024	2023	2022
Net income (TotalEnergies share)	**15,758**	**21,384**	**20,526**
Less: adjustment items to net income (TotalEnergies share)	2,506	1,792	15,671
Adjusted net income (TotalEnergies share)	**18,264**	**23,176**	**36,197**
Adjusted items			
Add: non-controlling interests	322	274	460
Add: income taxes	11,209	12,939	20,565
Add: depreciation, depletion and impairment of tangible assets and mineral interests	11,667	12,012	12,316
Add: amortization and impairment of intangible assets	389	394	400
Add: financial interest on debt	3,016	2,820	2,386
Less: financial income and expense from cash & cash equivalents	(1,724)	(1,585)	(746)
Adjusted EBITDA	43,143	50,030	71,578

- Reconciliation of revenues from sales to adjusted EBITDA and net income (TotalEnergies share)

(in M$)	2024	2023	2022
Adjusted items			
Revenues from sales	195,610	218,945	263,206
Purchases, net of inventory variation	(126,000)	(142,247)	(171,049)
Other operating expenses	(29,485)	(29,808)	(28,745)
Exploration costs	(528)	(575)	(574)
Other income	725	504	1,349
Other expense, excluding amortization and impairment of intangible assets	(317)	(288)	(1,142)
Other financial income	1,304	1,221	812
Other financial expense	(835)	(722)	(533)
Net income (loss) from equity affiliates	2,669	3,000	8,254
Adjusted EBITDA	**43,143**	**50,030**	**71,578**
Adjusted items			
Less: depreciation, depletion and impairment of tangible assets and mineral interests	(11,667)	(12,012)	(12,316)
Less: amortization of intangible assets	(389)	(394)	(400)
Less: financial interest on debt	(3,016)	(2,820)	(2,386)
Add: financial income and expense from cash & cash equivalents	1,724	1,585	746
Less: income taxes	(11,209)	(12,939)	(20,565)
Less: non-controlling interests	(322)	(274)	(460)
Add: adjustment (TotalEnergies share)	(2,506)	(1 792)	(15,671)
Net income (TotalEnergies share)	15,758	21,384	20,526

D. Investments - Divestments (TotalEnergies share)

❋ Reconciliation of Cash flow used in investing activities to Net investments

(in millions of dollars)	2024	2023	2022
Cash flow used in investing activities (a)	**17,332**	**16,454**	**15,116**
Other transactions with non-controlling interests (b)	–	–	(50)
Organic loan repayment from equity affiliates (c)	29	(2)	1,630
Change in debt from renewable projects financing (d)*	(52)	78	(589)
Capex linked to capitalized leasing contracts (e)	471	259	177
Expenditures related to carbon credits (f)	49	48	19
Net investments (a + b + c + d + e + f = g - i + h)	**17,829**	**16,837**	**16,303**
of which acquisitions net of assets sales (g - i)	1,406	(1,289)	4,451
Acquisitions (g)	4,646	6,428	5,872
Asset sales (i)	3,240	7,717	1,421
Change in debt from renewable projects (partner share)	26	(81)	279
of which organic investments (h)	16,423	18,126	11,852
Capitalized exploration	516	1,094	669
Increase in non-current loans	2,210	1,845	954
Repayment of non-current loans, excluding organic loan repayment from equity affiliates	(1,083)	(524)	(1,082)
Change in debt from renewable projects (TotalEnergies share)	(26)	(3)	(310)

* Change in debt from renewable projects (TotalEnergies share and partner share).

Exploration & Production

(in millions of dollars)	2024	2023	2022
Cash flow used in investing activities (a)	**8,385**	**7,260**	**9,839**
Other transactions with non-controlling interests (b)	–	–	–
Organic loan repayment from equity affiliates (c)	1	–	22
Change in debt from renewable projects financing (d)*	–	–	–
Capex linked to capitalized leasing contracts (e)	418	218	147
Expenditures related to carbon credits (f)	49	48	19
Net investments (a + b + c + d + e + f = g - i + h)	**8,853**	**7,526**	**10,027**
of which net acquisitions (g - i)	(207)	(2,706)	2,520
Acquisitions (g)	534	2,320	3,134
Asset sales (i)	741	5,026	614
Change in debt from renewable projects (partner share)	–	–	–
of which organic investments (h)	**9,060**	**10,232**	**7,507**
Capitalized exploration	483	1,081	669
Increase in non-current loans	196	154	78
Repayment of non-current loans, excluding organic loan repayment from equity affiliates	(98)	(92)	(171)
Change in debt from renewable projects (TotalEnergies share)	–	–	–

* Change in debt from renewable projects (TotalEnergies share and partner share).

Integrated LNG

(in millions of dollars)	2024	2023	2022
Cash flow used in investing activities (a)	**3,487**	**3,120**	**(1,052)**
Other transactions with non-controlling interests (b)	–	–	–
Organic loan repayment from equity affiliates (c)	3	2	1,499
Change in debt from renewable projects financing (d)*	–	–	–
Capex linked to capitalized leasing contracts (e)	46	37	25
Expenditures related to carbon credits (f)	–	–	–
Net investments (a + b + c + d + e + f = g - i + h)	**3,536**	**3,159**	**472**
of which net acquisitions (g - i)	1,367	1,096	(47)
Acquisitions (g)	1,417	1,253	27
Asset sales (i)	50	157	74
Change in debt from renewable projects (partner share)	–	–	–
of which organic investments (h)	**2,169**	**2,063**	**519**
Capitalized exploration	33	13	–
Increase in non-current loans	809	570	328
Repayment of non-current loans, excluding organic loan repayment from equity affiliates	(372)	(131)	(690)
Change in debt from renewable projects (TotalEnergies share)	–	–	–

* Change in debt from renewable projects (TotalEnergies share and partner share).

Integrated Power

(in millions of dollars)	2024	2023	2022
Cash flow used in investing activities (a)	**3,897**	**4,836**	**4,100**
Other transactions with non-controlling interests (b)	–	–	–
Organic loan repayment from equity affiliates (c)	17	27	5
Change in debt from renewable projects financing (d)*	(52)	78	(589)
Capex linked to capitalized leasing contracts (e)	7	4	5
Expenditures related to carbon credits (f)	–	–	–
Net investments (a + b + c + d + e + f = g - i + h)	**3,869**	**4,945**	**3,521**
of which net acquisitions (g - i)	1,514	2,363	2,136
Acquisitions (g)	2,515	2,739	2,661
Asset sales (i)	1,001	376	525
Change in debt from renewable projects (partner share)	26	(81)	279
of which organic investments (h)	**2,355**	**2,582**	**1,385**
Capitalized exploration	–	–	–
Increase in non-current loans	979	870	397
Repayment of non-current loans, excluding organic loan repayment from equity affiliates	(439)	(177)	(83)
Change in debt from renewable projects (TotalEnergies share)	(26)	(3)	(310)

* Change in debt from renewable projects (TotalEnergies share and partner share).

Refining & Chemicals

(in millions of dollars)	2024	2023	2022
Cash flow used in investing activities (a)	**1,530**	**1,953**	**1,177**
Other transactions with non-controlling interests (b)	–	–	–
Organic loan repayment from equity affiliates (c)	8	(31)	104
Change in debt from renewable projects financing (d)*	–	–	–
Capex linked to capitalized leasing contracts (e)	–	–	–
Expenditures related to carbon credits (f)	–	–	–
Net investments (a + b + c + d + e + f = g - i + h)	**1,538**	**1,922**	**1,281**
of which net acquisitions (g - i)	(173)	(118)	(38)
Acquisitions (g)	77	32	15
Asset sales (i)	250	150	53
Change in debt from renewable projects (partner share)	–	–	–
of which organic investments (h)	**1,711**	**2,040**	**1,319**
Capitalized exploration	–	–	–
Increase in non-current loans	99	79	53
Repayment of non-current loans, excluding organic loan repayment from equity affiliates	(43)	(33)	(35)
Change in debt from renewable projects (TotalEnergies share)	–	–	–

* Change in debt from renewable projects (TotalEnergies share and partner share).

Marketing & Services

(in millions of dollars)	2024	2023	2022
Cash flow used in investing activities (a)	**(138)**	**(859)**	**964**
Other transactions with non-controlling interests (b)	–	–	(50)
Organic loan repayment from equity affiliates (c)	–	–	–
Change in debt from renewable projects financing (d)*	–	–	–
Capex linked to capitalized leasing contracts (e)	–	–	–
Expenditures related to carbon credits (f)	–	–	–
Net investments (a + b + c + d + e + f = g - i + h)	**(138)**	**(859)**	**914**
of which net acquisitions (g - i)	(1,089)	(1,924)	(121)
Acquisitions (g)	103	84	34
Asset sales (i)	1,192	2,008	155
Change in debt from renewable projects (partner share)	–	–	–
of which organic investments (h)	**951**	**1,065**	**1,035**
Capitalized exploration	–	–	–
Increase in non-current loans	103	152	83
Repayment of non-current loans, excluding organic loan repayment from equity affiliates	(109)	(82)	(87)
Change in debt from renewable projects (TotalEnergies share)	–	–	–

* Change in debt from renewable projects (TotalEnergies share and partner share).

E. Cash flow (TotalEnergies share)

Reconciliation of Cash flow from operating activities to Cash flow from operations excluding working capital (CFFO), to DACF and to Net cash flow

(in millions of dollars)	2024	2023	2022
Cash flow from operating activities (a)	**30,854**	**40,679**	**47,367**
(Increase) decrease in working capital (b)*	1,491	5,526	2,831
Inventory effect (c)	(525)	(714)	501
Capital gain from renewable project sales (d)	–	81	64
Organic loan repayments from equity affiliates (e)	29	(2)	1,630
Cash flow from operations excluding working capital (CFFO) (f = a - b - c + d + e)	**29,917**	**35,946**	**45,729**
Financial charges	(697)	(505)	(1,296)
Debt Adjusted Cash Flow (DACF)	**30,614**	**36,451**	**47,025**
Organic investments (g)	16,423	18,126	11,852
Free cash flow after organic investments (f - g)	**13,494**	**17,820**	**33,877**
Net investments (h)	17,829	16,837	16,303
Net cash flow (f - h)	**12,088**	**19,109**	**29,426**

* Changes in working capital are presented excluding the mark-to-market effect of Integrated LNG and Integrated Power segments' contracts.

Reconciliation of cash flow from operating activities to CFFO

Exploration & Production

(in millions of dollars)	2024	2023	2022
Cash flow from operating activities (a)	**17,388**	**18,531**	**27,654**
(Increase) decrease in working capital (b)	340	(595)	1,596
Inventory effect (c)	–	–	–
Capital gain from renewable project sales (d)	–	–	–
Organic loan repayments from equity affiliates (e)	1	–	22
Cash flow from operations excluding working capital (CFFO) (f = a - b - c + d + e)	**17,049**	**19,126**	**26,080**

Integrated LNG

(in millions of dollars)	2024	2023	2022
Cash flow from operating activities (a)	**5,185**	**8,442**	**9,604**
(Increase) decrease in working capital (b)*	285	1,151	1,319
Inventory effect (c)	–	–	–
Capital gain from renewable project sales (d)	–	–	–
Organic loan repayments from equity affiliates (e)	3	2	1,499
Cash flow from operations excluding working capital (CFFO) (f = a - b - c + d + e)	**4,903**	**7,293**	**9,784**

* Changes in working capital are presented excluding the mark-to-market effect of Integrated LNG and Integrated Power segments' contracts.

Integrated Power

(in millions of dollars)	2024	2023	2022
Cash flow from operating activities (a)	**2,972**	**3,573**	**66**
(Increase) decrease in working capital (b)*	434	1,529	(835)
Inventory effect (c)	–	–	–
Capital gain from renewable project sales (d)	–	81	64
Organic loan repayments from equity affiliates (e)	17	27	5
Cash flow from operations excluding working capital (CFFO) (f = a - b - c + d + e)	**2,555**	**2,152**	**970**

* Changes in working capital are presented excluding the mark-to-market effect of Integrated LNG and Integrated Power segments' contracts.

Refining & Chemicals

(in millions of dollars)	2024	2023	2022
Cash flow from operating activities (a)	**3,808**	**7,957**	**8,663**
(Increase) decrease in working capital (b)	433	2,641	823
Inventory effect (c)	(377)	(568)	240
Capital gain from renewable project sales (d)	–	–	–
Organic loan repayments from equity affiliates (e)	8	(31)	104
Cash flow from operations excluding working capital (CFFO) (f = a - b - c + d + e)	**3,760**	**5,853**	**7,704**

Marketing & Services

(in millions of dollars)	2024	2023	2022
Cash flow from operating activities (a)	**2,901**	**1,957**	**3,124**
(Increase) decrease in working capital (b)	730	(215)	498
Inventory effect (c)	(148)	(146)	261
Capital gain from renewable project sales (d)	–	–	–
Organic loan repayments from equity affiliates (e)	–	–	–
Cash flow from operations excluding working capital (CFFO) (f = a - b - c + d + e)	**2,319**	**2,318**	**2,365**

F. Gearing ratio

(in millions of dollars)	2024	2023	2022
Current borrowings*	7,929	7,869	14,065
Other current financial liabilities	664	446	488
Current financial assets*,**	(6,536)	(6,256)	(8,556)
Net financial assets classified as held for sale*	33	17	(38)
Non-current financial debt*	35,711	32,722	36,987
Non-current financial assets*	(1,027)	(1,229)	(1,303)
Cash and cash equivalents	(25,844)	(27,263)	(33,026)
Net debt (a)	**10,930**	**6,306**	**8,617**
Shareholders' equity (TotalEnergies share)	117,858	116,753	111,724
Non-controlling interests	2,397	2,700	2,846
Shareholders' equity (b)	**120,255**	**119,453**	**114,570**
Gearing = a / (a + b)	**8.3%**	**5.0%**	**7.0%**
Leases (c)	*8,272*	*8,275*	*8,096*
Gearing including leases (a+c)/(a+b+c)	*13.8%*	*10.9%*	*12.7%*

* Excludes leases receivables and leases debts.
** Including initial margins held as part of the Company's activities on organized markets.

G. Return on average capital employed

Full-year 2024

(in millions of dollars)	Exploration & Production	Integrated LNG	Integrated Power	Refining & Chemicals	Marketing & Services	Company
Adjusted net operating income	10,004	4,869	2,173	2,160	1,360	19,974
Capital employed at 12/31/2022	65,784	33,671	16,225	7,438	7,593	128,811
Capital employed at 12/31/2023	63,870	36,048	21,511	6,043	7,674	132,222
Capital employed at 12/31/2024	64,430	41,477	21,739	5,564	6,870	138,125
ROACE	**15.6%**	**12.6%**	**10.0%**	**37.2%**	**18.7%**	**14.8%**

Reconciliation of capital employed (balance sheet) and calculation of ROACE

(in millions of dollars)	Exploration & Production	Integrated LNG	Integrated Power	Refining & Chemicals	Marketing & Services	Corporate	Inter-Company	Company
Adjusted net operating income 2024 (a)	**10,004**	**4,869**	**2,173**	**2,160**	**1,360**	**(592)**	**–**	**19,974**
Balance sheet as of December 31, 2024								
Property plant and equipment intangible assets net	83,397	27,654	13,034	11,956	6,632	660	–	143,333
Investments & loans in equity affiliates	3,910	15,986	9,537	3,984	988	–	–	34,405
Other non-current assets	3,732	1,952	1,316	646	1,116	111	–	8,873
Inventories, net	*1,456*	1,475	547	12,063	3,327	–	–	18,868
Accounts receivable, net	5,845	8,412	7,466	16,362	7,167	581	(26,552)	19,281
Other current assets	6,663	10,198	4,086	2,208	2,870	2,342	(4,680)	23,687
Accounts payable	(6,632)	(8,888)	(9,222)	(32,204)	(8,642)	(805)	26,461	(39,932)
Other creditors and accrued liabilities	(10,241)	(11,060)	(3,363)	(4,992)	(5,329)	(5,747)	4,771	(35,961)
Working capital	(2,909)	137	(486)	(6,563)	(607)	(3,629)	–	(14,057)
Provisions and other non-current liabilities	(24,271)	(4,252)	(1,663)	(3,343)	(1,113)	903	–	(33,739)
Assets and liabilities classified as held for sale - Capital employed	571	–	1	–	70	–	–	642
Capital Employed (Balance sheet)	**64,430**	**41,477**	**21,739**	**6,680**	**7,086**	**(1,955)**	**–**	**139,457**
Less inventory valuation effect				(1,116)	(216)			**(1,332)**
Capital Employed at replacement cost (b)	**64,430**	**41,477**	**21,739**	**5,564**	**6,870**	**(1,955)**	**–**	**138,125**
Balance sheet as of December 31, 2023								
Property plant and equipment intangible assets net	84,876	24,936	12,526	12,287	6,696	678	–	141,999
Investments & loans in equity affiliates	2,630	13,905	9,202	4,167	553	–	–	30,457
Other non-current assets	3,451	2,720	1,027	677	1,258	141	–	9,274
Inventories, net	*1,463*	*1,784*	*689*	*11,582*	*3,798*	*1*	–	*19,317*
Accounts receivable, net	*6,849*	*10,183*	*7,601*	*20,010*	*9,024*	*683*	*(30,908)*	*23,442*
Other current assets	*6,218*	*9,782*	*6,963*	*2,383*	*3,465*	*1,817*	*(9,807)*	*20,821*
Accounts payable	*(6,904)*	*(11,732)*	*(8,114)*	*(33,864)*	*(10,693)*	*(798)*	*30,770*	*(41,335)*
Other creditors and accrued liabilities	*(9,875)*	*(11,653)*	*(6,985)*	*(6,152)*	*(5,707)*	*(6,300)*	*9,945*	*(36,727)*
Working capital	(2,249)	(1,636)	154	(6,041)	(113)	(4,597)	–	(14,482)
Provisions and other non-current liabilities	(25,152)	(3,877)	(1,790)	(3,706)	(1,267)	854	–	(34,938)
Assets and liabilities classified as held for sale - Capital employed	314	–	392	137	881	–	–	1,724
Capital Employed (Balance sheet)	**63,870**	**36,048**	**21,511**	**7,521**	**8,008**	**(2,924)**	**–**	**134,034**
Less inventory valuation effect				(1,478)	(334)			(1,812)
Capital Employed at replacement cost (c)	**63,870**	**36,048**	**21,511**	**6,043**	**7,674**	**(2,924)**	**–**	**132,222**
ROACE 2024 as a percentage (a / average (b + c))	**15.6%**	**12.6%**	**10.0%**	**37.2%**	**18.7%**			**14.8%**

(in millions of dollars)	Exploration & Production	Integrated LNG	Integrated Power	Refining & Chemicals	Marketing & Services	Corporate	Inter-Company	Company
Adjusted net operating income 2023 (a)	**10,942**	**6,200**	**1,853**	**4,654**	**1,458**	**(423)**	**–**	**24,684**
Balance sheet as of December 31, 2023								
Property plant and equipment intangible assets net	84,876	24,936	12,526	12,287	6,696	678	–	141,999
Investments & loans in equity affiliates	2,630	13,905	9,202	4,167	553	–	–	30,457
Other non-current assets	3,451	2,720	1,027	677	1,258	141	–	9,274
Inventories, net	1,463	1,784	689	11,582	3,798	1	–	19,317
Accounts receivable, net	6,849	10,183	7,601	20,010	9,024	683	(30,908)	23,442
Other current assets	6,218	9,782	6,963	2,383	3,465	1,817	(9,807)	20,821
Accounts payable	(6,904)	(11,732)	(8,114)	(33,864)	(10,693)	(798)	30,770	(41,335)
Other creditors and accrued liabilities	(9,875)	(11,653)	(6,985)	(6,152)	(5,707)	(6,300)	9,945	(36,727)
Working capital	(2,249)	(1,636)	154	(6,041)	(113)	(4,597)	–	(14,482)
Provisions and other non-current liabilities	(25,152)	(3,877)	(1,790)	(3,706)	(1,267)	854	–	(34,938)
Assets and liabilities classified as held for sale - Capital employed	314	–	392	137	881	–	–	1,724
Capital Employed (Balance sheet)	**63,870**	**36,048**	**21,511**	**7,521**	**8,008**	**(2,924)**	**–**	**134,034**
Less inventory valuation effect	–	–	–	(1,478)	(334)	–	–	(1,812)
Capital Employed at replacement cost (b)	**63,870**	**36,048**	**21,511**	**6,043**	**7,674**	**(2,924)**	**–**	**132,222**
Balance sheet as of December 31, 2022								
Property plant and equipment intangible assets net	87,833	24,189	6,696	11,525	8,120	669	–	139,032
Investments & loans in equity affiliates	2,138	12,065	8,804	4,431	451	–	–	27,889
Other non-current assets	3,069	3,342	327	570	1,050	130	–	8,488
Inventories, net	1,260	2,312	1,836	12,888	4,640	–	–	22,936
Accounts receivable, net	7,312	11,110	12,515	19,297	8,482	1,407	(35,745)	24,378
Other current assets	6,347	21,344	12,914	2,410	3,787	2,455	(13,187)	36,070
Accounts payable	(6,298)	(11,846)	(14,881)	(30,673)	(12,082)	(1,313)	35,747	(41,346)
Other creditors and accrued liabilities	(11,452)	(24,796)	(10,940)	(7,215)	(5,115)	(5,942)	13,185	(52,275)
Working capital	(2,831)	(1,876)	1,444	(3,293)	(288)	(3,393)	–	(10,237)
Provisions and other non-current liabilities	(24,633)	(4,049)	(1,201)	(3,760)	(1,303)	694	–	(34,252)
Assets and liabilities classified as held for sale - Capital employed	208	–	155	–	–	–	–	363
Capital Employed (Balance sheet)	**65,784**	**33,671**	**16,225**	**9,473**	**8,030**	**(1,900)**	**–**	**131,283**
Less inventory valuation effect				(2,035)	(437)			**(2,472)**
Capital Employed at replacement cost (c)	**65,784**	**33,671**	**16,225**	**7,438**	**7,593**	**(1,900)**	**–**	**128,811**
ROACE 2023 as a percentage (a / average (b + c))	**16.9%**	**17.8%**	**9.8%**	**69.0%**	**19.1%**			**18.9%**

H. Payout

(in millions of dollars)	2024	2023	2022	2021
Dividend paid (parent company shareholders) (a)	7,717	7,517	9,986	8,228
Repayment of treasury shares	7,995	9,167	7,711	1,823
of which buy-backs in view of their cancelation (b)	*7,329*	*9,000*	*7,019*	*1,500*
Cash flow from operations excluding working capital (CFFO) (c)	29,917	35,946	45,729	29,140
Payout ratio = (a+b) / c	**50.3%**	**46.0%**	**37.2%**	**33.4%**

1.9.2 Liquidity and capital resources

LONG-TERM AND SHORT-TERM CAPITAL

Long-term capital as of December 31, *(in M$)*	2024	2023	2022
Shareholders' equity	120,255	119,453	114,570
Non-current financial debt	43,533	40,478	45,264
Non-current financial assets	(2,305)	(2,395)	(2,731)
Total net non-current capital	161,483	157,536	157,103

Short-term capital as of December 31 *(in M$)*	2024	2023	2022
Current financial debt	10,024	9,590	15,502
Net current financial assets	(6,914)	(6,585)	(8,258)
Net current financial debt	**3,110**	**3,005**	**7,244**
Cash and cash equivalents	(25,844)	(27,263)	(33,026)

CASH FLOW

(in M$)	2024	2023	2022
Cash flow from operating activities	30,854	40,679	47,367
Gross investments	(21,750)	(24,860)	(19,802)
Total divestments	4,418	8,406	4,686
Other operations with non-controlling interests	(273)	(126)	(49)
Net cash flow after working capital requirement changes	**13,249**	**24,099**	**32,202**
Dividends paid[a]	(8,039)	(7,828)	(10,522)
Share buybacks	(7,995)	(9,167)	(7,711)
Gearing ratio on December 31[b]	8.3%	5.0%	7.0%

(a) Including dividends paid to non-controlling interests.
(b) Refer to the glossary for definitions and additional information on alternative performance measures (APM, Non-GAAP measures) and to point 1.9 for reconciliation table.

The Company's net cash flow after working capital requirement changes was $13,249 million in 2024, compared to $24,099 million in 2023. This change was mainly due to a $6.1 billion decrease in operating cash flow before working capital changes (CFFO). The Company's gearing ratio excluding lease agreements amounted to 8.3% as of December 31, 2024.

BORROWING REQUIREMENTS AND FUNDING STRUCTURE

The Company's policy consists in incurring long-term debt at a floating or fixed rate, depending on its general corporate needs and the interest rate environment at the time of issue, mainly in dollars or euros. Long-term interest rate and currency swaps may be entered into for the purpose of hedging bonds at the time of issuance, synthetically resulting in the incurrence of variable or fixed rate debt. In order to partially alter the interest rate exposure of its long-term indebtedness, the Company may also enter into long-term interest rate swaps on an ad-hoc basis.

Long-term financial indebtedness is generally raised by central corporate treasury entities either directly in dollars or euros, or in other currencies exchanged for dollars or euros through currency swaps at issuance, in accordance with the Company's general corporate needs.

As of December 31, 2024, the Company's long-term financial debt, after taking into account the effect of currency and interest rate swaps, was 92% in US dollars and 25% at floating rates; as of December 31, 2023, these ratios were 92% and 20%, respectively.

In addition to its ongoing bond issuance activity, TotalEnergies SE regularly issues perpetual subordinated notes in one or several tranches and also regularly launches tender offers on some of its perpetual subordinated notes as part of their early refinancing. In April 2024, TotalEnergies SE reimbursed €1.5 billion of perpetual subordinated notes which were reaching their repayment date, without refinancing them. In November 2024, TotalEnergies SE issued €2.5 billion of perpetual subordinated notes in two tranches. Furthermore, in November, TotalEnergies SE also conducted a partial buyback of €1,418 million of the initial nominal amount of €2,500 million of perpetual subordinated notes with a coupon of 2.625% issued in February 2015, with the first call date being February 26, 2025. Thus, the outstanding amount of perpetual subordinated notes issued by TotalEnergies SE as of December 31, 2024, stood at €10.83 billion (amount of €11.25 billion as of December 31, 2023). The details of the portfolio of perpetual subordinated notes issued by TotalEnergies SE is disclosed in Note 9 of chapter 8, in the paragraph "Issuances of Perpetual subordinated notes".

In accordance with IAS 32 provisions "*Financial instruments – Presentation*" and given their characteristics (notably the absence of mandatory repayment and no obligation to pay a coupon except under certain circumstances specified into the documentation of the notes) the perpetual subordinated notes issued by TotalEnergies SE were accounted for as equity.

TotalEnergies has established standards for market transactions under which any banking counterparty must be approved in advance, based on an assessment of the counterparty's financial solidity (multi-criteria analysis including notably a review of its Credit Default Swap (CDS) level, credit ratings, which must be of high standing, and general financial situation).

An overall credit limit is set for each authorized financial counterparty and is allocated amongst the affiliates and the TotalEnergies central treasury entities, according to the financial needs.

To reduce the market valuation risk on its commitments, in particular relating to derivative financial instruments, the Treasury Department has entered into margin call agreements with its counterparties, in compliance with applicable regulations. Moreover, since December 21, 2018 and pursuant to Regulation (EU) No. 648/2012 on OTC derivatives, central counterparties and trade repositories (EMIR), any new interest rate hedging swap (excluding cross currency swaps) entered into by a TotalEnergies entity is now subject to central clearing.

Finally, since September 1, 2021, TotalEnergies has been applying Delegated Regulation (EU) N° 2016/2251 (supplementing Regulation (EU) N° 648/2012), regarding initial margin calls on certain OTC derivatives not cleared by a central counterparty.

CONDITIONS OF USE OF EXTERNAL FINANCINGS

As of December 31, 2024, the aggregate amount of the main committed credit facilities granted by international banks to TotalEnergies SE or some of its subsidiaries was $10,919 million (compared to $11,988 million as of December 31, 2023), of which $10,779 million was unutilized (compared to $11,605 million unutilized as of December 31, 2023).

TotalEnergies SE has committed credit facilities granted by international banks enabling it to benefit from significant liquidity reserves. As of December 31, 2024, these credit facilities amounted to $10,353 million (compared to $10,559 million as of December 31, 2023), of which $10,353 million was unutilized (compared to $10,559 million unutilized as of December 31, 2023).

The agreements underpinning credit facilities granted to TotalEnergies SE do not contain conditions related to the Corporation's financial ratios, to its credit ratings from specialized agencies, or to the occurrence of events that could have a material adverse effect on its financial position.

Credit facilities granted to the companies of the Company other than TotalEnergies SE are not intended to fund the Company's general corporate purposes; they are intended to fund either general corporate purposes of the borrowing affiliate, or a specific project.

ANTICIPATED SOURCES OF FINANCING

Investments, working capital, dividend payments and buybacks of its own shares by the Corporation are financed by cash flow from operating activities, asset disposals and, if necessary, by net borrowings.

For the coming years and based on the current financing conditions available in the financial markets, the Corporation intends to maintain this policy.

1.9.3 Trends and outlook

OUTLOOK

At the beginning of 2025, Brent prices remain volatile between $70 and $80/b, supported by the willingness of OPEC+ countries to balance oil markets that are facing strong supply growth from non-OPEC countries (US, Guyana, Brazil). According to the IEA, global oil demand is anticipated to grow by 1.1 Mb/d in 2025, up from a 0.8 Mb/d increase in 2024.

European gas prices increased at the end of 2024 and forward markets currently expect prices to be above $13/Mbtu in the first quarter of 2025, supported by high winter consumption and rapid inventory declines in Europe in the context of the interruption of Russian imports via Ukraine. Gas markets should remain in tension in 2025 due to very limited expected capacity additions related to delays of some projects. TotalEnergies expects more than 40 Mt of LNG sales in 2025. Given the evolution of oil and gas prices in the recent months and the lag effect on price formulas, TotalEnergies anticipates its average LNG selling price will be above $10/Mbtu in the first quarter 2025.

In 2025, TotalEnergies anticipates its hydrocarbon production will grow more than 3%, benefiting from the ramp-up of 2024 start-ups and production start-ups, notably Ballymore in the Gulf of Mexico and Mero-4 in Brazil.

First quarter 2025 hydrocarbon production is expected to be between 2.5 and 2.55 Mboe/d thanks to the ramp-up of 2024 start-ups and the closing of the acquisitions of SapuraOMV in Malaysia and of interests in the Eagle Ford shale gas play in Texas that occurred during the fourth quarter 2024.

The Integrated Power segment is expected to expand in 2025 supported by electricity production growth greater than 20% to reach an annual net electricity generation of more than 50 TWh. Cash flow before working capital (CFFO) is expected to be between $2.5 and $3 billion in 2025.

By combining hydrocarbon and electricity production growth, the Company expects to increase energy production by 5% in 2025. Integrated Power production will represent 10% of hydrocarbon production.

For 2025, TotalEnergies expects net investments of $17 to $17.5 billion, of which $4.5 billion is dedicated to low carbon energies, mostly Integrated Power. Organic investments should amount to approximately $17 billion, focused on core growth projects to achieve 2030 production targets, down from the $18 billion guidance presented during the *Strategy & Outlook* in October 2024.

RISKS AND UNCERTAINTIES

Due to the nature of its business, the Company's activities remain subject to the market risks (sensitivity to the environmental parameters of the oil and financial markets), industrial and environmental risks related to its operations, and to political or geopolitical risks stemming from the global presence of most of its activities.

Detailed information is given in the Risk Factors section (point 3.1 of chapter 3) of this Universal Registration Document. For more information on internal control and risk management procedures, also refer to point 3.3 of chapter 3.

RUSSIA: SITUATION OF THE COMPANY AT MARCH 28, 2025

The Company presents in the section below an update on the situation since the invasion of Ukraine by Russia on February 24, 2022 and its impact on its activities carried out by TotalEnergies in connection with Russia.

Principal activities of TotalEnergies in connection with Russia and principles of conduct

On **March 1, 2022**, TotalEnergies announced that it condemns Russia's military aggression against Ukraine, supports the scope and strength of the sanctions put in place by Europe that will be implemented by the Company regardless of the consequences on its asset management, and that it will no longer provide capital for new projects in Russia.

On **March 22, 2022**, considering the worsening conflict, TotalEnergies reaffirmed its firmest condemnation of Russia's military aggression against Ukraine, which has tragic consequences for the Ukrainian population and threatens peace in Europe. To act responsibly, as a European company and in accordance with its values, **the Company defined clear principles of conduct for managing its Russian related business:**

- Ensure strict compliance with current and future European sanctions, no matter what the consequences on the management of its assets in Russia, and gradually suspend its activities in Russia, while assuring its workforce's safety,
- Provide no further capital of TotalEnergies SE for the development of projects in Russia,
- Do not reverse the purpose of sanctions against Russia: do not unwarrantedly transfer value to Russian interests by withdrawing from assets,
- Help ensure the security of the European continent's energy supply within the framework defined by European authorities, and
- No longer enter into or renew contracts to purchase Russian oil and petroleum products, in order to halt all its purchases of Russian oil and petroleum products as soon as possible and by the end of 2022 at the latest. TotalEnergies announced that since February 25, 2022, it would not trade Russian oil or oil products on the spot markets, including spot trading of Russian natural gas or LNG.

TotalEnergies restated that it did not operate any oil or gas field, or Liquefied Natural Gas (LNG) plant, in Russia and that was a minority shareholder, at that time, in a number of non-state-owned Russian companies: Novatek (19.4%)[1], Yamal LNG (20%)[2], Arctic LNG 2 (10%)[3], TernefteGaz (49%)[4] and partner with 20% in the Kharyaga joint-venture operated by Zarubezhneft[5], without any activity or operational responsibility on those sites.

On the same day, concerning the Arctic LNG 2 project in particular, given the uncertainty created by technological and financial sanctions on the ability to carry out the Arctic LNG 2 project currently under construction and their probable tightening with the worsening conflict, TotalEnergies SE decided no longer to record proven reserves for Arctic LNG 2 in its accounts.

On **April 27, 2022**, considering the new sanctions adopted by the European authorities on April 8, 2022, notably prohibiting export from European Union countries of goods and technology for use in the liquefaction of natural gas benefitting a Russian company, it appeared that these new prohibitions constituted additional risks on the execution of the Arctic LNG 2 project. As a result, TotalEnergies decided to record in its accounts, as of March 31, 2022, an impairment of 4.1 B$, concerning notably Arctic LNG 2.

On **July 28, 2022**, in the context of its second quarter and first half 2022 results, TotalEnergies announced that had recorded in its accounts a new $3.5 billion impairment charge related mainly to the potential impact of international sanctions on the value of its Novatek stake.

On **August 26, 2022**, TotalEnergies restated that in the context of the implementation of its principles of conduct, it would continue its duty to contribute toward securing Europe's gas supply from the Yamal LNG plant within the framework of long-term contracts that it must honor as long as Europe's governments do not impose sanctions on Russian gas.

TotalEnergies had also announced the gradual suspension of its activities in Russia that do not contribute to the security of energy supply of Europe. This included assets producing oil (Kharyaga field) and gas for the local Russian market (Termokarstovoye field) as well as other local businesses (lubricants, batteries) which were mothballed in the first half of 2022.

In accordance with these principles, TotalEnergies had announced on July 6, 2022 the sale of its remaining 20% interest in the Kharyaga oil project to Zarubezhneft. This sale was finalized on August 3, 2022. The Company also announced that it had agreed on July 18, 2022, to sell to Novatek TotalEnergies' 49% interest in Terneftegaz, which operates the Termokarstovoye gas and condensates field in Russia, on economic terms enabling TotalEnergies to recover the outstanding amounts invested in the field. This sale was finalized on September 15, 2022.

On **October 27, 2022**, in the context of its third quarter 2022 results, TotalEnergies announced that had recorded in its accounts a new $3.1 billion impairment charge related mainly to the potential impact of international sanctions on the value of its Novatek stake.

On **December 9, 2022,** TotalEnergies reiterated that it holds a 19.4% stake in Novatek, that it cannot sell given the shareholders' agreements in effect, as it is forbidden for TotalEnergies to sell any asset to one of Novatek's main shareholders who is under sanctions.

The Company highlighted that in view of the European sanctions in force since the beginning of the war, the two directors representing TotalEnergies on the board of directors of Novatek have to abstain from voting in meetings of the board of directors of this company, in particular on financial matters and that they are therefore no longer in a position to fully carry out their duties on the board, which might become an issue for the governance of this company.

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(1) Novatek is a Russian company listed on the Moscow stock exchange in which TotalEnergies held an interest of 19.4% as of December 31, 2024.
(2) Yamal LNG is a Russian company jointly owned by Novatek, TotalEnergies EP Yamal (20.02%), YAYM Limited, and China National Oil and Gas Exploration Development Company (CNODC), a subsidiary of CNPC, as of December 31, 2024.
(3) Arctic LNG 2 is a Russian company jointly owned by Novatek, TotalEnergies EP Salmanov (10%), CNODC Dawn Light Limited, CEPR Limited and Japan Arctic LNG, as of December 31, 2024.
(4) Terneftegas is a company jointly owned by Novatek, and TotalEnergies EP Termokarstovoye SAS (49%) before the sale of its interest finalized on September 15, 2022.
(5) Kharyaga is a non-incorporated joint-venture with Zarubezhneft (operator, 40%), Equinor (30%) and Nenets Oil Company (10%). TotalEnergies finalized on August 3, 2022 the sale of its 20% interest in Kharyaga à Zarubezhneft.

Under these circumstances, the Board of Directors of TotalEnergies decided to withdraw the representatives of the Company from the board of Novatek with immediate effect. As a result, as the criteria for significant influence within the meaning of the accounting regulations that apply to the Company are not met, TotalEnergies will no longer equity account for its 19.4% stake in Novatek in the Company's accounts. In addition, TotalEnergies will no longer book reserves for its interest in Novatek.

On **February 8, 2023**, TotalEnergies announced that it had recorded in its accounts for the fourth quarter results a new $4.1 billion impairment charge related to the deconsolidation of Novatek.

Russian assets were fully impaired in 2022, with the exception of the shares held in the Yamal LNG company. In total, the impact of impairments and provisions recorded in 2022 due to the Russo-Ukrainian conflict amounted to $(14,756) million in TotalEnergies' net result.

On **November 2, 2023**, the Arctic LNG 2 company was placed under sanctions by the US authorities. TotalEnergies initiated the contractual suspension procedure provided for in the Arctic LNG 2 shareholders' agreement and that of force majeure for the LNG purchase contract from Arctic LNG 2. These procedures, upon their notification, resulted in the suspension of TotalEnergies' rights and obligations under these agreements, thus implying in particular the suspension of the participation of TotalEnergies' representatives in the governance bodies of Arctic LNG 2. As a result, the 10% interest held by TotalEnergies in Arctic LNG 2 is no longer accounted for using the equity method in the Company's accounts since December 31, 2023 but is recorded under "other investments". As mentioned above, as the shares in Arctic LNG 2 were fully impaired in 2022, this deconsolidation had no impact in the 2023 consolidated financial statements.

The Company has also ensured the absence of depreciation to be accounted for on Yamal LNG, by testing the value of its equity accounted investment which amounts to $5,200 million as of December 31, 2024.

With regard to the participation in Novatek, in the absence of any new event, the assessments and judgments taken into account on December 31, 2022 and on December 31, 2023 in the accounting and valuation method remain unchanged at December 31, 2024. As the criteria for significant influence are no longer met within the meaning of IAS 28 "Investments in associates and joint-ventures", TotalEnergies' 19.4% interest in Novatek has no longer been accounted for using the equity method in the Company's financial statements since the end of the 4th quarter of 2022.

Depending on the developments of the Russian-Ukrainian conflict and the measures that the European and American authorities may take, the activities of TotalEnergies in Russia, in particular those relating to the Yamal LNG asset, could be affected in the future.

The table below presents TotalEnergies' producing assets and entities in Russia as of December 31, 2024, the interest held in the asset or entities (TotalEnergies share in %).

Producing assets as of December 31, 2024 in Russia

Exploration & Production segment		Integrated LNG segment	
Non-operated:	None TotalEnergies no longer equity account for its 19.4% stake in Novatek as of December, 31, 2022.	**Non-operated:**	Yamal LNG (20.02%)

The tables below present the average daily production of liquids and natural gas of TotalEnergies, in Russia, as well as the Upstream Capital Employed per project in Russia as of December 31, 2024.

TotalEnergies' average daily liquids and natural gas production in Russia in 2024	Liquids kb/d[(a)]	Natural gas Mcf/d[(b)]	Total kboe/d
Russia	**6**	**622**	**120**
including production share of equity affiliates	6	622	120
— Yamal LNG	6	622	120

(a) Liquids include crude oil, bitumen, condensates, and natural gas liquids (NGL).
(b) Including fuel gas.

Upstream Capital Employed in Russia *(M$)*	December 31, 2024	December 31, 2023
Novatek	0	0
Yamal LNG	5,200	4,560
Arctic LNG 2	0	0
Provisions	(1,844)	(1,822)
Total Upstream Capital Employed	**3,356**	**2,738**

Activities in Russia in 2024

In the Integrated LNG segment, LNG production in Russia was from the Yamal LNG project. This development project of the onshore South Tambey field (gas and condensates) located on the Yamal peninsula was launched in 2013 by the company Yamal LNG. TotalEnergies holds a direct 20.02% interest in the project through its subsidiary TotalEnergies EP Yamal. The project includes a four-train gas liquefaction plant with a nominal capacity of 17.4 Mt/y of LNG.

In addition, TotalEnergies hold a 10% direct interest in the Arctic LNG 2 project (19.8 Mt/y, under construction) since 2019 through its subsidiary TotalEnergies EP Salmanov.

Since July 2021, TotalEnergies has also held a direct interest of 10% via TotalEnergies EP Transshipment in Arctic Transshipment[1], which was established to serve Arctic LNG 2 in order to enable the transfer of LNG cargoes from Arctic LNG carriers (icebreakers) to conventional LNG carriers at transshipment terminals in Murmansk and Kamchatka.

Given the uncertainties that technological and financial sanctions pose on the ability to complete the Arctic LNG 2 project, TotalEnergies has ceased to recognize as proved reserves the resources associated with the Arctic LNG 2 project since December 31, 2021, and has provisioned in its accounts the value of its investments as of March 31, 2022. TotalEnergies no longer recorded reserves from its interest in Novatek.

The American Office of Foreign Assets Control (OFAC) designated, on September 14, 2023 and November 2, 2023, respectively, Arctic Transshipment and Arctic LNG 2 as Specially Designated Nationals with immediate effect subject to temporary exceptions under licenses issued by the OFAC. As a consequence of these designations, US persons are prohibited to deal with those two entities. All non-US persons are exposed to the risk of US secondary sanctions if they provide material support to these entities. Since April 18, 2023, TotalEnergies EP Transshipment has not participated in any governance body and has not paid any cash calls to Arctic Transshipment. The Company is party to an LNG purchase contract with Arctic LNG 2, for which the Company had indicated that it could not terminate it early without exposing itself financially to significant consequences in the absence of economic sanctions, and that it would exercise the force majeure clauses provided for in the contract to interrupt it if sanctions were imposed. On November 2, 2023, Arctic LNG 2 was placed under sanctions by the US authorities. As a result, in accordance with what it announced, on November 7, 2023, TotalEnergies initiated the contractual suspension procedure provided for in the Arctic LNG 2 shareholders' agreement and the force majeure procedure for the LNG purchase contract with Arctic LNG 2. Upon notification of these procedures, TotalEnergies' rights and obligations under these contracts were suspended (refer to point 3.2. of Chapter 3).

In the Marketing & Services segment, TotalEnergies stopped producing lubricants in Russia at the end of May 2022, in accordance with its principles of conduct published on March 22, 2022 and announced the sale of these activities in March 2023 to a company created by the Russian management team of the subsidiary TotalEnergies Marketing Russia.

ADANI: SITUATION OF THE COMPANY AT MARCH 28, 2025

The Company presents in the section below an update on the situation following the public announcements made by the US authorities of the indictment of certain individual Adani group executives in relation to an alleged corruption scheme linked to the business of Adani Green Energy Limited (AGEL).

TotalEnergies' main activities in relation with the Adani Group and principle of actions

TotalEnergies' investments in and with AGEL

In January 2021 TotalEnergies acquired a minority interest in the listed company Adani Green Energy Limited of which it owns 19,75% as of December 31, 2024. As part of its strategy to enhance its development in renewables in India through direct access to a portfolio of assets, TotalEnergies has also acquired a 50% stake in three joint-ventures operating renewable assets (AGE23L in 2020, ARE9L in 2023, ARE64L[2] in 2024).

In November 2024, TotalEnergies learnt through public announcements made by the US authorities of the indictment of certain individual Adani group executives in relation to an alleged corruption scheme linked to the business of AGEL. This indictment does not target AGEL itself, nor any AGEL related companies.

In accordance with its Code of Conduct, TotalEnergies rejects corruption in any form.

TotalEnergies, which is not targeted nor involved in the facts described by such indictment, will take all relevant actions to protect its interests as minority shareholder of AGEL and as a joint-venture partner in project companies with AGEL.

Until such time when the accusations against the Adani group individuals and their consequences have been clarified, TotalEnergies will not make any new financial contribution as part of its investments in the Adani group of companies.

TotalEnergies recalls that its investments in Adani's entities were undertaken in full compliance with applicable laws, and with TotalEnergies' own internal governance processes pursuant to due diligence and representations made by the sellers. In particular, TotalEnergies was not made aware of the existence of an investigation into the alleged corruption scheme.

Exposure resulting from these stakes is limited, as it represents 2.7% ($3.8 billion at December 31, 2024) of the Company's capital employed and only $122 million of net operating income in 2024. These investments being accounted for under the equity method, TotalEnergies has not performed any re-evaluation in its accounts of its stakes in the listed entities ATGL and AGEL in relation to the variation in their stock values.

(1) Arctic Transshipment is a Russian company jointly owned by Novatek (90%) and TotalEnergies EP Transshipment (10%) at December 31, 2024.
(2) Adani Green Energy Twenty-Three Limited, Adani Renewable Energy Nine Limited and Adani Renewable Energy Sixty-Four Limited.

The following table lists TotalEnergies' current stakes in ventures with Adani:

Entity	TotalEnergies' share
Adani Green Energy Limited (AGEL)	19.75%
Adani Green Twenty Three Limited	50%
Adani Renewable Energy Nine Limited	50%
Adani Renewable Energy Sixty Four Limited	50%
Adani Total Private Limited (ATPL)	50%
Adani Total Gas Limited (ATGL)[1]	37.4%
Adani Total LNG Singapore Pte Ltd (ATLS)	50%

At the end of 2024 in India, the total gross power production installed capacity is 7.3 GW (28% of the Company's total), the capacity in construction is 3.2 GW (36% of the Company's total) and the company under development is 2.5 GW (4% of the Company's total).

1.9.4 Significant changes

Significant changes in the Company's financial and commercial situation since December 31, 2024, the closing date of the last financial year for which audited financial statements have been published by the Corporation, are those mentioned above in point 1.9.3, in the Business overview (chapter 2), and in the description of legal and arbitration procedures (point 3.5 of chapter 3).

(1) To be noted that ATGL owns 100% of Adani TotalEnergies E-Mobility Ltd (ATEEL), which has been active in the electric vehicle charging infrastructure market since March 2022 and of Adani TotalEnergies Biomass Limited (ATBL) dedicated to the development of biogas activities in India.

2

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2.1 Upstream oil and gas activities

TotalEnergies' Upstream oil and gas activities encompass the oil and gas exploration and production activities of the Exploration & Production (E&P) and Integrated LNG segments. They are conducted in about 50 countries.

Main indicators

2.43 Mboe/d
of hydrocarbons produced in 2024

$4.9/boe
Production costs (ASC932) in 2024(1)

17 kg/boe
Intensity of GHG emissions of Upstream oil & gas activities(2) in 2024

11.1 Gboe
of proved reserves of hydrocarbons as of December 31, 2024(3)

12.4 years of proved reserve life index

Main objectives

~+3% per year between 2024-2030
Production growth
>+3% in 2025

< $5/boe
Production costs (ASC932)(4)

-80%
methane emissions from operated facilities in 2030 compared to 2020
-60% in 2025

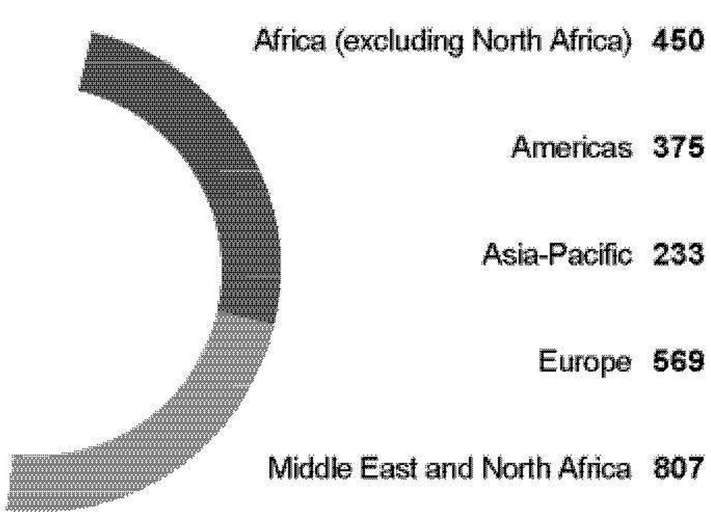
Production(5)

Hydrocarbon production	2024	2023	2022
Combined production *(kboe/d)*	2,434	2,483	2,765
Oil (including bitumen) *(kb/d)*	1,314	1,388	1,307
Gas (including condensates and associated NGL) *(kboe/d)*	1,120	1,095	1,458

Hydrocarbon production	2024	2023	2022
Combined production *(kboe/d)*	2,434	2,483	2,765
Liquids *(kb/d)*	1,468	1,550	1,519
Gas *(Mcf/d)*	5,211	5,028	6,759

Hydrocarbon production excluding Novatek	2024	2023	2022
Combined production *(kboe/d)*	2,434	2,483	2,437

Hydrocarbon production by geographical zone in 2024 *(kboe/d)*



Hydrocarbon production was 2,434 thousand barrels of oil equivalent per day in 2024, up 2% year-on-year (excluding the Canada disposal representing 3.5%) and was comprised of:

- +3% due to start-ups and ramp-ups, including Mero-2 and Mero-3 in Brazil, Absheron in Azerbaijan, Block 10 in Oman, Tommeliten Alpha in Norway, Akpo West in Nigeria, Fenix in Argentina and Anchor in the United States;
- +1% due to higher availability of production facilities;
- +1% portfolio effect related to entry into the producing fields of SARB Umm Lulu in the United Arab Emirates and Ratawi in Iraq and the acquisition of interests in Eagle Ford shale gas plays in Texas;
- -3% due to the natural field declines.

(1) Production costs for the consolidated subsidiaries, calculated in accordance with ASC 932 standards, excluding special items (refer to point 9.1.5 of chapter 9).
(2) Excluding LNG assets. The GHG emissions intensity of Upstream oil & gas activities is reported on the assets perimeter operated by the Company.
(3) Based on a Brent price of $81.17/b (reference price in 2024) in accordance with the rules established by the Securities and Exchange Commission (refer to point 2.1.1).
(4) Production costs for the consolidated subsidiaries, calculated in accordance with ASC 932 standards, excluding special items (refer to point 9.1.5 of chapter 9).
(5) TotalEnergies production = E&P production + production of Integrated LNG.

Technical costs[a]

	2024	2023	2022
Production costs *($/boe)*	4.9	5.5	5.5
Exploration costs *($/boe)*	0.7	0.7	0.7
DD&A *($/boe)*	10.4	10.2	11.1
Technical costs *($/boe)*	16.0	16.4	17.3

(a) Technical costs for the consolidated subsidiaries, calculated in accordance with ASC 932[1] standards, excluding special items (refer to point 9.1.5 of chapter 9).

Production costs of the consolidated subsidiaries, calculated in accordance with ASC 932[1], amounted to $4.9/boe in 2024 compared to $5.5/boe in 2023 and in 2022.

Liquids and gas sale price

Price realizations[a]	2024	2023	2022
Average liquids sales price *($/b)*	77.1	76.2	91.3
Average gas sales price *($/Mbtu)*	5.54	6.64	13.15

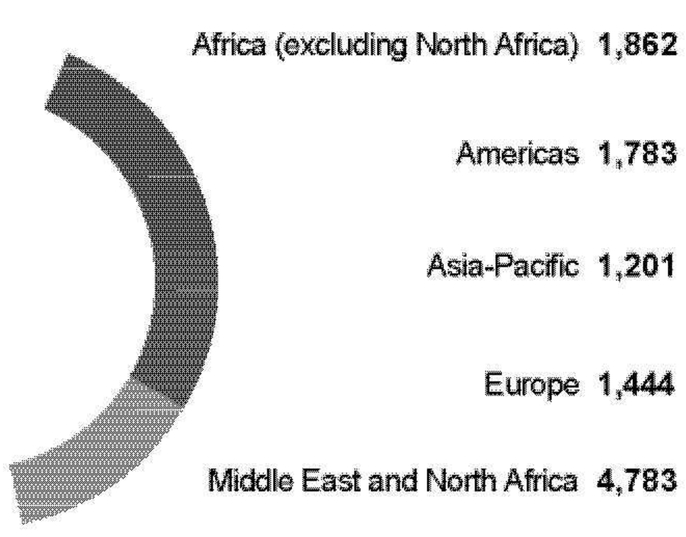
(a) Consolidated subsidiaries.

Proved reserves

As of December 31	2024	2023	2022
Hydrocarbon reserves *(Mboe)*	11,073	10,564	10,190
Oil (including bitumen) *(Mb)*	5,227	4,731	5,183
Gas (including Condensates and associated NGL) *(Mboe)*	5,846	5,833	5,007

As of December 31	2024	2023	2022
Hydrocarbon reserves *(Mboe)*	11,073	10,564	10,190
Liquids *(Mb)*	5,980	5,487	5,716
Gas *(Bcf)*	27,626	27,517	24,093

Hydrocarbon proved reserves by geographical zone *(in Mboe)*



Proved reserves of hydrocarbons established under the SEC rules (Brent at $81.17/b in 2024) were 11,073 Mboe as of December 31, 2024. The proved reserve replacement rate[2], based on SEC rules (Brent at $81.17/b in 2024), was +157% in 2024 and +65% over three years. Excluding Novatek, the 3-years proved reserves replacement rates was +128%.

2.1.1 Oil and gas reserves

The definitions used for proved, proved developed and proved undeveloped crude oil and natural gas reserves are in accordance with the United States Securities & Exchange Commission (SEC) Rule 4-10 of Regulation S-X as amended by the SEC Modernization of Oil and Gas Reporting release issued on December 31, 2008. Proved reserves are estimated using geological and engineering data to determine with reasonable certainty whether the crude oil or natural gas in known reservoirs is economically producible under existing regulatory, economic and operating conditions.

TotalEnergies' oil and natural gas reserves are consolidated annually, taking into account among other factors, levels of production, field reassessments, additional reserves from discoveries and extensions, disposals and acquisitions of reserves and other economic factors.

Unless otherwise indicated, any reference to TotalEnergies' proved reserves, proved developed reserves, proved undeveloped reserves and production reflects the TotalEnergies' entire share of such reserves or such production. TotalEnergies' worldwide proved reserves include the proved reserves of its consolidated entities as well as its proportionate share of the proved reserves of equity affiliates. The reserves estimation process involves making subjective judgments. Consequently, estimates of reserves are not exact measurements and are subject to revision under well-established control procedures.

(1) FASB Accounting Standards Codification 932, Extractive industries – Oil and Gas.
(2) Variation of reserves, excluding production: (revisions + discoveries & extensions + acquisitions - disposals)/production for the period.

The reserves booking process requires, among other actions:

- that an internal peer review of technical evaluations is carried out to ensure that the SEC definitions and guidance are followed; and
- that prior to booking proved reserves, management makes the necessary funding commitments required for their development.

For further information concerning the reserves and their evaluation process, refer to points 9.1 and 9.2 of chapter 9.

PROVED RESERVES FOR 2024, 2023 AND 2022

In accordance with the amended Rule 4-10 of SEC Regulation S-X, proved reserves as of December 31 are calculated using a 12-month average price determined as the unweighted arithmetic average of the first-day-of-the-month price for each month of the relevant year, unless prices are defined by contractual arrangements, excluding escalations based upon future conditions. The average reference prices for Brent crude for 2024, 2023 and 2022 were, respectively, $81.17/b, $83.27/b and $101.24/b.

As of December 31, 2024, TotalEnergies' combined proved reserves of oil and gas were 11,073 Mboe (of which 6,965 Mboe were proved developed reserves) compared to 10,564 Mboe (of which 6,835 Mboe were proved developed reserves) as of December 31, 2023. As of December 31, 2024, the reserves were located in Africa (mainly in Angola, Mozambique, Nigeria and Uganda), the Americas (mainly in Argentina, Brazil and the United States), Asia-Pacific (mainly in Australia and Kazakhstan), Europe (mainly in Denmark, Norway, and the United Kingdom) and the Middle East and North Africa (mainly in Libya, Qatar, the United Arab Emirates and Yemen).

Natural gas and related products (condensates and natural gas liquids) represent approximately 53% of these reserves, and crude oil 47%.

Discoveries of new fields and extensions of existing fields added, excluding Novatek, 787 Mboe to TotalEnergies' proved reserves during the three years 2022, 2023 and 2024 (before deducting production and sales of reserves and without adding any reserves acquired during this period). The revisions over the same period, excluding Novatek, are +1,900 Mboe, mainly due to fields performance and to the net impact of the changes in hydrocarbon prices in 2022 (increase), in 2023 (decrease) and in 2024 (decrease).

RESERVE SENSITIVITY TO OIL AND GAS PRICES

Changes in the price used as a reference for the proved reserves estimation result in non-proportionate inverse changes in proved reserves associated with production sharing and risked service contracts (which together represent approximately 29% of TotalEnergies' reserves as of December 31, 2024). Under such contracts, TotalEnergies is entitled to a portion of the production, the sale of which is meant to cover expenses incurred by TotalEnergies. The greater the oil prices decrease, the greater the number of barrels necessary to cover the same amount of expenses. In addition, the number of barrels economically producible under these contracts may vary according to criteria such as cumulative production, the rate of return on investment or the income-cumulative expenses ratio. This increase in reserves is partly offset by a reduction of the duration over which fields are economically producible. However, the effect of a reduction in the duration of production is usually inferior to the impact of the drop in prices in production sharing contracts or risked service contracts and consequently lower prices usually lead to an increase in TotalEnergies' reserves, and vice versa.

Finally, for any type of contract, a significant decrease in the reference price of petroleum products that negatively impacts projects' profitability may lead to a reduction in proved reserves, and vice versa.

2.1.2 Exploration

TotalEnergies evaluates exploration opportunities based on a variety of geological, technical, political, economic (including tax and contractual terms), environmental and societal factors.

In line with the Company's strategy, TotalEnergies has increased the selectivity of its exploration investments with a greater focus on oil prospects with low technical costs, low GHG emissions and which can be put into production quickly, and on gas prospects, in areas where they can provide feedstock to existing LNG infrastructure and future projects. In addition to these criteria, the Company ensures to balance its exploration investments between mature regions (35%; with a relatively low level of geological risk, situated near existing producing fields and infrastructure), emerging regions (50%; in under-explored areas but where the presence of hydrocarbons is already proven), and in frontier basins (15%; where there is a chance of making major discoveries).

This approach has led to numerous significant discoveries since 2022, notably in Suriname (discovery of Sapakara and Krabdagu on Block 58, 50%, under development following GranMorgu project final investment decision announced in October 2024), in Cyprus (discovery of Cronos on Block 6, 50%) and in Namibia (discovery of Venus on Block 2913B, 50.50%). Discoveries were made near existing infrastructure in Nigeria in 2023 (discovery of Ntokon on license OML102, 40%) and in Denmark in 2024 (discovery of Harald East on the Danish Underground Consortium permit). In 2024, the appraisal activities were mainly devoted to the Venus discovery in Namibia (drilling and well testing of Venus-2A) and the discovery of Cronos in Cyprus (drilling and well testing of Cronos-2).

In 2024, the Company's exploration and appraisal expenditure was $0.9 billion compared to $1.2 billion in 2023 and $1 billion in 2022.

2.1.3 Hydrocarbon production

The average daily production of liquids and natural gas was 2,434 kboe/d in 2024, compared to 2,483 Kboe/d in 2023 and 2,765 kboe/d in 2022.

Gas and associated products (condensates and natural gas liquids) represented approximately 46% of TotalEnergies' overall oil and gas production in 2024, compared to 44% in 2023 and 53% in 2022. Crude oil and bitumen represented 54% in 2024, compared to 56% in 2023 and 47% in 2022.

The tables on the following pages set forth TotalEnergies' annual and average daily production of liquids and natural gas by geographical area and for each of the last three fiscal years.

Consistent with industry practice, TotalEnergies often holds a percentage interest in its fields with the balance being held by joint-venture partners (which may include other international oil companies, state-owned oil companies or public entities). TotalEnergies entities may frequently act as the operator, *i.e.*, meaning the party responsible for the execution of technical production on the fields in which it holds an interest). For further information, refer to the table on producing assets by geographical area below.

In 2024, as in 2023 and 2022, the Trading & Shipping unit of the Refining & Chemicals segment marketed substantially all of TotalEnergies' liquids production (refer to the table regarding Trading & Shipping's crude oil sales and supply and petroleum products sales in point 2.5.2.1).

PRODUCTION BY GEOGRAPHICAL ZONE

The following table sets forth TotalEnergies' annual liquids and natural gas production by geographical area.

	2024			2023			2022		
	Liquids Mb[(a)]	Natural gas Bcf[(b)(c)]	Total Mboe	Liquids Mb[(a)]	Natural gas Bcf[(b)(c)]	Total Mboe	Liquids Mb[(a)]	Natural gas Bcf[(b)(c)]	Total Mboe
Africa (excl. North Africa)	**119**	**231**	**165**	**127**	**224**	**172**	**131**	**213**	**173**
Angola	49	45	58	52	45	61	56	44	65
Gabon	6	2	7	6	2	6	6	2	6
Nigeria	41	175	76	45	170	80	43	158	75
Republic of the Congo	23	9	24	24	7	25	26	9	27
Americas	**66**	**395**	**137**	**92**	**356**	**155**	**87**	**383**	**155**
Argentina	2	182	35	3	161	32	2	160	31
Bolivia	1	58	12	2	64	13	2	81	16
Brazil	55	9	56	48	6	49	37	4	38
Canada	–	–	–	31	–	31	37	–	37
United States	8	146	34	8	125	30	9	127	31
Venezuela	–	–	–	–	–	–	–	11	2
Asia-Pacific	**34**	**273**	**85**	**39**	**294**	**94**	**33**	**350**	**96**
Australia	10	172	42	11	176	44	11	163	41
Brunei	<1	12	3	1	15	3	<1	16	4
China	<1	55	10	<1	62	12	<1	54	10
Indonesia	–	1	<1	–	2	<1	–	3	1
Kazakhstan	23	26	29	27	28	33	20	18	23
Malaysia	<1	5	1	–	–	–	–	–	–
Myanmar	–	–	–	–	–	–	–	23	3
Thailand	<1	1	<1	<1	11	2	2	73	14
Europe	**82**	**681**	**208**	**85**	**657**	**206**	**102**	**1,251**	**335**
Azerbaïjan	2	25	7	2	19	5	–	–	–
Denmark	8	21	12	8	18	12	9	19	12
Italy	7	1	7	7	1	7	5	1	6
Norway	49	223	91	50	199	87	45	187	80
Netherlands	<1	20	4	<1	19	3	<1	25	4
United Kingdom	14	163	44	16	190	52	19	229	62
Russia	2	228	44	2	211	40	24	790	171
Middle East and North Africa	**236**	**327**	**295**	**223**	**304**	**279**	**201**	**270**	**250**
Algeria	8	56	18	8	55	19	11	62	22
Egypt	<1	15	3	<1	13	3	<1	7	1
United Arab Emirates	136	14	139	127	12	129	114	13	116
Iraq	10	2	11	6	2	6	4	1	4
Libya	31	15	34	32	16	35	26	11	29
Oman	11	71	24	10	53	20	10	27	15
Qatar	40	154	67	40	153	67	36	149	63
Yemen	–	–	–	–	–	–	<1	–	<1
Total production	**537**	**1,907**	**891**	**566**	**1,835**	**906**	**554**	**2,467**	**1,009**
Including share of equity affiliates	**56**	**416**	**132**	**55**	**366**	**122**	**75**	**942**	**250**
Angola	1	28	7	2	28	7	2	25	6
United Arab Emirates	9	14	11	9	12	11	9	12	12
Oman	11	58	21	9	27	15	10	27	15
Qatar	33	88	49	33	88	49	31	88	47
Russia	2	228	44	2	211	40	23	790	170

(a) Liquids include crude oil, bitumen, condensates, and natural gas liquids (NGL).
(b) Including fuel gas (149 Bcf in 2024, 144 Bcf in 2023 and 179 Bcf in 2022).
(c) Gas conversion ratio: 1 boe = 1 b of crude oil =5,390 cf of gas in 2024 (5,388 cf of gas in 2023 and 5,422 cf of gas in 2022).

The following table sets forth TotalEnergies' average daily liquids and natural gas production by geographical zone.

	2024			2023			2022		
	Liquids kb/d[(a)]	Natural gas Mcf/d[(b)(c)]	Total kboe/d	Liquids kb/d[(a)]	Natural gas Mcf/d[(b)(c)]	Total kboe/d	Liquids kb/d[(a)]	Natural gas Mcf/d[(b)(c)]	Total kboe/d
Africa (excluding North Africa)	**325**	**630**	**450**	**348**	**614**	**471**	**358**	**584**	**474**
Angola	134	122	158	143	122	166	155	120	178
Gabon	17	6	18	16	5	17	16	5	17
Nigeria	113	477	209	124	467	219	117	433	204
Republic of the Congo	61	25	65	65	20	69	70	26	75
Americas	**180**	**1 080**	**375**	**251**	**975**	**426**	**238**	**1,048**	**425**
Argentina	5	497	95	7	442	87	6	438	85
Bolivia	4	158	34	4	175	35	5	223	45
Brazil	148	25	153	132	17	135	102	10	104
Canada	–	–	–	86	–	86	101	–	101
United States	23	400	93	22	341	83	24	347	85
Venezuela	–	–	–	–	–	–	–	30	5
Asia-Pacific	**94**	**746**	**233**	**107**	**805**	**257**	**91**	**960**	**262**
Australia	28	469	116	31	482	120	30	447	113
Brunei	1	34	7	1	42	9	1	45	10
China	<1	150	27	<1	170	31	<1	147	27
Indonesia	–	4	1	–	5	1	–	8	1
Kazakhstan	64	72	79	74	76	90	54	49	64
Malaysia	<1	15	3	–	–	–	–	–	–
Myanmar	–	–	–	–	–	–	–	64	8
Thailand	<1	2	<1	1	30	6	6	200	39
Europe	**225**	**1,862**	**569**	**232**	**1,801**	**565**	**280**	**3,427**	**918**
Azerbaïjan	6	70	19	5	53	14	–	–	–
Denmark	21	57	32	22	50	32	24	51	34
Italy	20	2	20	18	2	18	15	2	15
Norway	134	611	247	138	546	239	123	514	218
Netherlands	<1	54	10	<1	52	9	<1	69	12
United Kingdom	37	446	121	44	521	142	53	626	171
Russia	6	622	120	5	577	111	65	2,165	468
Middle East and North Africa	**644**	**894**	**807**	**612**	**833**	**764**	**552**	**740**	**686**
Algeria	21	154	49	24	151	51	31	169	61
Egypt	<1	41	8	<1	37	7	<1	19	3
United Arab Emirates	372	38	379	347	34	353	311	35	318
Iraq	28	7	29	17	4	18	11	4	12
Libya	85	40	93	88	42	96	73	32	79
Oman	29	193	65	28	145	55	26	74	40
Qatar	109	421	184	108	420	184	100	407	173
Yemen	–	–	–	–	–	–	<1	–	<1
Total production	**1,468**	**5,211**	**2,434**	**1,550**	**5,028**	**2,483**	**1,519**	**6,759**	**2,765**
Including share of equity affiliates	**152**	**1,135**	**361**	**150**	**1,004**	**335**	**203**	**2,581**	**682**
Angola	4	77	19	4	77	19	4	69	17
United Arab Emirates	24	38	31	24	34	30	25	34	31
Oman	29	157	57	26	73	40	26	74	40
Qatar	90	241	134	91	243	135	84	240	128
Russia	6	622	120	5	577	111	64	2,164	466

(a) Liquids include crude oil, bitumen, condensates, and natural gas liquids (NGL).
(b) Including fuel gas (407 Mcf/d in 2024, 394 Mcf/d in 2023 and 490 Mcf/d in 2022).
(c) Gas conversion ratio: 1 boe = 1 b of crude oil = 5,390 cf of gas in 2024, (5,388 cf of gas in 2023 and 5,422 cf of gas in 2022).

PRODUCING ASSETS BY GEOGRAPHICAL ZONE

The table below shows TotalEnergies' producing assets at December 31, 2024[1] by geographical area, the year in which TotalEnergies' activities started in the country, the interest held in the asset (TotalEnergies' stake in %) and whether TotalEnergies operates the asset.

Africa (excluding North Africa)	Exploration & Production segment	Integrated LNG segment
Angola (1953)	**Operated:** Girassol, Dalia, Pazflor, CLOV (Block 17) (38.00%), Kaombo (Block 32) (30.00%)	
	Non-operated: Cabinda Block 0 (10.00%)	**Non-operated:** Angola LNG (13.60%)
Gabon (1928)	**Operated:** Baudroie Marine G5-143 (90.00%), Pointe Clairette Cap Lopez G6-5 (100.00%), Grand Anguille Marine G6-16 (100.00%), N'Tchengué G6-9 (100.00%), N'Tchengué Océan G6-14 (100.00%), Port Gentil Océan G6-15 (100.00%), Torpille G6-17 (100.00%)	
Nigeria (1962)	**Operated:** OML 99 Amenam-Kpono (30.40%), OML 99 Ikike (40.00%), OML 100 (40.00%), OML 102 Ofon (40.00%), PML 2/3 (ex OML 130), Akpo/Egina/Akpo West (24.00%)	**Operated:** OML 58 (40.00%)
	Non-operated: Shell Petroleum Development Company (SPDC) (10.00%), OML 118 Bonga (12.50%), OML 138 (20.00%)	**Non-operated:** Nigeria LNG (15.00%)
Republic of the Congo (1968)	**Operated:** Moho Bilondo (53.50%), Moho Nord (53.50%), Nkossa (53.50%), Nsoko (53.50%), Sendji (55.25%), Yanga (55.25%)	
	Non-operated: Lianzi (26.75%)	

Americas	Exploration & Production segment	Integrated LNG segment
Argentina (1978)	**Operated:** Aguada Pichana Este – Mulichinco (27.27%), Aguada Pichana Este – Vaca Muerta (55.00%), San Roque (24.71%), Rincon La Ceniza (45.00%), La Escalonada (45.00%), Aries (37.50%), Cañadon Alfa Complex (37.50%), Carina (37.50%), Hidra (37.50%), Kaus (37.50%), Vega Pleyade (37.50%), Fenix (37.50%)	
Bolivia (1995)	**Operated:** Incahuasi (50.00%)	
	Non-operated: San Alberto (15.00%), San Antonio (15.00%), Itaú (41.00%)	
Brazil (1975)	**Operated:** Lapa (45.00%)	
	Non-operated: Libra (19.30%), Iara (22.50%), Atapu ToR Surplus (22.50%), Sepia ToR Surplus (28.00%)	
United States (1957)	**Non-operated:** Tahiti (17.00%), Jack (25.00%), Anchor (37.14%)	**Operated:** several assets in the Barnett basin (95% on average)
		Non-operated: Dorado (20.00%), several assets in the Eagle Ford basin (45.00%)

Asia-Pacific	Exploration & Production segment	Integrated LNG segment
Australia (2006)		**Non-operated:** several assets in the GLNG (27.50%)[a], Ichthys (26.00%)
China (2006)	**Non-operated:** South Sulige (49.00%)	
Indonesia (1968)	**Non-operated:** Sebuku (13.50%)	
Kazakhstan (1992)	**Non-operated:** Kashagan (16.81%)	
Malaysia (2001)		**Operated:** SK408 (40.00%)[b], SK310 (30,00%) [b]

(a) TotalEnergies' interest in the unincorporated joint-venture.
(b) SapuraOMV acquisition by TotalEnergies

(1) TotalEnergies' interest in the local entity is approximately 100% in all cases except for TotalEnergies EP Gabon (58.28%), TotalEnergies EP Congo (85.00%) and Oman (refer to the table foot notes below).

Europe	Exploration & Production segment	Integrated LNG segment
Azerbaijan (1996)	**Non-operated:** Absheron (35.00%)	
Denmark (2018)	**Operated:** Danish Underground Consortium (DUC) zone (43.20%), comprising the Dan/Halfdan, Gorm and Tyra fields, and all their satellites	
Italy (1960)	**Operated:** Tempa Rossa (50.00%)	
Norway (1965)	**Operated:** Skirne (40.00%), Atla (40.00%)	
	Non-operated: Johan Sverdrup (8.44%), Åsgard (7.81%), Ekofisk (39.90%), Eldfisk (39.90%), Embla (39.90%), Tor (48.20%), Kristin (6.00%), Kvitebjørn (5.00%), Oseberg (14.70%), Oseberg East (14.70%), Oseberg South (14.70%), Troll (3.69%), Tune (10.00%), Tyrihans (23.15%), Tommeliten Alpha (20.14%)	**Non-operated:** Snøhvit (18.40%)
Netherlands (1964)	**Operated:** F15a (38,20%), J3a (30.00%), K1a (40.10%), K2c (60,00%), K3b (56.16%), K4a (50.00%), K4b/K5a (36.31%), K5b (50.00%), K6 (56.16%), L1a (60.00%), L1d (60.00%), L1e (55.66%), L1f (55.66%), L4a (55.66%)	
	Non-operated: E16a (16.92%), E17a/E17b (14.10%), J3b/J6 (25.00%), Q16a (6.49%)	
United Kingdom (1962)	**Operated:** Alwyn North (100.00%), Dunbar (100.00%), Ellon (100.00%), Forvie North (100.00%), Grant (100.00%), Jura (100.00%), Nuggets (100.00%), Elgin-Franklin (46.17%), West Franklin (46.17%), Glenelg (58.73%), Culzean (49.99%), Laggan, Edradour and Glenlivet (all 40.00%), Gryphon (86.50%), Maclure (38.19%), South Gryphon (89.88%), Tullich (100.00%), Ballindalloch (91.80%)	
	Non-operated: Bruce (1.00%), Markham unitized field (7.35%), Harding (30.00%)	
Russia (1991)	None[a]	**Non-operated:** Yamal LNG (20.02%)[b]

(a) TotalEnergies no longer equity accounts for its 19.4% stake in Novatek as of December 31, 2022.
(b) TotalEnergies'direct interest of 20.02% in Yamal LNG.

Middle East and North Africa	Exploration & Production segment	Integrated LNG segment
Algeria (1952)	**Non-operated:** TFT II (49.00%), Timimoun (37.75%), 404a & 208 (12.25%)	
Egypt (2010)		**Non-operated:** NEHO (25.00%)
United Arab Emirates (1939)	**Non-operated:** ADNOC Onshore (10.00%), ADNOC Offshore: Umm Shaif/Nasr (20.00%), Lower Zakum (5.00%), SARB/Umm Lulu (20.00%)), ADNOC Gas Processing (15.00%)	**Non-operated:** ADNOC LNG (5.00%)
Iraq (1924)	**Operated:** Ratawi (GGIP) (45.00%)	
	Non-operated: Halfaya (22.50%)	
Libya (1959)	**Non-operated:** zones 15, 16 & 32 (37.50%), zones 129 & 130 (15.00%), zones 130 & 131 (12.00%), zones 70 & 87 (37.50%), Waha (20.42%)	
Oman (1937)	**Non operated:** Block 6 (4.00%)[a]	**Non-operated:** Oman LNG (5.54%), Block 10 (26.55%)[b] Qalhat LNG (2.04%)[c],
Qatar (1936)	**Operated:** Al Khalij (40.00%)	
	Non-operated: North Field-Block NF Dolphin (24.50%), Al Shaheen (30.00%)	**Non-operated:** North Field-QatarEnergy LNG N2 (ex Qatargas 2) Train 5 (16.70%)

(a) TotalEnergies' indirect interest (4.00%) in the concession through its 10.00% stake in Private Oil Holdings Oman Ltd (POHOL) which owns 40.00% of Block 6.
(b) TotalEnergies' indirect interest (26.55%) in the asset through its 80.00% stake in Marsa LNG LLC which owns 33.19% of Block 10.
(c) TotalEnergies' indirect interest (2.04%) in the asset through its 5.54% in Oman LNG which owns 36.80% Qalhat LNG.

2.1.4 Delivery commitments

The majority of TotalEnergies' natural gas production is sold under long-term contracts. However, most of its North American and United Kingdom production, and part of its Norwegian production, is sold on the spot market. Spot market trading of Russian LNG was halted at the end of 2022.

The long-term contracts under which TotalEnergies sells its natural gas usually provide for a price related to, among other factors, average crude oil and other petroleum product prices, as well as, in some cases, a cost-of-living index. Though the price of natural gas tends to fluctuate in line with crude oil prices, a slight delay may occur before changes in crude oil prices are reflected in long-term natural gas prices.

Some of TotalEnergies' long-term contracts provide for the delivery of quantities of natural gas that may or may not be fixed and determinable. Such delivery commitments vary substantially, both in duration and scope, from contract to contract throughout the world. TotalEnergies expects to fulfill most of these obligations through the production of its proved reserves of natural gas and, if needed, additional sourcing from spot market purchases.

2.1.5 Contractual framework of Upstream oil and gas production activities

Licenses, permits and contracts governing the ownership of oil and gas interests by TotalEnergies' entities have terms that vary from country to country and are generally granted by or entered into with a government entity or a state-owned company or sometimes with private owners. These agreements and permits usually take the form of concessions or production-sharing contracts.

In the framework of oil concession agreements, the oil company (or consortium) owns the assets and the facilities and is entitled to the entire production. In exchange, the operating risks, costs and investments are the oil company's or the consortium's responsibility and it agrees to remit to the relevant host country, usually the owner of the subsoil resources, a production-based royalty, income tax, and possibly other taxes that may apply under local tax legislation.

Production sharing contracts (PSCs) involve a more complex legal framework than concession agreements. They define the terms and conditions of production sharing and set the rules governing the cooperation between the company (the contractor) or consortium (the contracting group) in possession of the license and the host country, which is generally represented by a state-owned company. The latter can thus be involved in operating decisions, cost accounting and production allocation. The contractor (or contracting group) undertakes the execution and financing, at its own risk, of all exploration, development or operational activities. In exchange, it is entitled to a portion of the production, known as "cost oil", the sale of which is intended to cover its incurred expenses (capital and operating costs). The balance of production, known as "profit oil", is then shared in varying proportions, between the contractor (or the contracting group), on the one hand, and the host country or state-owned company, on the other hand.

Today, concession agreements and PSCs can coexist, sometimes in the same country. Even though there are other contractual models, TotalEnergies' license portfolio is comprised mainly of concession agreements.

On most licenses, the partners and authorities of the host country, often assisted by international accounting firms, perform joint-venture and PSC cost audits and ensure the observance of contractual obligations.

In some countries, TotalEnergies has also signed contracts called "risked service contracts", which are similar to PSCs. However, the profit oil is replaced by a defined or determinable cash monetary remuneration, agreed by contract, which depends in particular on field performance parameters such as the amount of barrels produced.

Oil and gas exploration and production activities are subject to authorization granted by public authorities (licenses), which are granted for specific and limited periods of time and include an obligation to relinquish a large portion, or the entire portion in case of failure, of the area covered by the license at the end of the exploration period.

TotalEnergies pays taxes on income generated from its oil and gas production and sales activities under its concessions, PSCs and risked service contracts, as required by local regulations. In addition, depending on the country, TotalEnergies' production and sales activities may be subject to a number of other taxes, fees and withholdings, including special petroleum taxes and fees. The taxes imposed on oil and gas production and sales activities are generally substantially higher than those imposed on other industrial or commercial businesses.

2.1.6 Oil and gas acreage

As of December 31 *(in thousands of acres)*		2024	
		Undeveloped acreage[a]	Developed acreage
Africa (excluding North Africa)	Gross	68,753	885
	Net	33,496	203
Americas	Gross	10,754	1,003
	Net	4,171	428
Asia-Pacific	Gross	19,142	1,061
	Net	9,474	321
Europe	Gross	4,874	876
	Net	1,513	213
Middle East and North Africa	Gross	51,683	3,654
	Net	10,157	649
Total	**Gross**	**155,206**	**7,479**
	Net[b]	**58,811**	**1,814**

(a) Undeveloped acreage includes licenses and concessions.
(b) Net acreage equals the sum of TotalEnergies' equity interests in gross acreage.

2.1.7 Productive wells

As of December 31 *(number of wells)*		2024	
		Gross productive wells	Net productive wells[a]
Africa (excluding North Africa)	Liquids	1,311	354
	Gas	68	14
Americas	Liquids	148	33
	Gas	2,515	1,670
Asia-Pacific	Liquids	135	67
	Gas	4,700	1,473
Europe	Liquids	633	207
	Gas	540	145
Middle East and North Africa	Liquids	13,934	1,037
	Gas	229	72
Total	**Liquids**	**16,161**	**1,698**
	Gas	**8,052**	**3,374**

(a) Net productive wells corresponds to the sum of TotalEnergies' equity interests in gross productive wells.

2.1.8 Productive and dry wells drilled

As of December 31 *(number of wells)*	2024			2023			2022		
	Net productive wells drilled [a][b]	Net dry wells drilled [a][c]	Total net wells drilled [a][c]	Net productive wells drilled [a][b]	Net dry wells drilled [a][c]	Total net wells drilled [a][c]	Net productive wells drilled [a][b]	Net dry wells drilled [a][c]	Total net wells drilled [a][c]
Exploration									
Africa (excluding North Africa)	1.4	0.3	1.7	2.4	0.4	2.8	0.4	0.9	1.3
Americas	–	0.7	0.7	1.6	–	1.6	1.4	1.1	2.5
Asia-Pacific	–	–	–	–	–	–	0.3	–	0.3
Europe	0.6	–	0.6	1.3	1.0	2.3	0.2	0.1	0.3
Middle East and North Africa	0.5	1.4	1.9	0.7	0.6	1.3	0.5	0.5	1.0
Total	**2.5**	**2.5**	**5.0**	**6.0**	**2.0**	**8.0**	**2.8**	**2.6**	**5.4**
Development									
Africa (excluding North Africa)	29.5	0.6	30.1	10.5	–	10.5	6.9	0.1	7.0
Americas	77.2	–	77.2	22.8	–	22.8	22.4	–	22.4
Asia-Pacific	105.5	–	105.5	138.8	–	138.8	130.8	–	130.8
Europe	12.6	1.0	13.6	16.5	0.4	16.9	25.9	–	25.9
Middle East and North Africa	76.3	–	76.3	93.5	–	93.5	55.4	0.7	56.1
Total	**301.1**	**1.6**	**302.7**	**282.1**	**0.4**	**282.5**	**241.4**	**0.8**	**242.2**
Total	**303.6**	**4.0**	**307.6**	**288.1**	**2.4**	**290.5**	**244.2**	**3.4**	**247.6**

(a) Net wells equal the sum of TotalEnergies' equity interests in gross wells.
(b) Includes certain exploratory wells that were abandoned, but which would have been capable of producing hydrocarbons in sufficient quantities to justify completion.
(c) Note: service wells and stratigraphic wells are not reported in this table.

2.1.9 Wells in the process of being drilled (including wells temporarily suspended)

	2024	
As of December 31 *(number of wells)*	Gross	Net[a]
Exploration		
Africa (excluding North Africa)	1	0.5
Americas	1	0.3
Asia-Pacific	–	–
Europe	–	–
Middle East and North Africa	3	0.6
Total	**5**	**1.4**
Other wells[b]		
Africa (excluding North Africa)	170	70.1
Americas	57	14.5
Asia-Pacific	268	87,1
Europe	25	8.3
Middle East and North Africa	338	50.8
Total	**858**	**230.8**
Total	863	232.2

(a) Net wells equal the sum of TotalEnergies' equity interests in gross wells. Includes wells for which surface facilities permitting production have not yet been constructed. Such wells are also reported in the table "Number of net productive and dry wells drilled" above, for the year in which they were drilled.
(b) Other wells are development wells, service wells and stratigraphic wells.

2.1.10 Interests in pipelines

The table below shows the main interests held by TotalEnergies entities[1] in pipelines, as of December 31, 2024.

Pipeline(s)	Origin	Destination	(%) Interest	Operator	Liquids	Gas
Africa (excluding North Africa)						
Nigeria						
O.U.R	Obite	Rumuji	40.00	X		X
NOPL	Rumuji	Owaza	40.00	X		X
Americas						
Argentina						
TGM	Aldea Brasilera (Entre Rios)	Paso de Los Libres (Argentina--Brazil border)	32.68			X
Brazil						
TSB	Paso de Los Libres (Argentina--Brazil border)	Uruguayana (Brazil)	25.00			X
	Porto Alegre	Canoas	25.00			X
Asia-Pacific						
Australia						
GLNG	Fairview, Roma, Scotia, Arcadia	GLNG (Curtis Island)	27.50			X
Europe						
Azerbaijan						
BTC	Baku (Azerbaijan)	Ceyhan (Turkey, Mediterranean)	5.00		X	
Norway						
Frostpipe (inhibited)	Lille-Frigg, Froy	Oseberg	36.25		X	
Heimdal to Brae Condensate Line	Heimdal	Brae	16.76		X	
Kvitebjorn Pipeline	Kvitebjorn	Mongstad	5.00		X	
Norpipe Oil	Ekofisk Treatment Center	Teesside (United Kingdom)	34.93		X	
Oseberg Transport System	Oseberg, Brage and Veslefrikk	Sture	12.98		X	
Troll Oil Pipeline I and II	Troll B and C	Vestprosess (Mongstad refinery)	3.71		X	
Netherlands						
WGT K13-Den Helder	K13A	Den Helder	4.66			X
WGT K13-Extension	Markham	K13 (via K4/K5)	23.00			X
United Kingdom						
Alwyn Liquid Export Line	Alwyn North	Cormorant	100.00	X	X	
Bruce Liquid Export Line	Bruce	Forties (Unity)	1.00		X	
Graben Area Export Line (GAEL) Northern Spur	ETAP	Forties (Unity)	9.58		X	
Graben Area Export Line (GAEL) Southern Spur	Elgin-Franklin	ETAP	32.09		X	
Ninian Pipeline System	Ninian	Sullom Voe	16.36		X	
Shearwater Elgin Area Line (SEAL)	Elgin-Franklin, Shearwater	Bacton	25.73			X
SEAL to Interconnector Link (SILK)	Bacton	Interconnector	54.66	X		X
Middle East and North Africa						
United Arab Emirates						
Dolphin	North Field (Qatar)	Taweelah-Fujairah-Al Ain (United Arab Emirates)	24.50			X

(1) Excluding equity affiliates other than the Dolphin pipeline.

2.2 Exploration & Production segment

The Exploration & Production (E&P) segment encompasses the activities of exploration and production of oil and natural gas, as well as the carbon neutrality activities, conducted in about 50 countries.

Main indicators

1.95 Mboe/d
of hydrocarbons produced in 2024

$17 billion
Cash flow from operations excluding working capital (CFFO)* in 2024

$9 billion
of organic investments* in 2024

* Refer to the glossary for definitions and additional information on alternative performance measures (APM, Non-GAAP measures) and to point 1.9 of chapter 1 for reconciliation tables.

Production

Hydrocarbon production	2024	2023	2022
E&P *(kboe/d)*	1,947	2,034	2,296
Liquids *(kb/d)*	1,408	1,492	1,466
Gas *(Mcf/d)*	2,880	2,900	4,492

Exploration & Production segment financial data

(in M$)	2024	2023	2022
Adjusted net operating income	10,004	10,942	17,479
Including share of adjusted income from equity affiliates	*742*	*539*	*1,335*
Effective tax rate[a]	47.8%	50.0%	50.8%
Organic investments[b]	9,060	10,232	7,507
Acquisitions net of assets sales[b]	(207)	(2,706)	2,520
Net investments[b]	8,853	7,526	10,027
Cash flow from operations excluding working capital (CFFO)[b]	17,049	19,126	26,080
Cash flow from operating activities	17,388	18,531	27,654

(a) (The average tax rate is defined as follows: (tax on adjusted net operating income) / (adjusted net operating income – share of income of equity affiliates – dividends received from investments – impairment of goodwill + tax on adjusted net operating income).
(b) Refer to the glossary for definitions and additional information on alternative performance measures (APM, Non-GAAP measures) and to point 1.9 of chapter 1 for reconciliation tables.

Exploration & Production adjusted net operating income was $10,004 million in 2024, down 9% year-on-year and cash flow from operations excluding working capital (CFFO) was $17,049 million in 2024, down 11% year-on-year, mainly due to lower oil and gas prices and by the impact of the disposal of the Canadian oil sands assets.

2.2.1 Presentation of the segment

To responsibly produce the oil and gas that the world needs today and to contribute to the Company's transition, E&P articulates its strategy around the following axes:

- meeting global demand for oil and gas by producing resources with low costs and greenhouse gas emissions, particularly gas, the least emitting fossil energy. To achieve this, E&P intends to put in production more than ten major projects, most of which are currently under construction, and to increase its production by 3% per year between now and 2030;
- reducing GHG emissions to reduce the intensity of scope 1+2 emissions of its activities:
  - by conceiving designs that will avoid emissions on new projects as much as possible.
  - by implementing projects to improve energy efficiency, eliminate routine flaring, reduce its methane emissions on its operated sites by 80% in 2030 relative to 2020, reduce fuel gas consumption and capture and store emissions on its existing sites.
  - while placing sustainable development at the heart of its operations and projects.

The safety of employees, stakeholders and facilities drives the day-to-day implementation of this strategy.

E&P relies on the commitment, technical expertise and diversity of its employees, its operational excellence and its local roots in Africa, Northern Europe and in the Middle East.

In order to increase cash flow generation and maximize the value of its assets, E&P is pursuing its efforts to start its numerous projects on time and within budget, maintain a high level of availability of its facilities, and retain its competitive advantage as a low-cost producer by launching a $500 million cost reduction program between 2025 and 2027 to offset inflation and keep production costs below $5/boe.

In addition, TotalEnergies assesses its E&P investment projects by considering an environment of $50/b and a CO_2 price of $100/t (or the price in force in a given country if this is higher) and focuses on projects with technical costs of less than $20/boe or where the break-even is less than $30/b and GHG emissions intensity (Scope 1+2) is less than the average of its portfolio.

Lastly, the Company continues to dynamically manage its portfolio by restructuring or disposing of its least-performing E&P assets and accessing new low-cost and low-emission resources, through exploration on the one hand and acquisition of resources already discovered on the other.

2.2.2 Management of GHG emissions

TotalEnergies has reaffirmed its ambition to produce hydrocarbons while reducing emissions at its facilities to as low as possible (near zero), by 2050.

The goals of E&P in this area, in line with those of the Company, are based on three key elements:

- avoid GHG emissions by prioritizing the production of resources with the lowest impacts in terms of carbon footprint and by designing low-carbon infrastructures and operating procedures;
- reduce GHG emissions by developing and implementing a systematic approach in E&P to identify and implement the best available technologies for reducing GHG emissions (Scope 1+2) and, if necessary, storing captured CO_2 underground; and
- develop nature-based carbon sinks.

To this end, the Carbon Neutrality division within E&P aims to develop a global approach to generate synergies, and encompasses the following activities:

- Carbon Footprint Reduction (CFR) whose mission is to reduce E&P GHG emissions;
- Carbon Capture and Storage (CCS) whose mission is to reduce the Company's GHG emissions (Scope 1+2) and its clients' emissions by developing a transport and storage offer; and
- Nature Based Solutions (NBS), whose mission is to develop nature-based carbon sinks.

2.2.2.1 Reduction of the carbon footprint

The Carbon Footprint Reduction (CFR) entity manages the reduction of GHG emissions from oil & gas assets, both operated and non-operated, and consolidates the efforts made by all E&P's subsidiaries in this area to improve energy efficiency, reduce fuel gas consumption, eliminate routine flaring and reduce methane emissions of its operated facilities to close to zero by 2030 and to capture and store emissions at its existing sites.

On operated assets, the CFR entity assists the subsidiaries in implementing projects aimed to reduce GHG emissions (Scope 1+2) from facilities in order to contribute to the Company's target of reducing GHG emissions from 100% operated facilities to less than 37 Mt CO_2e by 2025 and 25-30 Mt CO_2e by 2030, by focusing on 4 main levers:

- improving energy efficiency as part of the $1 billion program launched by the Company for the period 2023-2025 and the additional program announced in 2024 for the period 2026-2028, also amounting to $1 billion;
- electrifying and supplying renewable energy to facilities;
- reducing routine flaring with a view to eliminating it by 2030;
- reducing methane emissions, to contribute to the Company's goal of lowering them by 80% between 2020 and 2030 and methane emission intensity below 0.1% of commercial gas produced at Upstream operated oil and gas facilities, aiming for near-zero methane emissions in the Company's operations by 2030 at the latest. Having achieved its goal of reducing operated methane emissions by 50% compared to 2020 in 2024, a year ahead of schedule, the Company has set a new target of reaching -60% in 2025 compared to 2020. Additionally, TotalEnergies has taken a new step by deciding to install fixed continuous detection equipment across all its operated upstream assets by the end of 2025, which will allow real-time identification of any methane leaks and immediate implementation of corrective measures to stop them.

The CFR entity also coordinates:

- the communication with partners and operators in order to encourage them to also implement emissions reduction projects on assets that the Company does not operate;
- the implementation of the OGMP 2.0 (Oil and Gas Methane Partnership 2.0[1]), initiative to which TotalEnergies subscribed in November 2020. In this context, in 2024 for the fourth consecutive year, IMEO, the International Methane Emissions Observatory under UNEP, the United Nations Environment Program, recognized TotalEnergies' efforts as a major player in the reduction of methane emissions, confirming its "Gold Standard" status and praising the methane detection and measurement campaign using AUSEA (Airborne Ultralight Spectrometer for Environmental Applications) on its operated assets, enabling a better understanding of emission sources and leading to mitigation actions.

Thus, recent cooperation agreements with National Oil & Gas Companies (Petrobras, Sonangol, NNPC, Socar, ONGC and Oil India Limited) to carry out methane detection and measurement campaigns using AUSEA technology, demonstrate the shared commitment to identify, quantify and reduce methane emissions and encourage the entire oil and gas industry to aim for Zero Methane Emission by 2030.

In addition to the continuous efforts deployed on projects to reduce emissions from existing assets, E&P also deploys communication and training actions for employee and partners on climate issues and the need to reduce GHG emissions.

2.2.2.2 CO_2 capture and storage (CCS)

TotalEnergies believes that CCS is one of the necessary levers in the fight against climate change and is developing new businesses to enable its industrial, residential and power-generating customers to capture and store their CO_2 emissions, by studying new industrial solutions tested on its own facilities. Thus, the Company aims to develop CO_2 gross storage capacity of more than 10 Mt/y by 2030, for its own facilities and those of its customers.

In **Norway**, TotalEnergies holds a 33.33% interest in the Northern Lights project, the world's first commercial transportation and storage project, with a storage capacity of 1.5 Mt/year of CO_2 for Phase 1. Facilities inaugurated in September 2024 include a CO_2 cargo reception terminal, a 100 km subsea pipeline and subsea injection facilities for a permanent and secured storage of CO_2 in a reservoir 2,600 meters below the seabed. Studies are progressing to expand the capacity to 5 Mt CO_2/y. This project, supported by Norway, aims to store the emissions from several industrial sites, including a Norcem cement plant for 0.4 Mt/year of CO_2, a Celsio waste incinerator for 0.4 Mt/year of CO_2 in Oslo, an ammonia and fertilizer plant operated by Yara in the Netherlands (0.7 Mt/year of CO_2), as well as biogenic CO_2 from two power plants owned by Ørsted in Denmark (0.4 Mt/year of CO_2). In operation since September 2024, the facilities are expected to receive the first CO_2 deliveries in 2025.

(1) Source: An Eye on Methane: International Methane Emissions Observatory 2022 Report UNEP (*United Nations Environment Programme*).

In 2023, TotalEnergies acquired a 40% interest in the ExL004 CO_2 storage exploration license located 120 kilometers off the coast of Bergen, in 200 meters water depth (the "Luna" project).

In the **Netherlands**, TotalEnergies participates in the Aramis project (60%) which aims to store CO_2 permanently in depted offshore gas reservoirs at a depth of approximately four kilometers thanks to new CO_2 transportation infrastructure connecting Rotterdam to these offshore fields. Detailed engineering studies for phase 1 of the project, with a storage target of 2.5 Mt of CO_2 per year in fields operated by TotalEnergies, are expected to be completed in 2025. This storage capacity could be further expanded up to 5 Mt CO_2/y in later phases.

In **Denmark**, TotalEnergies holds two storage exploration licenses (80%). These two Blocks cover an area including the Harald gas fields, currently operated by TotalEnergies and for which the Company is already assessing the CO_2 storage potential as part of the Bifrost project, as well as a saline aquifer that could increase stored volumes. A 3D seismic survey was carried out in the summer of 2023. Subject to evaluation and assessment work, this project could ultimately provide storage of more than 5 Mt CO_2/y.

In the **United Kingdom** the Company is part of the Northern Endurance Partnership (10%). This project consists of collecting CO_2 in the industrial regions of Teesside and Humberside, transporting it offshore and storing it in a saline aquifer located 145 km off the Teesside and 85 km off the Humber coast. The closing of financing for Phase 1 of the project (4 Mt CO_2/year) was announced in December 2024, enabling the execution of the first CCS project in the UK to begin. The project infrastructures will initially serve three carbon capture projects in the Teesside region (NZT Power, H2Teesside and Teesside Hydrogen CO_2 Capture). In 2023, a new exploration Block was obtained in addition to the two Blocks obtained in 2022. The ongoing appraisal work on these Blocks will help to prepare expansion phases for a storage capacity of more than 20 Mt CO_2/y.

In the **United States**, in March 2024, TotalEnergies acquired 100% of Talos Low Carbon Solutions which holds a 25% interest in the Bayou Bend project in Texas, a 65% interest in the Harvest Bend project in Louisiana and a 50% interest in the Coastal Bend project in Texas. The latter two interests were sold at the end of 2024, as the projects were far away from the Company's assets in the region. The Bayou Bend project provides CO_2 transportation and storage solutions for industrial emitters in the Houston and Beaumont-Port Arthur region, one of the main industrial hubs in the United States. Constituted of a set of permits for underground CO_2 storage, both onshore and offshore, covering an area of approximately 600 km^2 (231.7 square miles), this project could enable the storage of several hundred million tons of CO_2. The Bayou Bend project could play a key role in reducing direct emissions from the Company's U.S. operations, given its proximity to the Port Arthur refinery and La Porte petrochemical assets.

In **Australia**, TotalEnergies has a 26% interest in a joint-venture that was awarded a CO_2 storage assessment license of the Australian northwest coast in August 2022. A seismic acquisition campaign and the drilling of two appraisal wells were completed in 2024 to demonstrate the possibility of storing CO_2 on a large scale in the saline aquifer of this license. This project is part of a comprehensive action plan aimed at reducing CO_2 emissions from the Ichthys LNG project.

In **Malaysia**, TotalEnergies partnered with Petronas and Mitsui to develop a CCS project in the Malaysian basin (Southern CCS Hub). This partnership was created in 2023 to develop a project to permanently store CO_2 in the Duyong depleted gas reservoir and nearby saline aquifers by 2029. The project has been selected by the Japanese government as one of its advanced CCS projects to support the decarbonization of Japan's industries.

2.2.2.3 Nature-based carbon sinks

While TotalEnergies' priority is first to avoid and then to reduce its GHG emissions, the net emissions targets for Scope 1+2 take into account the contribution of nature-based carbon sink projects, that is to say sequestration projects, such as reforestation or regenerative agriculture, or conservation projects which protect environments where significant amounts of carbon are already stored.

TotalEnergies plans to invest up to $100 million per year on average between 2020 and 2030 in these projects to build a carbon credit stock of around 50 Mt. If such a stock is built by 2030 and based on a consumption of 10% of the stock per year from 2030, then TotalEnergies estimates that it could consume around 5 million credits per year from 2030 to partially offset the remaining Scope 1+2 emissions of the Company after the priority actions to avoid and reduce its GHG emissions have been carried out.

These credits will be certified according to environmental and social management standards. Projects are designed to respect the resource regeneration cycles and contribute to provide social, economic and environmental co-benefits for local communities, on which they rely.

The carbon credit stock at the end of 2024 amounts to 13.7 million carbon credits certified by major international standards such as Verified Carbon Standard (VCS or Verra), ACR (American Carbon Registry), or ANREU. The cumulative budget committed to date for all concluded operations amounts to nearly $770 million over their lifetime, for a cumulative volume of verified credits expected to be 37 million by 2030 and 53 million by 2050, taking into account methodological revisions for certification and technical updates.

In 2024, TotalEnergies signed an agreement with Anew Climate, a North American leader in climate solutions, and Aurora Sustainable Lands, a company specialized in carbon management and forest landowner in the U.S., to contribute $100 million to the projects they deploy to protect productive forests from overexploitation and support their conversion to sustainable management practices, enhancing their ability to store more carbon from the atmosphere.

In 2023, the Company decided to invest $100 million in the Nature Based Carbon fund managed by Climate Asset Management, mainly targeting the preservation or restoration of three types of ecosystems: degraded natural forests, grasslands impacted by human activity as well as wetlands.

In 2022, TotalEnergies entered into partnerships and contracts with recognized players in Gabon, Peru, Southeast Asia and Guatemala. In particular, TotalEnergies and Compagnie des Bois du Gabon (CBG) joined forces to develop a new model of forest management combining sustainable wood production, conservation of biodiversity and lasting carbon storage. TotalEnergies became CBG's leading partner after acquiring 49% of its capital from Criterion Africa Partners. In March 2022, TotalEnergies invested $50 million in the Tropical Asia Forest Fund 2 (TAFF2) managed by the New Forests company, whose objective is to invest in certified plantation and primary forest conservation projects in several South-East Asian countries, including Indonesia, Malaysia, Laos, Cambodia, Thailand, and Vietnam.

2.2.3 Activities by geographical area

The information below describes the Exploration & Production segment's main oil and gas activities by geographical area, without giving details of all of the assets held by TotalEnergies. The capacities referred to herein are expressed on a 100% basis, regardless of TotalEnergies' interest in the asset. TotalEnergies' average annual and daily production of liquids and gas by country for 2024, 2023 and 2022 are presented in the tables "Production by geographical area" in point 2.1.3. For information concerning TotalEnergies' interest in each asset (share in %) and to determine whether the Company operates the asset on December 31, 2024, refer to the table entitled "Assets in production by geographical area" in point 2.1.3.

2.2.3.1 Africa (excluding North Africa)

In **Nigeria**, the Company's production is mainly offshore. It operates 8 licenses out of the 34 permits in which TotalEnergies holds interests[1].

TotalEnergies is present offshore in particular:

- in PML 2/3/4 (formerly OML 130, 24%, operator), with the Akpo and Egina fields in production as well as the Preowei field where development studies continued in 2024. In May 2023, the production licenses were renewed for 20 years until 2043; in February 2024, the Akpo West field was connected to the Akpo FPSO and put into production;
- in OML 99 (40%, operator), with the Amenam-Kpono fields (30.4%) in production as well as the Ikike field, where production started in July 2022 and reached its plateau at the end of 2022;
- in OML 102 (40%, operator), with the Ofon producing field and where, following the Ntokon oil and gas discoveries in June 2023, studies have started for a new tie-back development to existing facilities;
- in OML 138 (20%), with the Usan field in production. The license was renewed in August 2022 for a period of 20 years. Development studies on the Owowo discovery in OML 139 (18%) located near OML 138, continued in 2024;
- in OML 118 (12.5%), with the Bonga field in production as well as the Bonga North field which is under development following the final investment decision made in 2024.

TotalEnergies is also present via the SPDC joint-venture (10%) which holds 18 production licenses, including 3 offshore licenses.

In 2024, TotalEnergies signed an agreement to sell its interest in SPDC's oil licenses, retaining a full economic interest in 3 licenses (OML 23, 28 and 77) producing mainly gas and contributing to Nigeria LNG's gas supply. This transaction is in the process of being finalized.

In **Angola**, the Company's production comes from Blocks 17, 32 and 0:

- on Block 17 (38%, operator), the Company's main asset in the country, located in deep offshore, four major hubs are in production: Girassol, Dalia, Pazflor and CLOV. Various infill drilling projects are being carried out. An exploration well, Dalia-6 was also drilled in 2024, the results of which are currently being assessed;
- on Block 17/06 (30%, operator), the development of the Begonia field was approved in July 2022. The start-up of production is planned for the end of 2025 with a tie-back to the Pazflor FPSO;
- on Block 32 (30%, operator), located in deep offshore, production comes from the Kaombo Norte and Kaombo Sul FPSOs. Drilling of development wells is expected to continue until the third quarter of 2025, including the three infill wells approved in 2023 under the name Kari Phase1. Discoveries in the central and northern areas of the Block (outside Kaombo) offer additional potential currently being assessed;
- on Block 0 (10%), in May 2023, the Angolan authorities approved the extension of the license until 2045 as well as new tax terms;
- on Block 20/11[2] (40%, operator), in the Kwanza Basin, TotalEnergies and its partners decided in May 2024 to invest in the Kaminho project to develop the Cameia and Golfinho oil discoveries. In September 2023, TotalEnergies sold a 40% stake in the Block to Petronas.

In December 2022, the company Angola Block 14 B.V., in which TotalEnergies held a 50.01% stake, was sold to the Angolan company Somoil. TotalEnergies held interests in Blocks 14 and 14K through this participation.

TotalEnergies has held exploration licenses on Block 16/21 since August 2023 and on Block 29 since August 2021. The exploration license on Block 48 (40%, operator) expired in May 2023.

In the **Republic of the Congo** (Congo Brazzaville), the Company's production comes from the TotalEnergies EP Congo subsidiary, owned by TotalEnergies (85%) and QatarEnergy (15%). The production operated by TotalEnergies EP Congo comes mainly from the Haute Mer permit (53.5%) which includes the Moho Bilondo asset composed of two fields: Moho Bilondo and Moho North. In 2024, TotalEnergies signed an agreement for the simultaneous acquisition of an additional 10% interest in the Moho permit (bringing the Company's interest to 63.5%) and sale of its 53.5% interest in the Nkossa and Nsoko permits. The closing of this agreement took place in January 2025.

TotalEnergies EP Congo also operates the Yanga and Sendji fields (55.25%) and holds 26.75% of the Lianzi field located within the offshore unitization area between Angola (Block 14K) and the Republic of Congo (Haute Mer permit).

TotalEnergies EP Congo continued to operate the Djéno oil terminal, the country's only oil terminal, under an interim agreement until the signing in August 2024 of the operating agreement for the new concession (TotalEnergies EP Congo 48%, operator).

TotalEnergies EP Congo holds an exploration license on the Marine XX permit (32.5%, operator) on which an exploration well was drilled in 2024 with negative results and transferred to SNPC its rights and interests in the Nanga license on December 11, 2023.

In **Gabon**, TotalEnergies EP Gabon[3] operates the assets governed by the Anguille-Torpille concession agreement (100%) and the Baudroie-Mérou production sharing agreement (90%). In 2022, the Baudroie-Mérou production sharing contract was renewed until 2047, and the fiscal terms of the Anguille-Torpille concession were revised and extended until 2042. In December 2022, The Republic of Gabon acquired a 10% interest in the Baudroie-Mérou production sharing agreement. In 2024, TotalEnergies EP Gabon continued its intervention on the Anguille-Torpille wells aimed at maintaining the production plateau using its own pulling unit. Furthermore, in application of the country's Petroleum Code, TotalEnergies EP Gabon signed an agreement with Gabon Oil Company for the sale of a 15% interest in the Baudroie-Mérou production sharing contract, which would bring the Company's interest to 75%. Completion of this sale is scheduled for 2025.

(1) Including through its stake in joint-venture SPDC.
(2) In 2023, Blocks 20/15 and 21/09 were merged into a single Block 20/11.
(3) TotalEnergies EP Gabon is a company under Gabonese law. Its shares are listed on Euronext Paris and at December 31, 2024 were owned by TotalEnergies (58.28%), the Republic of Gabon (25%) and the public (16.72%).

In **Uganda**, TotalEnergies is a partner, with a 56.67% interest, in the project to develop the Lake Albert oil resources located in Blocks CA-1, LA-2 and CA-3A. TotalEnergies is also a 62% shareholder, in East African Crude Oil Pipeline (EACOP) Ltd, the company responsible for developing and operating of a pipeline of close to 1,450 km that will transport crude oil to a storage and offloading terminal in Tanga, Tanzania.

After taking into consideration the societal and environmental challenges, the project was approved by the Board of Directors in December 2020. The production capacity is planned to be 230 kb/d and will include the joint development of the resources in Blocks CA-1 and LA-2 (the Tilenga project operated by TotalEnergies) and Block CA-3A (the Kingfisher project, operated by CNOOC). It plans the drilling of approximately 450 onshore wells and the construction of two crude oil processing facilities. The final investment decision was announced in February 2022. Drilling started in 2023 and start of production is planned for 2026.

Firmly committed to transparency, the guiding principle for all its actions, TotalEnergies publishes on its website detailed information on the social, environmental and societal challenges related to this project.

In **South Africa**, TotalEnergies operates three deep offshore exploration licenses: the ODB Block (48.6%), the DWOB Block (40% following the partial transfer of a 10% interest to Petrobras in 2024) as well as 3B/4B Block (33% acquired in 2024). A multi-client 3D seismic acquisition program was carried out in 2024 on the DWOB Block.

In 2024, TotalEnergies announced its withdrawal from Blocks 5/6/7 (40%) and 11B/12B (45%, which included the Brulpadda and Luiperd discoveries). The withdrawal is expected to take effect in 2025, once the administrative processes have been completed. In February 2025, TotalEnergies has relinquished the South Outeniqua Block (100%).

In **Namibia**, TotalEnergies operates two deep offshore exploration licenses in the Orange basin: Blocks 2912 and 2913B. In November 2024, TotalEnergies finalized the acquisition of additional interests in both Blocks, increasing its interests from 37.78% to 47.17% on Block 2912 and from 40% to 50.50% on Block 2913B. A partial cession of the acquired interests to QatarEnergy is subject to approval of local authorities, which will decrease its interests to 42.475% on Block 2912 and 45.25% on Block 2913B.

In 2022, following the drilling of an exploration well on Block 2913B, TotalEnergies announced a significant discovery of light oil and associated gas on the Venus prospect (the Venus-1X well). In 2023, two rigs were mobilized to evaluate the area's potential, with positive results from the Venus-1A appraisal well and production tests from the Venus-1X and Venus-1A wells and a negative result for the Nara-1X exploration well, targeting a prospect west of the Venus discovery on Block 2912. In 2024, the drilling campaign continued with:

- drilling of an exploration well on a prospect north of Venus (Mangetti-1X) and an additional appraisal well on the Venus field (Venus-2A) with positive results;
- drilling of a new exploration well Tamboti-1X, which began in October 2024.

In addition, a 3D seismic survey was carried out in 2024 on the two Blocks and the development studies have been launched with the objective of a project sanction in 2026.

In **Senegal**, TotalEnergies relinquished the Ultra Deep Offshore Block (70%, operator) and the Rufisque Offshore Profond exploration license (90%, operator) in 2024.

In **São Tomé and Principe**, TotalEnergies signed an agreement in 2024 to acquire from Agência Nacional do Petróleo (ANP-STP) a 60% interest with operator status in the STP02 offshore exploration Block. A 3D seismic survey is planned for this Block in 2025. TotalEnergies also obtained a 3-year extension on Block STP01 (55%) and announced to the authorities its withdrawal from Blocks JDZ-7, 8, 11 in the joint development zone between São Tomé and Principe and Nigeria.

In **Kenya**, TotalEnergies finalized the exit from offshore licenses L11A, L11B and L12 in November 2022. In May 2023, TotalEnergies relinquished onshore Blocks 10BA, 10BB and 13T.

In **Mauritania**, in August 2023, TotalEnergies relinquished Block C-15, the last exploration Block held.

In **Côte d'Ivoire**, TotalEnergies no longer holds any licenses, having exited offshore Block CI-705 in June 2022 following the negative results of the Barracuda-1 exploration well in August 2021.

2.2.3.2 Americas

In **Brazil**, the Company's production comes from the Libra (19.3%), Lapa (45%, operator), Iara (22.5%), Atapu ToR Surplus (22.5%) and Sépia ToR Surplus (28%) Blocks in the Santos Basin.

On the Libra Block, located approximately 170 km offshore Rio de Janeiro, production began in 2017 on Mero field with the Pioneiro de Libra FPSO (capacity of 50 kb/d). At year-end 2024, the Mero development project comprised four FPSOs, each with a liquid processing capacity of 180 kb/d:

- Mero 1, approved in 2017, started up in April 2022;
- Mero 2, approved in 2019, started up in December 2023;
- Mero 3, approved in 2020, started up in October 2024;
- Mero 4, approved in 2021, scheduled for start-up in 2025.

On Lapa, the Lapa South-West project was approved in January 2023. Upon its production start in 2025, it is expected to increase the FPSO's production by 25 kb/d, bringing the total field's production to 60 kb/d.

On Iara, the P-68 FPSO is dedicated to production of the Berbigão and Sururu-West fields, reached its nominal production capacity in 2022.

On the Atapu (22.5%) and Sépia (28%) fields, the two production sharing contracts (TOR-Surplus) have been in force since May 2022 and two FPSOs are in production: the P-70 FPSO of a nominal capacity of 150 kb/d on the Atapu fieldiand the FPSO Carioca with a nominal capacity of 180 kb/d on the Sépia field. Final investment decisions for an additional FPSO on each field were made in May 2024, and two FPSOs of 225 kb/d each are under construction. In the Sépia area, an additional oil accumulation was discovered with the drilling of the Pedunculo well in 2022.

TotalEnergies holds an interest in the Gato do Mato field (20%), discovered in 2012. The resources of this field have been confirmed by the drilling of the GDM#4 well.

TotalEnergies sold its 40% interest in the Itaipu field on Block BM-C-32 in the Campos Basin in 2023.

In exploration, the drilling of the first exploration well on the C-M-541 Block (40%, operator), Marolo-1, ended in July 2022. The drilling of the second well, Ubaia-1, started in 2022 and was completed in October 2023.

TotalEnergies also holds two operated exploration Blocks (with a 50% Working Interest after the sale of 50% in early 2023) in the SM-1711 and SM-1815 Blocks in the South Santos basin. A 3D seismic survey was carried out on these two Blocks in 2024. A production sharing contract for the Água Marinha (30%) exploration Block, in the Campos basin was signed in May 2023. The drilling of an exploration well (Andorinha) on this Block has been planned in 2025. In addition, TotalEnergies holds an interest in an exploration license located in the Barreirinhas basin (50%).

As part of their strategic alliance, TotalEnergies and Petrobras renewed their agreement in 2023 to promote technical cooperation between the two companies in areas of common interest, notably for the development of new technologies, particularly in deep offshore. As part of this agreement, a pilot unit using a pioneer high-pressure subsea technology to separate oil from CO_2-rich gas (HISEP®) and re-inject the CO_2-rich gas into the Mero 3 reservoir, was approved in December 2023.

In **Argentina**, TotalEnergies operates the onshore Ara and Cañadón Alfa Complex, on the CMA-1 concession in Tierra del Fuego, as well as the Hidra, Carina, Aries and Vega Pleyade offshore fields (37.5%). In September 2024, the Company started the Fenix offshore gas field (37.5%, operator) with a capacity of 10 Mm^3/d of natural gas.

In the onshore Neuquén Basin, TotalEnergies holds interests in five operated licenses. In addition to conventional projects, TotalEnergies operates four shale gas and shale oil projects in the basin, the first located in the Aguada Pichana Este Block in the gas window of the Vaca Muerta, the second and third located in the Rincón la Ceniza Block (45%) and la Escalonada (45%) in the gas and condensate window of the Vaca Muerta, and the fourth located in the Aguada San Roque Block (24.71%) in the oil window of the Vaca Muerta.

In 2023, TotalEnergies swapped with PanAmerican Energy and YPF its 25% stake in the non-operated Aguada Pichana Oeste and Aguada de Castro Blocks for an additional 14% in its operated Block Aguada Pichana Este (55%), in the Vaca Muerta. TotalEnergies also sold its interest in the Rincon de Aranda Block (45%) to Pampa Energia. TotalEnergies has initiated the process of withdrawing from the non-operated Veta Escondida Block (45%).

In exploration, TotalEnergies operates an offshore license MLO 123 (37.5%) located in the Malvinas basin, on which a seismic acquisition in progress. The two offshore licenses CAN 111 and CAN 113 (50%) were relinquished in July 2024.

In the **United States**, TotalEnergies' oil and gas production in the Gulf of Mexico comes from its interests in the Tahiti (17%), Jack (25%) and Anchor (37.14%) deep offshore fields. Anchor, with a production capacity of 75 kb/d of oil, started production in August 2024.

TotalEnergies also holds an interest in another deep offshore project, Ballymore (40%). The investment decision was made in May 2022 and its start-up is scheduled for 2025.

In 2024, TotalEnergies was granted three exploration licenses with a 25% interest in the northwestern part of the Jack field: 668, 712 and 713 and relinquished by anticipation the Green-Canyon-849 Crown West B, in August 2024. In 2022, TotalEnergies relinquished its interests in seven deep offshore licenses, initially owned 100%.

In **Canada**, with effect from November 2023, TotalEnergies no longer holds any interest in the oil sands. TotalEnergies held a 50% interest in the Surmont in-situ production project, and a 31.23% interest in the Fort Hills mining project (after increasing its stake by 6.65% in February 2023 through the exercise of its pre-emption right when Suncor acquired Teck's interest), both located in the province of Alberta. On October 4, 2023, TotalEnergies finalized the sale to ConocoPhillips of its stake in Surmont as well as certain associated logistics obligations. On November 20, 2023, TotalEnergies finalized the sale to Suncor of its subsidiary TotalEnergies EP Canada, including in particular its interest in the Fort Hills asset and associated logistics obligations.

In **Bolivia**, TotalEnergies has interests in five producing licenses: San Alberto (15%), San Antonio (15%), Block XX Tarija Oeste (Itau, 41%), Aquio and Ipati (50%, operator) which include the Incahuasi field.

In **Venezuela**, TotalEnergies transferred in July 2021 its non-operated minority participation of 30.32% in Petrocedeño S.A. to Corporación Venezolana del Petróleo, S.A, a subsidiary of PdVSA. In July 2022, TotalEnergies sold its 69.50% stake in the Yucal Placer field to a subsidiary of Sucre Energy Group. Together with the operator, TotalEnergies relinquished the license for Plataforma Deltana Block 4 (49%) in August 2022. (refer to point 3.2.1 of chapter 3).

In **Suriname**, TotalEnergies, operator of Block 58 (50%), announced on October 2024 the final investment decision for the GranMorgu project for the development of the Sapakara and Krabdagu fields, located 150 km off the Surinamese coast. The project includes a floating production, storage and offloading (FPSO) unit with a capacity of 220 kb/d, based on the proven design of units in Guyana. Total investment is estimated at approximately $10.5 billion, with production scheduled to start up in 2028. Staatsolie, Suriname's national oil and gas company, has the possibility to exercise its right to enter the project with a participation of up to 20% until June 2025. In May 2023, TotalEnergies acquired the rights to explore shallow offshore Blocks 6 and 8 (40%, operator), located south of Block 58, and in December 2023 the rights to explore offshore Block 64 (40%, operator).

In **Mexico**, TotalEnergies holds licenses in five offshore exploration Blocks in the Gulf of Mexico: Block 1 (33.33%) in the Salina Basin and Blocks 15 (35%, operator), 32 (50%), 33 (35%, operator) and 34 (27.5%) located in the shallow waters of the Campeche Basin. Blocks 2 and 3 were relinquished in 2023. Two exploration wells, Boox Peek and Ochkan, were drilled in 2024 on Blocks 33 and 15, respectively. As the studies concluding to the lack of prospectivity, the operators of Blocks 1, 32 and 34 launched the relinquishment processes which are currently on going. Following the acquisition of SapuraOMV Upstream in 2024, TotalEnergies also holds a 30% interest in offshore Block 30, where the Kan discovery was made in 2023 and is currently being appraised.

In **Guyana**, TotalEnergies holds a stake in the Canje Block (35%), The exploration phase has been extended by the Government of Guyana for an additional year due to force majeure caused by COVID-19. In the context of the 2023 call for tenders for new exploration licenses, TotalEnergies is currently negotiating with the authorities, the terms of shallow offshore Block S4 (40%, operator). The Kanuku license (25%) expired in May 2023 and TotalEnergies exited the Orinduik license (25%) in October 2024, at the end of the second exploration period.

2.2.3.3 Asia-Pacific

In **Kazakhstan**, TotalEnergies' oil and gas production comes mainly from the Kashagan field, operated by the North Caspian Operating Company (NCOC) located in the North Caspian license (16.81%). The oil production capacity of the first phase of this field and the associated processing plant is in the range of 410 kb/d as per initial design.

TotalEnergies has divested its interests in the Dunga field (60%, operator) in November 2023.

In **China**, production comes from the South Sulige Block (49%), located in the Ordos basin in Inner Mongolia. Drilling of tight gas development wells continues. Production increased to 4 Gm^3/y, following the approval in 2022 of a new development plan.

In **Brunei**, production came from the Maharaja Lela Jamalulalam offshore gas and condensate field located on Block B (37.5%, operator); where the gas is delivered to the Brunei LNG liquefaction plant. The sale of the subsidiary TotalEnergies EP (Brunei) B.V. was finalized in October 2024.

In **Indonesia**, production comes from the Ruby gas field located on the Sebuku license (13.5%).

In **Myanmar**, the Company no longer has any activities, having definitively withdrawn on July 20, 2022.

In **Thailand**, the main Bongkot licenses expired in April 2022 and March 2023. The company benefits from residual production from a Block whose transfer to PTTEP is currently being approved by the competent authorities.

In **Papua New Guinea**, TotalEnergies holds interests in exploration licenses PPL339 (35%), PPL589 (100%) and PPL576 (50% following the sale to Petronas of 50% of its interest in November 2024) and in the PRL-15 Block (37.5%). For more information refer to point 2.3.2. An exploration well on PPL576 is planned for 2025.

In **Malaysia**, TotalEnergies holds interests in three offshore exploration licenses, Block SB2K (34.90%), Block N (34.90%) where the Tepat-2 exploration well was drilled in the Sabah state in 2022 and Block SB-412 following the acquisition of SapuraOMV. For further information refer to point 2.3.2 in chapter 2.

In **Tajikistan**, TotalEnergies withdrew from the exploration license in which it held a 50% stake in May 2023.

2.2.3.4 Europe

The specific context of **Russia** and its consequences on TotalEnergies are detailed in point 1.9.3 of chapter 1.

In **Norway**, production comes from many fields:

- Ekofisk (39.9%), Eldfisk (39.9%), Embla (39.9%) and Tor (48.2%). The production of the Tommeliten Alpha (20.14%) field, an Ekofisk satellite, started in October 2023;
- Johann Sverdrup (8.44%), one of the five biggest oil fields on the Norwegian Continental shelf of which the production facilities are powered from shore resulting in very low GHG emissions - only 0.67 kg of CO_2e/boe;
- Oseberg (14.7%), whose facilities also treat, among other fields, the production from Tune (10%). Electrification of the Oseberg installations with power supply from shore was approved by the authorities in 2022; and the Lambda exploration well was successfully drilled in 2024;
- Troll (3.69%), one of the largest oil producing fields on the Norwegian Continental Shelf and with very large quantities of gas, and Kvitebjørn (5%);
- Åsgard (7.81%), Tyrihans (23.15%) and Kristin (6%) located in the Haltenbanken area.

Production at the end-of-life Flyndre (6.26%) and Islay (5.51%) fields ceased in 2024. For the Skirne (40%, operator) and Atla (40%, operator) fields, which also ceased production in 2024, well abandonment and decommissioning of the production lines to the Heimdal processing platform (16.76%) is expected to be completed by the end of 2028.

In the **United Kingdom**, production comes from:

- the Alwyn North (100%) and Dunbar (100%) fields in the Northern North Sea, as well as from satellites linked to them;
- the Elgin/Franklin complex (46.17%) which includes the West Franklin (46.17%) and Glenelg (58.73%) fields in the Central Graben area. TotalEnergies also operates the Culzean gas and condensate field (49.99%), where production capacity was increased by approximately 10% in March 2022. In addition, TotalEnergies announced in March 2020 an oil and gas discovery on the Isabella prospect (30%, operator), located close to existing operated infrastructures. An appraisal well on this structure was drilled in January 2023, the results of which are currently being analyzed. Finally, TotalEnergies relinquished the P2215 license (where the Glengorm discovery is located) in November 2024;
- to the West of the Shetlands, the Laggan, Tormore, Edradour and Glenlivet fields. In July 2022, TotalEnergies finalized the sale of 20% of its stake in these fields, thus reducing its stake to 40%; In June 2024, TotalEnergies signed an agreement to dispose of its interests in all its West of Shetland assets (Laggan, Tormore, Glenlivet, Edradour and Glendronach fields, Shetland onshore gas processing plant, neighboring exploration licenses). The transaction is subject to approval from the competent authorities;
- in the Quad 9 area, in the Eastern North Sea, the Gryphon (86.5%), Maclure (38.19%), South Gryphon (89.88%) and Tullich (100%) fields. Following the decision to cease production of the Gryphon FPSO at the end of 2024, dismantling operations will begin in 2025 with the removal and recycling of the FPSO.

In **Denmark**, TotalEnergies operates the Danish Underground Consortium (DUC, 43.2%). Production comes from DUC's four main fields: Dan, Gorm, Halfdan, and Tyra. Dan, Gorm and Halfdan production is mainly oil, while Tyra's production is mainly gas and condensates. Production of the Tyra field stopped in September 2019 as part of a redevelopment project and resumed in 2024. An exploration well was successfully drilled in 2024, leading to the discovery of new gas condensate resources near the offshore Harald field. The well was immediately tied to the existing facilities, and production began in December 2024.

In **Italy**, TotalEnergies operates the Tempa Rossa field (50%), located in the Gorgoglione concession in Basilicata region, main asset of TotalEnergies EP Italia. The new facilities being built in Taranto with ENI and partners, are expected to allow Tempa Rossa to increase crude oil export and production in 2025.

In **the Netherlands**, production originates from the assets held in 18 offshore production licenses, of which 14 are operated.

In **Azerbaijan**, the Absheron gas condensate field (35%), located in the Caspian Sea, and operated by JOCAP (Joint Operating Company of Absheron Petroleum, a company jointly held by TotalEnergies, ADNOC and SOCAR), started production in July 2023 and is currently producing 1.5 Gm^3/y. The second phase of development is expected to make it possible to increase the field's production to 5.5 Gm^3/y. TotalEnergies and SOCAR finalized, in February 2024, the transfer of a 15% stake each to ADNOC (Abu Dhabi National Oil Company), thereby reducing TotalEnergies' stake in Absheron to 35%.

In **Bulgaria**, TotalEnergies withdrew in November 2023 from the deep offshore exploration Block Han Asparuh in which it held a 57.14% stake.

2.2.3.5 Middle East and North Africa

In the **United Arab Emirates**, TotalEnergies' production, mainly comes from the following stakes:

- 20% in the Umm Shaif/Nasr offshore concession, 5% in the Lower Zakum offshore concession and since March 2023, 20% in the Satah Al Razboot (SARB)/Umm Lulu offshore concession, all three operated by ADNOC Offshore and signed for a 40-year duration to 2058;
- 10% in the ADNOC Onshore concession, which includes Abu Dhabi's 15 major onshore oil fields; the concession is operated by ADNOC Onshore and signed for a 40-year duration to 2055;
- 15% in ADNOC Gas Processing, a company that processes the associated gas produced by ADNOC Onshore to extract condensates.

In addition, TotalEnergies holds a 10% stake in the Ruwais Diyab unconventional gas concession, operated by ADNOC and awarded until 2063, which is currently in the development phase. TotalEnergies reduced its participation to 10% after the transfer of both operatorship and 30% interests to ADNOC.

In addition, TotalEnergies holds a 24.5% stake in Dolphin Energy Ltd., which sells gas produced on the Dolphin North Field-Block NF, in the North Field, Qatar, to the United Arab Emirates and Oman.

In **Qatar**, production comes mainly from TotalEnergies' stakes in the offshore fields of Al Khalij (40%, operator), Al Shaheen (30%) and Dolphin Block, North Field (24.5%). Developments continued in 2024 on the Al Shaheen field, operated by North Oil Company, which is owned by TotalEnergies (30%) and QatarEnergy (70%), with a duration of 25 years starting from 2017.

In **Libya**, production comes from the Waha (20.42%) and El Sharara onshore fields located in Blocks 129-130 (15%) and 130-131 (12%) and the Al Jurf offshore field located in Blocks 15, 16 and 32 (37.5%). The Mabruk field (37.5%), located in onshore Blocks 70 and 87, has been shut down since the end of 2014; following the installation of an early production facility its production is to restart in 2025.

In November 2021, TotalEnergies signed various agreements for the sustainable development of the country's natural resources, in particular the construction and operation of a 500 MW photovoltaic power plant, and an increase in its interest in the Waha concession from 16.33% to 20.42%. This increase in interests was finalized in November 2022.

The production from Libyan onshore assets has been disrupted on a regular basis since 2022, notably due to security and social issues. Production from Libyan onshore assets was interrupted several times in 2024 for security reasons.

In **Algeria**, production comes from TotalEnergies' interests in the TFT II (26.4%), TFT Sud (49%) and Timimoun (37.75%) gas fields and the Ourhoud and El Merk oil fields in the Berkine basin located in Blocks 404a and 208 (12.25%). In July 2023, TotalEnergies and Sonatrach agreed to convert the production contracts of TFT II and TFT Sud within the framework of the new Algerian oil law promulgated in December 2019, allowing the continuation of the investment program aimed at increasing the combined production of the two fields to over 100 kboe/d by 2026. The Council of Ministers validated the conversion of those contracts on October 15, 2023.

On Timimoun, production continues under the gas concession and marketing contracts which entered into force in 2018.

In the Berkine basin, in July 2022, TotalEnergies and its partners and Sonatrach signed a new 25-year oil contract for Blocks 404a and 208.

In **Oman**, TotalEnergies' oil production comes from its interests in the fields on Block 6 (4%) and Block 10 (26.55%, natural gas). On the onshore Block 11 (22.5%), following a 3D seismic survey in 2022, three positive appraisal wells were drilled in 2023 and 2024. TotalEnergies drilled two dry exploration wells in 2024 on onshore Block 12 (50%, operator after the transfer of a 30% interest to Petronas in October 2023).

In **Iraq**, TotalEnergies' production comes from its 45% interest in the Ratawi field and its 22.5% stake in the risk service contract for the Halfaya field, located in the province of Missan.

On the Halfaya field, the plant treating associated gas and enabling the recovery of LPGs and condensates started operations in August 2024. In the first half of 2024, production continued to be affected by OPEC+ production quotas.

In July 2023, TotalEnergies joined the Gas Growth Integrated Project (GGIP) for the sustainable development of natural resources in the Basra region. This major multi-energy project combines the redevelopment of the Ratawi field, the recovery of gas now flared on three oil fields, including Ratawi, in order to feed power plants, a 1 GW solar farm and the construction of a seawater treatment plant for injection and to maintain the pressure of the region's oil fields. These agreements became effective in August 2023 and TotalEnergies has been operating the Ratawi field since November 2023.

On this field, the AGUP Phase 1 project (Associated Gas Upgrade Project), launched in September 2023, will restore the integrity and operability of the existing facilities to secure current production (around 60 kb/d) and then increase it to 120 kb/d. In a second phase, the AGUP Phase 2 project will build new processing units to increase oil production to 210 kb/d and gas production to 160 Mcf/d.

At year-end 2024, TotalEnergies has taken the Final Investment Decision of ArtawiGas25 Project, a first processing facility for the associated gas from the Ratawi field. This facility is expected to process 50 Mcf/d of gas previously flared, as early as year-end 2025. The GGIP also includes a large-scale gas processing plant, with a first phase of 300 Mcf/d that will recover gas being flared on three oil fields and supply gas to a 1.5 GW capacity power plant.

The sale of the Company's 18% interest in the Sarsang field, located in the Kurdistan region of Iraq, was finalized in September 2022.

In **Yemen**, after the sale in November 2022 of its stake in onshore Block 5 (Marib Basin, Jannah license, 15%), TotalEnergies relinquished its stake in Block 70 to the Government in May 2023. TotalEnergies retains interests in three onshore exploration licenses, which have been in force majeure since 2015.

In **Cyprus**, TotalEnergies is present in offshore exploration Blocks 7 (50%, operator), 11 (50%, operator), 2 (20%), 3 (30%), 6 (50%), 8 (40%) and 9 (20%). On Block 6, two exploration wells, Cronos-1 and Zeus-1, drilled in 2022, resulted in two natural gas discoveries. In February 2024, drilling and production testing of the Cronos-2 appraisal well on Block 6 was successfully completed. In February 2025, the partners signed a Host Governmental Agreement with the Arab Republic of Egypt and the Republic of Cyprus, establishing a framework that allows Cronos gas to be processed via the existing infrastructure of the Zohr field, offshore Egypt, and then liquefied at the Damietta LNG plant in Egypt for export to Europe. Following this agreement, the partners are working on the development and production plan for Cronos in close collaboration with the Cyprus authorities.

In **Lebanon**, TotalEnergies is the operator of offshore Block 9 (35%) on which a dry exploration well was drilled in 2023. TotalEnergies was also the operator of Block 4, on which a well was drilled in 2020 with negative results and was relinquished to the Government in October 2023.

In **Egypt,** TotalEnergies was the operator of offshore exploration Block 3 (35%), relinquished in June 2024.

In **Iran**, TotalEnergies ceased all operational activities prior to the re-imposition of US secondary sanctions on the oil industry with effect from November 5, 2018.

In **Syria**, TotalEnergies discontinued its activities connected with oil and gas production since December 2011.

2.3 Integrated LNG segment

Since the first quarter of 2023, TotalEnergies has separated in its published results the Integrated LNG segment covering its LNG and low-carbon gas activities and the Integrated Power segment covering the integrated electricity chain.

The Integrated LNG segment covers the integrated gas chain (including upstream and midstream LNG activities) as well as biogas, hydrogen and gas trading activities.

In its final statement, the COP28 recognized the utility of transitional fuels in achieving "Net Zero". TotalEnergies shares this conclusion, which reinforces its growth strategy in gas, and particularly LNG. Gas remains key for the energy transition to support the development of intermittent renewables and rapidly reduce CO_2 emissions through switching from other fossil fuels such as coal that emit significantly more.

Main indicators

$4.9 billion
CFFO[1] in 2024

40 Mt
Volumes of LNG sold in 2024

No. 1
US LNG exporter with over **10 Mt** in 2024[2]

25
Long term chartered LNG carriers in 2024

20.8 Mt
Regasification capacity in Europe in 2024

Main objectives and ambitions

Methane emissions
Tending towards zero
by 2030

+50%
LNG sales growth (excluding Russia excluding spot) between 2023 and 2030

>15 Mt/y
US LNG exportation by 2030

30
Long term chartered LNG carriers by 2030

Hydrocarbon production and LNG sales

Hydrocarbon production for LNG	2024	2023	2022
Integrated LNG *(kboe/d)*	487	449	469
Liquids *(kb/d)*	60	58	53
Gas *(Mcf/d)*	2,331	2,128	2,267
Integrated LNG excluding Novatek *(kboe/d)*	487	449	413

Liquefied Natural Gas	2024	2023	2022
Overall LNG sales *(Mt)*	39.8	44.3	48.1
Including sales from equity production[a]	*15.5*	*15.2*	*17.0*
Including sales by TotalEnergies from equity production and third party purchases	*34.7*	*40.1*	*42.8*

(a) The Company's equity production may be sold by TotalEnergies or by the joint-ventures.

Hydrocarbon production for LNG was up 8% in 2024 compared to 2023, thanks to higher installations availability, notably QatarEnergy LNG N(2), and to the acquisition of interests in gas permits in the Eagle Ford basin in Texas, compensating an un planned maintenance on Ichthys LNG in Australia during third quarter.

LNG sales in 2024 were down 10% in 2024 year-on-year, in a lower demand context in Europe, mainly due to high inventories in the beginning of the year.

(1) Refer to the glossary for definitions and additional information on alternative performance measures (APM, Non-GAAP measures) and to point 1.9 of chapter 1 for reconciliation tables.
(2) Long term FOB contracts - Source: TotalEnergies' data.

Results

(in $ millions, except the average price of LNG)	2024	2023	2022
Average price of LNG ($/Mbtu)[a]	9.80	10.76	15.90
Consolidated subsidiaries and equity affiliates			
Adjusted net operating income	4,869	6,200	11,169
Including adjusted income from equity affiliates	*1,978*	*2,103*	*5,637*
Organic investments[b]	2,169	2,063	519
Acquisitions net of assets sales[b]	1,367	1,096	(47)
Net investments[b]	3,536	3,159	472
Cash flow from operations excluding working capital (CFFO)[b]	4,903	7,293	9,784
Cash flow from operating activities	5,185	8,442	9,604

(a) Sales in $ / Sales in volume for consolidated and equity affiliates. Does not include LNG trading activities.
(b) Refer to the glossary for definitions and additional information on alternative performance measures (APM, Non-GAAP measures) and to point 1.9 of chapter 1 for reconciliation tables.

Integrated LNG adjusted net operating income was $4,869 million in 2024, down 21% year-on-year, mainly due to lower average LNG selling prices and low market volatility during the first three quarters that impacted gas trading results.

Cash flow from operations excluding working capital (CFFO) was $4,903 million in 2024, down 33% year-on-yearfor the same reasons.

2.3.1 Presentation of the segment

TotalEnergies is implementing an integrated strategy for profitable growth in the **liquefied natural gas** (LNG) segment and along the whole natural gas value chain. TotalEnergies is also involved in the trading of LNG and complementary products (liquefied petroleum gas, petcoke and sulfur) and is developing positions in low-carbon gases.

Worldwide LNG market volumes grew by 6% a year on average between 2015 and 2024[1], thanks to the switch from coal to natural gas. In Europe, Russia's invasion of Ukraine has led the continent's countries to sharply reduce their imports of Russian gas by pipeline. To mitigate this, Europe has increased its regasification capacity and LNG imports. In 2024, in a context of persistently tight market conditions, the measures taken combined with a fall in demand for gas enabled Europe to secure its supply at an average price below that of 2022 and 2023, albeit at a much higher level than before the crisis. Europe (European Union and United Kingdom) imported 91 Mt of LNG in 2024 compared with 113 Mt in 2023 and 115 Mt in 2022[2].

Worldwide LNG demand is expected to continue to grow by an average of 5% or 6% per year between 2024 and 2030, driven mainly by Asia. Supplies are likely to remain tight until 2027, when new liquefaction projects launched in the wake of rising gas prices, mainly in Qatar and North America, are expected to generate a sharp increase in global production.

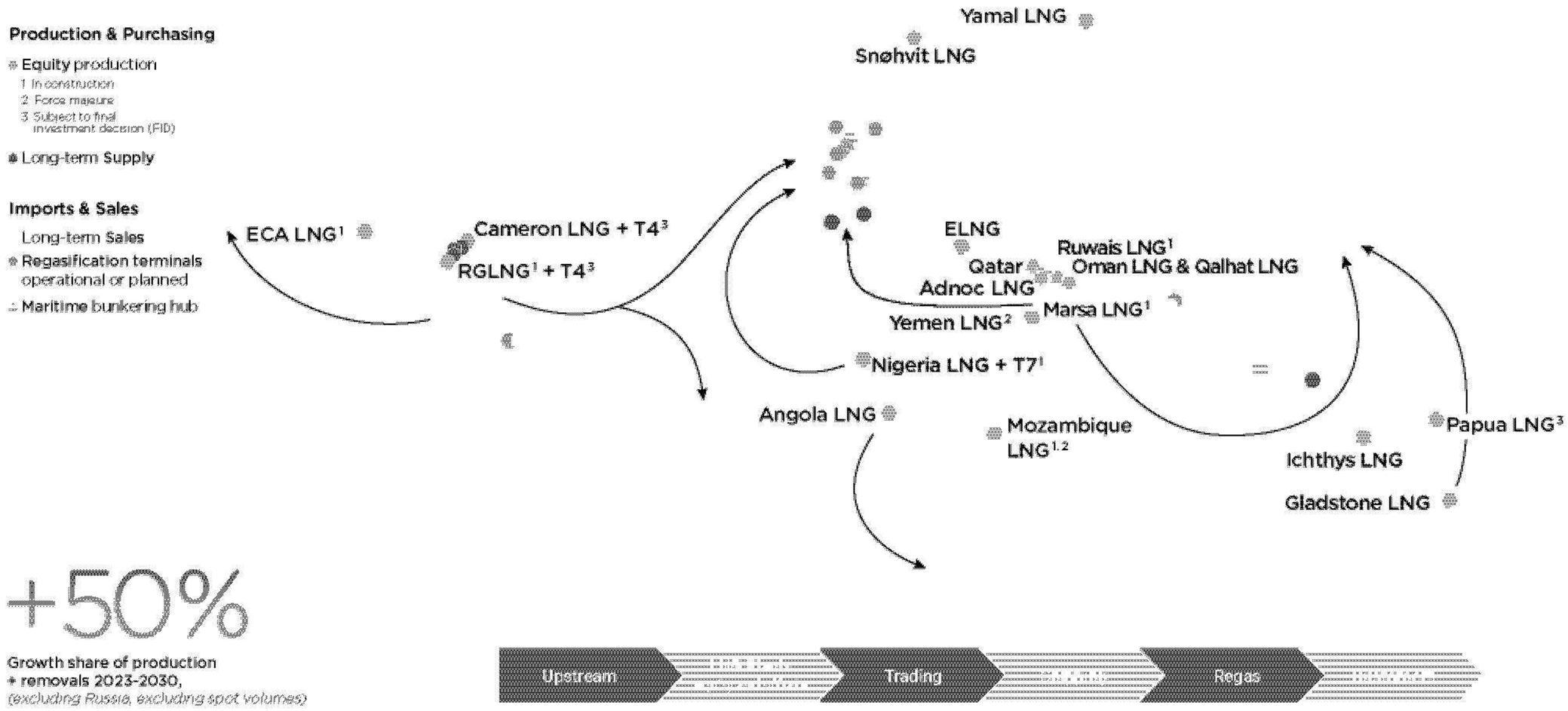
Due to its solid, diversified positions, TotalEnergies is still the world's third largest player in LNG, with a global portfolio of 40 Mt and a global market share of about 10%[3] in 2024. The Company is the leading importer in Europe. TotalEnergies' LNG sales in EU and UK reached 13.8 Mt in 2024 compared to 22.8 Mt in 2023 and to 26.5 Mt in 2022 thanks to a 21 Mt/y of regasification capacity. The Company is also the leading United States exporter[4] (with over 10 Mt in 2024[5]).

In accordance with its balanced multi-energy strategy, the Company intends to consolidate its integrated position throughout the LNG value chain and its position as third largest global LNG player by developing a portfolio of leading projects (such as North Field East and North Field South in Qatar, Marsa LNG in Oman, Rio Grande LNG in the United States, Energía Costa Azul in Mexico, Mozambique LNG in Mozambique and Papua LNG in Papua New Guinea). TotalEnergies has strengthened its presence across the entire chain, from upstream activities, thanks mainly to its interests in liquefaction plants located in the major production areas, through midstream activities, such as transportation, regasification and trading, and through distribution to end customers. TotalEnergies' managed volumes (excluding Russian and spot volumes) are thus expected to grow by 50% between 2023 and 2030. TotalEnergies also intends to continue increasing its LNG exports from the United States (with more than 15 Mt in 2030) and to focus on improving the flexibility and resilience of its LNG portfolio, in particular by continuing to increase its Brent-indexed sales in Asia. It plans to increase its fleet of long-term chartered LNG carriers to 30 vessels by 2030 and to remain amongst the first regasification capacity holders in Europe, above 20 Mt/y.

The LNG sold by TotalEnergies on worldwide markets comes in part from equity production in natural gas and condensate fields or liquefaction plants of which the subsidiaries are shareholders (refer to point 2.3.2). It also comes from purchase agreements concluded with third parties (refer to point 2.3.3).

(1) Source: IHS *Historical Bilateral LNG Trade Data*; January 2024.
(2) Source: IHS *Historical Bilateral LNG Trade Data*; January 2024.
(3) Source: IHS *Historical Bilateral LNG Trade Data*; January 2024, for the worlwide market size.
(4) Source: TotalEnergies' data.
(5) Long term FOB contracts.

A diversified, integrated portfolio, resilient through cycles



In response to the issue of methane emissions, TotalEnergies has reinforced in 2024 its target to reach a below 0.1% methane intensity by 2030 on its gas facilities, to extend it to all its upstream oil and gas operated facilities. Thanks to the efforts made, the Company reached its objective in 2024, one year ahead of schedule, of 50% methane emissions reduction compared to 2020(1), and targets a reduction by 80% in 2030.

In the **low-carbon gas** segment, the Company intends to develop the production and marketing of **biogas**, mainly in Europe and the United States, in order to meet incorporation obligations and to support its clients who wish to decarbonize their own activities. In Europe, in the context of the REPowerEU plan to end dependence on Russian gas and taking into account the support mechanisms for the development of biogas, TotalEnergies intends to develop its activities by capitalizing on its French and Polish subsidiaries and the portfolio of projects in the United States. At the end of 2024, the gross installed production capacity reached 1.2 TWh/y. Likewise, as regards **low-carbon hydrogen**, TotalEnergies intends to develop its business in Europe as a priority to meet part of the needs of its refineries.

2.3.2 LNG production and liquefaction

TotalEnergies' share of LNG production stood at 15.5 Mt in 2024 compared to 15.2 Mt in 2023 and 17.0 Mt in 2022.

Hydrocarbon production for LNG was up 8% in 2024.

LNG production growth is expected to continue in coming years thanks to liquefaction projects under construction (Rio Grande LNG in the USA, NFE and NFS in Qatar, ECA in Mexico, NLNG T7 in Nigeria and Marsa LNG in Oman) or under study.

The information below describes the main development, production and liquefaction activities of the Integrated LNG segment, presented by geographical area. The capacities are expressed on a 100% basis, regardless of TotalEnergies' interest in the asset.

AFRICA (EXCLUDING NORTH AFRICA)

In **Nigeria**, TotalEnergies holds a 15% interest in Nigeria LNG (NLNG), whose main asset is a liquefaction plant with a total capacity of 22 Mt/y. The project to install an additional 7.6 Mt/y of capacity is in progress. TotalEnergies is also present in the onshore fields of the OML 58 Block (40%, operator) in the context of its joint-venture with Nigerian National Petroleum Corporation Ltd (NNPC), which has been supplying gas to NLNG for about twenty years. In 2024, the final investment decision for the development of Ubeta gas field was taken in order to supply NLNG. The OML 58 onshore fields also supply gas to the Nigerian domestic market.

In **Angola**, TotalEnergies holds a 13.6% interest in Angola LNG (ALNG), which owns a gas liquefaction plant of 5.2 Mt/y capacity, located near Soyo, that is supplied by the gas associated with the production of Blocks 0, 14, 15, 17, 18, 31 and 32. In July 2022, TotalEnergies, a partner in the New Gas Consortium (NGC, 11.8%), announced the final investment decision for the Quiluma and Maboqueiro offshore gas field development project. This project is the first non-associated natural gas project developed in Angola. The gas produced from the two offshore fields Quiluma and Maboqueiro will supply the Angola LNG plant, thereby increasing Angola's LNG production and the availability of domestic gas for the country's industrial development. Production is scheduled to start in mid-2026.

In **Mozambique**, TotalEnergies EP Mozambique Area 1 (TEPMA1) holds a 26.5% interest in the Mozambique LNG project (acquisition in September 2019 from Occidental Petroleum Corporation), for which the final investment decision was taken in June 2019. The project includes the construction of two onshore trains with a total capacity of 13.1 Mt/y to liquefy the gas produced by the Golfinho and Atum fields in Offshore Area 1.

In light of the evolving security situation in the north of the Cabo Delgado province in Mozambique, TotalEnergies announced on April 26, 2021, the withdrawal of all personnel from the Mozambique LNG project site in Afungi. Consequently, Mozambique LNG declared force majeure.

(1) Methane emissions from operated facilities were 29 kt in 2024 compared to 34 kt in 2023 and 42 kt in 2022.

In December 2022, on behalf of Mozambique LNG, the Company entrusted Mr. Jean-Christophe Ruffin[1], to assess the humanitarian situation in the Cabo Delgado province, in the north of Mozambique, where Mozambique LNG project is located, and the socio-economic development programs undertaken by Mozambique LNG. In May 2023, TotalEnergies made public Mr. Jean-Christophe Ruffin's report, as well as the actions plan adopted by the Mozambique LNG partners based on the report's recommendations. For further information, refer to point 3.6.8.1 in chapter 3.

In 2024, Mozambique LNG conducted limited activities with its contractors, compatible with the security situation, aimed at preserving the site and preparing for the restart of the project once the conditions for lifting the force majeure are met.

The sale of nearly 90% of Mozambique LNG future production has been secured through long-term contracts for delivery to customers in Asia and Europe. In addition, part of the gas from the Golfinho and the Atum fields is intended for the domestic market in order to contribute to the country's economic development.

AMERICAS

In the **United States**, TotalEnergies is active in liquefaction through its 16.60% stake in the Cameron LNG plant in Louisiana. The production of the three phase 1 trains with a capacity of 4.5 Mt/y each, began in 2019 (train 1) and 2020 (trains 2 and 3). The study to expand the plant beyond its initial capacity of 13.5 Mt/y is ongoing. In the context of the extension, an agreement has been signed with Sempra Infrastructure, Mitsui & Co., Ltd. and Mitsubishi Corporation aiming to study the development of the Hackberry Carbon Sequestration (HCS) project for the capture, transportation and storage from Cameron LNG's site, in order to significantly reduce its GHG emissions.

In June 2023, TotalEnergies acquired from the U.S. company NextDecade[2] a 16.7% stake in the first phase of the Rio Grande LNG (RGLNG) project, a natural gas liquefaction plant, in South Texas. This first phase is composed of three liquefaction trains for a total capacity of 17.5 Mt/y, and is scheduled to start production in 2027. The terms of the agreement provide for TotalEnergies to offtake 5.4 Mt/y of LNG from this first phase for 20 years. TotalEnergies has held a 17.5% stake in NextDecade since September 2023 and will have the right to participate in subsequent phases of the project as well as a carbon capture and storage (CCS) project planned by NextDecade to reduce emissions generated by the LNG project.

TotalEnergies operates assets (held at 95% on average) in the Barnett Shale basin, with 1,513 active wells grouped in several sites and holds an interest in 310 non-operated wells. An investment program including drilling and well maintenance activities is being implemented to maintain the production. TotalEnergies measures and physically reduces its greenhouse gas emissions, particularly methane, thanks to the replacement of gas instrumentation with compressed air (all active sites equipped in March 2024), spectrometers mounted on drones (AUSEA technology), mobile sensors, infrared cameras with quantification algorithms (LDAR - Leak Detection and Repair program), and fixed methane detectors operating continuously (113 production sites equipped in December 2024, with the objective of converting all active sites by the end of 2025).

In 2024, TotalEnergies acquired interests in assets operated by third parties in the Eagle Ford basin in southwest Texas: a 20% interest in the Dorado dry gas assets in April and a 45% interest acquisition in dry gas assets operated by Lewis Energy Group.

In **Mexico**, TotalEnergies holds a 16.6% stake in the Energia Costa Azul (ECA) gas liquefaction project (nominal capacity of 3 Mt/y) currently under construction with start-up scheduled for 2026. The Company has agreed to offtake around 1.7 Mt/y.

ASIA-PACIFIC

In **Australia**, LNG production comes from the Ichthys LNG (26%) and Gladstone LNG (GLNG, 27.5%) projects.

The Ichthys LNG project involves the development of a gas and condensate field located in the Browse Basin. This development includes subsea wells connected to a platform for gas production, processing and export, an FPSO for condensate processing and export, an 889 km gas pipeline and an onshore liquefaction plant at Darwin, comprising two trains with a total nominal capacity of 8.9 Mt/y of LNG. Ichthys LNG has reached its production plateau and various adjustments have allowed it to reach 110% of nameplate capacity. A compression project was approved in 2021, to further extend the plateau. In addition to LNG, the facilities produce approximately 110 kboe/d of condensates and LPG.

In August 2023, TotalEnergies and INPEX (operator of the Ichthys LNG project) signed an agreement for the acquisition of PTTEP's 100% interest in the AC-RL7 permit. Under the terms of the agreement, TotalEnergies acquired a 26% stake in the permit, corresponding to its share in Ichthys LNG. INPEX acquired the remaining 74% while assuming operatorship. The permit, located approximately 250 kilometers northeast of the Ichthys offshore facilities, includes the Cash and Maple gas and condensate fields. Their development is expected to contribute to the long-term supply of the Ichthys LNG liquefaction plant.

In August 2022, the Bonaparte CCS Assessment joint-venture between TotalEnergies (26%), INPEX and Woodside was awarded a CO_2 Storage Assessment Permit, off the northwest coast of Australia, to carry out evaluation and appraisal work on Block G-7-AP for geological storage of CO_2 in order to reduce GHG emissions from Ichthys LNG. The appraisal program includes a seismic survey and two appraisal wells drilled both realized in 2024.

GLNG is an integrated project with production from the Fairview, Roma, Scotia and Arcadia fields transported to a liquefaction plant on Curtis Island in Queensland with a capacity of 7.8 Mt/y with two trains both in production. TotalEnergies entered into a tolling agreement with GIP Australia (GIP) effective since January 1, 2021, whereby GIP will receive a tolling income for 15 years based on the volumes of gas (TotalEnergies' share) passing through the downstream processing facilities. In June 2023, TotalEnergies signed an agreement with Gentari under which the partners plan to jointly develop the Pleasant Hills solar project to supply low-carbon electricity to the gas facilities of the Roma field.

In **Malaysia**, TotalEnergies finalized in December 2024 the acquisition of the respective 50% stakes of OMV and SapuraEnergy in SapuraOMV Upstream, an independent Malaysian gas producer and operator. SapuraOMV's main assets are its 40% operated interest in Block SK408 and 30% operated interest in Block SK310, both located offshore Sarawak in Malaysia.

Following a unitization agreement signed in July 2024 between the partners of Block 2E (85%) and those of Block SK318, the Block 2E has a right to 10% of the production from the Marjoram field, which is expected to start in 2026.

In **Papua New Guinea**, TotalEnergies holds a 37.5% stake (operator) in Block PRL-15 following the divestment of a 2.6% stake to JX Nippon in 2023. The State of Papua New Guinea retains the right to acquire up to 22.5% stake in the license (at the final investment decision), which would reduce TotalEnergies' stake to 29.1%.

(1) Mr. Jean-Christophe Ruffin is one of the co-founders of Médecins sans frontières and honorary president of the NGO Action Against Hunger.
(2) Company listed on NASDAQ.

Block PRL-15 encompasses the Elk and Antelope fields. It is anticipated that the gas produced from these fields will be conveyed through a 320 km onshore/offshore pipeline to the Caution Bay site. The project includes the allocation of 2 Mt/y of liquefaction capacity in a facility operated by a partner and the construction of three additional electrical liquefaction trains with a total capacity of 4 Mt/y at the same site.

In April 2019, TotalEnergies and its partners signed an agreement with the authorities of Papua New Guinea defining the fiscal framework for the development of the Papua LNG project. This agreement has been supplemented by a Fiscal Stability Act agreement, signed with the State in February 2021, and an agreement allowing the extension of the PRL-15 license by 5 years until 2026.

The integrated Front End Engineering and Design (FEED) studies, also encompassing the downstream part, were initiated in March 2023. After receiving the responses to the calls for tenders in 2024, it was decided to defer the project launch due to the high investments required, to review its design and issue new calls for tender with an expanded panel of contractors to optimize costs.

EUROPE

In **Norway**, TotalEnergies holds an 18.40% interest in the Snøhvit gas liquefaction plant (nominal capacity of 4.2 Mt/y). Production resumed in June 2022, following a 20-month shutdown due to a fire.

In **Russia**, TotalEnergies holds a 20.02% direct interest in the Yamal LNG gas liquefaction plant (nominal capacity of 17.4 Mt/y). Additionally, TotalEnergies holds a 10% direct interest in the Arctic LNG 2 project (19.8 Mt/y, under construction).

Since July 2021, TotalEnergies holds a 10% direct interest via TotalEnergies EP Transshipment in the Arctic Transshipment[1] company, which was established to serve Arctic LNG 2 by enabling the transshipment of LNG cargoes from Arctic LNG carriers (icebreakers) to conventional LNG carriers at the transshipment terminals in Murmansk and Kamchatka.

Given the uncertainties that technological and financial sanctions targeting Russia pose on the ability to complete the Arctic LNG 2 project, TotalEnergies has ceased recognizing as proved reserves the resources associated with the Arctic LNG 2 project since December 31, 2021, and has provisioned in its accounts the value of its investments in the project as of March 31, 2022. Moreover, TotalEnergies no longer records reserves from its interest in Novatek since the end of 2022.

The US Office of Foreign Assets Control (OFAC) designated, Arctic Transshipment and Arctic LNG 2 as Specially Designated Nationals list on September 14, 2023 and November 2, 2023, respectively, with immediate effect subject to temporary exceptions under OFAC-issued licenses. These designations prohibit US persons from trading with those two entities. Any non-US person is exposed to the risk of secondary US sanctions if they provide material support to these entities. Since April 18, 2023, TotalEnergies EP Transshipment has not participated in any governance body and has not paid any cash calls to Arctic Transshipment. The Company is party to an LNG purchase contract with Arctic LNG 2, for which the Company had indicated that it could not terminate it early without exposing itself financially to significant consequences in the absence of economic sanctions, and that it would exercise the force majeure clauses provided for in the contract to suspend it if sanctions were imposed. On November 2, 2023, the Arctic LNG 2 company was placed under sanctions by the U.S. authorities. Consequently, as announced, on November 7, 2023, TotalEnergies initiated the contractual suspension procedure provided for in the Arctic LNG 2 shareholders' agreement and the force majeure procedure for the LNG purchase contract with Arctic LNG 2. Upon notification of these procedures, TotalEnergies' rights and obligations under these contracts were suspended (refer to point 3.2.1 of Chapter 3).

MIDDLE EAST AND NORTH AFRICA

In **Qatar**, TotalEnergies participates in the production, processing and liquefaction of gas from the North Field through its interest in:

- QatarEnergy LNG N(2) (formerly Qatargas 2): TotalEnergies holds a 16.7% interest in train 5, which has a production capacity of 8 Mt/y of LNG;
- North Field East (NFE) and North Field South (NFS): TotalEnergies announced in June and September 2022 its entry in the NFE (6.25%) and NFS (9.375%) projects. These projects include four trains with a total planned capacity of 32 Mt/y for NFE and two trains with a total planned capacity of 16 Mt/y for NFS, which are currently under construction. These interests are expected to add, 3.5 Mt/y of production (Company share) to the TotalEnergies' global LNG portfolio by 2028;
- QatarEnergy LNG N(1) (formerly Qatargas 1): TotalEnergies held a 20% interest in the North Field-Qatargas 1 Upstream field and a 10% interest in the LNG plant (three trains with a total capacity of 10 Mt/y), for which the upstream license and LNG plant partner agreement expired on December 31, 2021. The transfer of shares in the Qatargas 1 LNG plant was finalized in February 2024.

In **Oman**, TotalEnergies holds a 80% stakes in Marsa LNG LLC (alongside the national company OQ 20%), which holds a 33.19% interest in onshore gas Block 10 in the Greater Barik area, which started production in January 2023. The gas from this block will feed a low-GHG emissions LNG plant with a capacity of 1 Mt/year, starting in March 2028. The final investment decision for this plant was announced in April 2024[2].

TotalEnergies also produces LNG through its investments in the Oman LNG (5.54%)/Qalhat LNG (2.04% via Oman LNG) liquefaction complex, with an overall capacity of 11.4 Mt/y. In November 2023, TotalEnergies signed an agreement allowing it to extend these shareholdings beyond 2024, for 10 years for Oman LNG (trains 1 and 2) and for 5 years for Qalhat LNG (train 3), including investments aimed at reducing the site's GHG emissions.

In the **United Arab Emirates**, TotalEnergies holds a 5% stake in ADNOC LNG (nominal capacity of 6 Mt/y), a company that processes associated gas supplied by ADNOC Offshore to produce LNG, LPG and condensates, as well as a 5% stake in National Gas Shipping Company (NGSCO), a company responsible for chartering ships and providing logistics for ADNOC LNG's needs.

In July 2024, TotalEnergies took a 10% interest in the Ruwais LNG project including a new natural gas liquefaction plant with two electrical trains with a total capacity of 9.6 Mt/year, scheduled to start in the second half of 2028.

In **Egypt**, TotalEnergies owns a 25% interest in the North El-Hammad offshore Block, on which part of the Bashrush offshore field is located, with the other part located on the Baltim Block. A unitization agreement signed in 2022 gives the Company rights to natural gas and condensate production since June 2022. In addition, TotalEnergies holds a 5% interest in the first train (capacity of 3.6 Mt/y) of Egyptian LNG's Idku liquefaction plant.

In **Yemen**, the deterioration of security conditions in the vicinity of the Balhaf site caused the company Yemen LNG, in which TotalEnergies holds a stake of 39.62%, to cease commercial production and export of LNG activities and declare force majeure to its various stakeholders in 2015. The plant has been placed in preservation mode.

(1) Arctic Transshipment is a Russian company jointly owned by Novatek (90%) and TotalEnergies EP Transshipment (10%) at December 31, 2024.
(2) The structure of the agreements between TotalEnergies and Oman Oil Company (OQ) leads to the equity method accounting of Marsa LNG from April 2024.

2.3.3 Intermediary activities: purchase, sale, trading and transportation of LNG and natural gas

PURCHASE, SALE AND TRADING OF LNG

In 2024, LNG trading activities represented a volume of 34.7 Mt, compared with 40.1 Mt in 2023 and 42.8 Mt in 2022. These volumes represent sales by TotalEnergies stemming from equity production and purchases from third parties.

TotalEnergies, with trading teams located in Geneva, Houston, Paris, and Singapore, develops its activities with the management and optimization of a portfolio of long-term contracts coupled with a strong presence on spot markets.

TotalEnergies purchases long-term volumes of LNG, in many cases from liquefaction projects in which the Company holds an interest. New sources of LNG from plants already in operation (Oman LNG – 0.8 Mt/y for 10 years from 2025, ADNOC Gas in the UAE for three years - signed in 2023), projects under construction (Rio Grande LNG in the United States – 5.4 Mt/y for 20 years from 2027, NFE and NFS in Qatar – 3.5 Mt/y for 27 years from 2026, ECA in Mexico, NLNG T7 in Nigeria, Mozambique LNG in Mozambique as well as volumes of LNG not sold as marine fuel from Marsa LNG in Oman from 2028) or under study, are expected to ensure the growth of the LNG portfolio in the coming years (refer to point 2.3.2).

TotalEnergies also purchases long-term LNG volumes mainly from plants in which the Company has no equity (Sabine Pass, Corpus Christi, and Freeport in the United States and also from Algeria - extension of the 2 Mt/y supply contract with Sonatrach to 2025). Deliveries from Cove Point (United States) ended in 2022.

In 2024, TotalEnergies purchased 366 shipments under long term contracts from Algeria, Australia, Egypt, the United States, Nigeria, Norway, Qatar and Russia and 188 spot or medium-term shipments, compared with 398 and 223 shipments in 2023 and 385 and 289 in 2022 respectively. Deliveries from Yemen LNG have been halted since 2015.

In addition, TotalEnergies holds several long-term LNG sales contracts, mainly in Asia (China, South Korea, India, Indonesia, Japan, Singapore, and Taiwan), but also in Brazil, Chile, Panama and the Dominican Republic.

The contract signed in 2022 with Korea's Hanwha Energy Corporation for the supply of 0.6 Mt/year of LNG over 15 years, starting in 2024, has been followed by the signature, in 2024 and 2025, of several sales contracts, mainly with Asian players.

- In February 2024, an agreement with Sembcorp for the supply of 0.8 Mt/y of LNG over a 16-year period from 2027. This new agreement comes on top of the existing contract which lasts until 2029.
- In June 2024, a sales contract with Indian Oil Corporation, for which the memorandum of understanding was signed in July 2023, providing for the delivery to India of 0.8 Mt/year of LNG for ten years from 2026, and a sales agreement with Korea South East Power providing for the delivery to South Korea of approximately 0.5 Mt/year of LNG for five years from 2027.
- In September 2024, a sales agreement with BOTAŞ, for the delivery of 1.1 Mt/year of LNG for 10 years from 2027, as well as a five-year extension of the sales contract with CNOOC, for the delivery in China of 1.25 Mt/year of LNG until 2034, and a sales agreement with HD Hyundai Chemical for the delivery of 0.2 Mt/year of LNG for seven years from 2027.
- In November 2024, a sales agreement with Sinopec, for the delivery of 2 Mt/year of LNG for 15 years, starting in 2028.
- In February 2025, a sales agreement with Gujarat State Petroleum Corporation Limited (GSPC), for the delivery of 0.4 Mt/year of LNG for 10 years, starting in 2026.

Additionally, TotalEnergies is developing LNG retail sales (by barge and tanker trucks) for industrial use or mobility (LNG for shipping or road mobility) in Europe, in the Caribbean in partnership with AES and in China via the joint-venture created in March 2021 with Shenergy Group.

LNG SHIPPING

In the framework of its LNG transportation activities, TotalEnergies Gas & Power Limited (TEGPL) operates a long term chartered fleet of 25 LNG carriers at year-end 2024 (compared to 19 at year-end 2023). In 2023, TEGPL sold its last co-owned LNG carrier (50%, with the Japanese shipowner NYK). This fleet is regularly renewed to benefit from best performing and lowest environment impacting vessels. It also includes two regasification vessels (FSRU) set up in Germany and France. In addition to the long-term fleet, each year TEGPL charters spot and short-term ships to serve trading needs and to adapt transportation capacity to seasonal demand.

The subsidiary TotalEnergies EP Norge charters two LNG carriers directly from the shipowners, in addition to the 25 chartered LNG carriers by TEGPL.

Finally, LNG carriers are chartered through the Company's interests in LNG production and export projects that control their own fleet, such as Nigeria LNG, Angola LNG and QatarEnergy.

TotalEnergies uses LNG ships selected in accordance with a process detailed in point 2.5.2.2.

NATURAL GAS TRADING AND TRANSPORTATION

TotalEnergies is active in the trading of natural gas in Europe and North America. It sells its output to third parties and supplies its subsidiaries.

In **Europe**, TotalEnergies sold 736 TWh of natural gas in 2024, compared with 924 TWh in 2023 and 888 TWh in 2022.

In **North America**, TotalEnergies sold 263 TWh of natural gas in 2024 from its own production or from external resources, compared to 282 TWh in 2023 and 305 TWh in 2022.

TotalEnergies holds interests in gas pipelines located in Brazil and Argentina.

2.3.4 LNG regasification

TotalEnergies holds interests in regasification assets and has signed agreements that provide long-term access to LNG regasification capacity worldwide, through existing assets in Europe (France, Germany, the Netherlands, and the U.K.), in Asia (India) and the Americas (United States and Panama).

Consequently, at year-end 2024 TotalEnergies had a long-term European LNG regasification capacity of 28.1 bcm/y (equivalent to 20.8 Mt/y).

In 2023, TotalEnergies finalized two regasification projects in Germany and France to contribute to Europe's security of supply in the context of the invasion of Ukraine by Russia. These projects involved the redeployment of two FSRUs previously operating in Asia and the Middle East. In France, the FSRU is based in Le Havre, while in Germany, it is located in Lubmin in partnership with Deutsche ReGas.

LNG regasification capacity[1] in Europe at year-end 2024

Country	Region/State	Terminal	Reserved TotalEnergies capacity *(bcm/y)*	Expiration
France	Provence-Alpes-Côte d'Azur	Fos Cavaou	7.7	≥2030
	Pays de la Loire	Montoir de Bretagne	7.0	2035
	Hauts-de-France	Dunkirk LNG	2.1	2036
	Normandy	Le Havre (FSRU)	2.2	2028
Germany	Mecklenburg-Western Pomerania	Deutsche Ostsee (FSRU)	2.6	2029
United Kingdom	Wales	South Hook LNG	2.0	2034
	Kent, England	Isle of Grain	3.3	2029
Netherlands	Rotterdam, South Holland	Gate	1.2	2029
Total			28.1	

Europe

In **France**, TotalEnergies has a regasification capacity of 7.7 bcm/y in the Fos Cavaou terminal, 7 bcm/y in the Montoir de Bretagne terminal, and 2.1 bcm/y in the Dunkirk LNG terminal. Since October 2023, the Company has had a 2.2 bcm/y regasification capacity in the Le Havre floating terminal. The authorization to operate was granted by the French authorities for a period of five years, in response to the emergency caused by the interruption of gas supplies by pipeline from Russia.

In **Germany**, TotalEnergies chartered a FSRU to Deutsche ReGas, which commissioned the Deutsche Ostsee terminal at the beginning of 2023, with a regasification capacity of 5 bcm/y in the port of Lubmin. TotalEnergies has a regasification capacity of 2.6 bcm/y in this terminal.

In the **United Kingdom**, as part of its stake in the Qatargas 2 project, TotalEnergies holds an 8.35% interest in the South Hook LNG regasification terminal which has a total capacity of 21 bcm/y and has access to 2.0 bcm/y of regasification capacity. TotalEnergies has also booked regasification capacity of 3.3 bcm/y at the Isle of Grain terminal.

In **Belgium**, TotalEnergies held a regasification capacity of 2.0 bcm/y in the Zeebrugge terminal, the contract for which expired at the end of September 2023.

In the **Netherlands**, TotalEnergies holds a regasification capacity of 1.2 bcm/y at the Gate terminal that is booked until 2029.

Rest of the world

In the **United States**, TotalEnergies has a regasification capacity of 5.0 bcm/y at the Sabine Pass terminal in Louisiana until 2029.

In **Panama**, the Colón LNG Marketing joint-venture with AES (TotalEnergies, 50%) holds a capacity of 0.3 bcm/y in the terminal until 2028.

In **India**, the partnerships between TotalEnergies and the Adani Group include several assets in the gas value chain, from LNG import facilities to gas distribution to domestic households. The Dhamra terminal, with a capacity of 6.8 bcm/y, started in May 2023 (refer to point 1.9.3 of chapter 1).

2.3.5 LPG, ethane, petcoke and sulfur trading

LPG, ETHANE, PETCOKE AND SULFUR TRADING

TotalEnergies is also present in the LPG, ethane, petcoke and sulfur markets.

In 2024, TotalEnergies traded and sold 7.1 Mt of LPG (propane and butane) and ethane worldwide, compared to 7.1 Mt in 2023 and 7 Mt in 2022. Almost 18% of these quantities came from fields or refineries operated by the Company. This trading activity was conducted using 13 long-term chartered vessels. In 2024, 255 voyages were necessary for transporting the quantities traded, including 191 voyages by TotalEnergies' long-term chartered vessels and 64 voyages by spot-chartered vessels.

TotalEnergies sells petcoke produced by the Port Arthur refinery in the United States and the Jubail refinery in Saudi Arabia. Petcoke is sold to cement producers and electricity producers, mainly in China, India, as well as in Mexico, Brazil, other Latin American countries, and Turkey. In 2024, 3.5 Mt of petcoke were sold on the international market, compared to 2.9 Mt in 2023 and 2.8 Mt in 2022.

TotalEnergies also sells sulfur, mainly from the production of its refineries. It sold 2.0 Mt of sulfur in 2024, compared to 1.7 Mt in 2023 and 2.5 Mt in 2022.

In 2015, TotalEnergies ceased its coal production activities, and it stopped selling and trading coal in 2016.

(1) Excluding short term capacity.

2.3.6 Biogas

TotalEnergies is involved in the development and operation of biogas production units, mainly from organic agricultural and agro-industrial waste. This biogas is either used to generate electricity and heat (cogeneration) or injected as biomethane into natural gas networks(1).

In addition, the anaerobic digestion process generates a co-product, digestate, a natural fertilizer with high agronomic value, which is used by farmers to replace synthetic fertilizers, in a virtuous circular economy scheme.

At year-end 2024, TotalEnergies' total annual gross production capacity amounted to 1.2 TWh biomethane equivalent (compared to 1.1 TWh in 2023 and 0.5 TWh in 2022). This represents the treatment of approximately 1.35 Mt/y of organic waste in order to provide renewable gas to the equivalent of 240,000 inhabitants, making it possible to avoid the emission of around 240 kt of CO_2(2). With 500 kt of digestate, this makes nearly 33 kt/y of chemical fertilizers that are replaced by a natural fertilizer.

Number of biogas production facilities and associated production capacity at year-end 2024

	In service		Under construction	
Country	Number of sites	Equivalent biomethane production capacity *(GWh/year)*	Number of sites	Equivalent biomethane production capacity *(GWh/year)*
France	16	663	2	185
Poland	20	460	2	185
United States	1	41	3	228
India	1	55	–	–
Total	38	1,219	7	598

France

TotalEnergies' combined biomethane and biogas gross production capacity in France stands at nearly 700 GWh/y. At the end of 2024, the Company had 16 production units in France for biogas used to generate electricity and heat, or purified to produce biomethane. Eight of these units run on agricultural inputs and have obtained ISCC EU sustainability certification, while the remaining eight (cogeneration) are not covered by this certification.

The latest units, BioBéarn, with a maximum capacity of 160 GWh/year, and BioNorrois, with a maximum capacity of 153 GWh/year, were respectively commissioned in January 2023 and February 2025. For the latest TotalEnergies has teamed up with French sugar group Cristal Union, partner in the project and 10% shareholder, which has committed to supply sugar beet pulp as feedstock for its biomethane production unit for 15 years and to contribute to digestate utilization.

Downstream in the chain, in June 2023, TotalEnergies signed a Biomethane Purchase Agreement with Saint-Gobain for 100 GWh over a 3-year period starting in 2024. The biomethane is produced by TotalEnergies at its BioBéarn site.

Poland

TotalEnergies has fully integrated Polska Grupa Biogazowa (PGB), Poland's leading biogas producer(3), acquired in March 2023. At year-end 2024, PGB owned and operated 20 units in production, representing installed electrical capacity of 21 MW, i.e. an electricity production capacity of 183 GWh/y (approximately 440 GWh/y in biomethane equivalent).

United States

TotalEnergies and Vanguard Renewables, a U.S. company, subsidiary of BlackRock, active in the production of biomethane from organic waste, signed an agreement in April 2024 to create a 50/50 joint-venture in order to develop, build and operate farm-based organics-to-renewable natural gas projects in the United States. The agreement provides for the development of ten renewable natural gas projects, with a total annual capacity of 0.8 TWh. Of these, the first three projects, each with a capacity of nearly 75 GWh/year, have already entered the construction phase in the states of Wisconsin and Virginia.

As part of their joint-venture, TotalEnergies and its US partner NASDAQ-listed Clean Energy Fuels Corp., in which TotalEnergies has a 19.06% interest at December 31, 2024, commissioned the 40 GWh/year Del Rio methanization unit in Texas in March 2023.

TotalEnergies took a 20% interest, in May 2023, in the capital of Ductor, a Finnish start-up that has developed an innovative technology for treating organic waste with a high nitrogen content, which was divested in December 2024 in exchange for an additional 25% equity interest in the Gypsum project (the first project developed in partnership between Ductor and TotalEnergies in the United States).

India

The Adani Total Gas Limited joint-venture (TotalEnergies, 37.4%) has started up in July 2024 a first biomethane plant project in Barsana in the state of Uttar Pradesh, with a capacity of 55 GWh/y (refer to point 1.9.3 of Chapter 1).

(1) Biogas is used to produce electricity and heat, in co-generation. Biogas, once purified, in particular of carbon dioxide, becomes biomethane, which has the same characteristics as natural gas.
(2) Source: ADEME method.
(3) Source: TotalEnergies' data.

2.3.7 Hydrogen

TotalEnergies is working primarily on using low carbon hydrogen in its European refineries by 2030. In addition to the Refining & Chemicals hydrogen purchasing contracts (refer to point 2.5.1), TotalEnergies has already launched projects to produce hydrogen by electrolysis to supply its European refineries.

- At the La Mède site, TotalEnergies and its partner Engie are continuing to develop the Masshylia project to produce green hydrogen by water electrolysis, with a capacity of 10 kt/year, to help reduce CO_2 emissions of both the biorefinery and customers in the Fos-Berre industrial port area. The two partners are aiming for start-up of the first 20 MW electrolyzer in 2029, subject to confirmation of European and French subsidies and the necessary public authorizations. To complement Masshylia, TotalEnergies and Air Liquide launched a renewable hydrogen production project in November 2024, with a capacity of 25 kt/year. This new unit is scheduled to come on stream in 2028.
- In February 2025, TotalEnergies signed agreements with Air Liquide to develop two projects in the Netherlands, for the production and delivery of some 45,000 tons a year of green hydrogen produced using renewable power, generated mostly by the OranjeWind offshore wind farm, developed by TotalEnergies (50%) and RWE (50%).

  The two companies have thus signed an agreement to set up a joint-venture, equally held by TotalEnergies (50%) and Air Liquide (50%), which will build and operate a 250 MW electrolyzer near the Zeeland refinery. This project will enable the production of up to 30,000 tons of green hydrogen a year, most of which will be delivered to Zeeland's platform. The electrolyzer should be commissioned in 2029 and cut the site's CO_2 emissions by up to 300,000 tons a year. In addition, as part of Air Liquide's 200 MW ELYgator electrolyzer project located in Maasvlakte (Netherlands), TotalEnergies signed a tolling agreement for 130 MW to be dedicated to the production of 15,000 tons per year of green hydrogen for the TotalEnergies platform in Antwerp. Under this agreement, TotalEnergies will supply the renewable electrons produced by the OranjeWind project to Air Liquide to be transformed into green hydrogen. The project is expected to be operational by the end of 2027 and will reduce CO_2 emissions at the Antwerp site by up to 150,000 tons per year.

The hydrogen production capacity from renewable electricity currently under development or under study is expected to contribute to achieving TotalEnergies' ambition to increase low-carbon molecules - biofuels, biogas, hydrogen, and e-fuels - to 25% of its energy production by 2050.

In May 2023, TotalEnergies joined forces with Tree Energy Solutions to study and develop a project in the United States to produce synthetic natural gas from renewable hydrogen and CO_2 of biogenic origin. This project, with a capacity of 100 to 200 kt/y, plans to produce synthetic natural gas that can be transported and/or liquefied and then marketed using existing natural gas infrastructure, and used by end customers without modifying their facilities.

Following the acquisition of the entire capital of Total Eren concluded in July 2023, development activities for renewable hydrogen projects are continuing as part of a new partnership through the TEH2 joint-venture (80% owned by TotalEnergies and 20% by the EREN group). TEH2 is developing pioneering renewable hydrogen production projects in different regions, such as North Africa, South America, and Australia. In 2024, TEH2 joined forces with Verbund to develop a project in Tunisia and with CIP and A.P. Møller Capital for a project in the Kingdom of Morocco. The first, scheduled to start up after 2030, aims to produce 0.2 Mt/year of green hydrogen in an initial phase, with the possibility of reaching 1 Mt/year thereafter, destined for the European market via an undersea pipeline. The second is aimed at producing green hydrogen by electrolysis of desalinated seawater and converting it into 0.2 Mt/year of green ammonia, also for the European market.

2.4 Integrated Power Segment

Since the first quarter of 2023, TotalEnergies has separated in its published results the Integrated LNG segment covering its LNG and low-carbon gas activities and the Integrated Power segment covering the integrated electricity chain.

The Integrated Power segment covers electricity production, storage, trading and gas-electricity marketing activities to BtB and BtC customers.

Main indicators

41.1 TWh
Net production of electricity in 2024 including **26 TWh** from renewable sources

35 GW
Gross installed power generation capacity at year-end 2024, of which **26 GW** from renewable sources

$2.6 B
Cash flow from operations excluding working capital (CFFO)* in 2024

$3.9 B
Net investments* in 2024

Main objectives and ambitions

>100 TWh
Net power production in 2030

~20%
share of electricity in the energy produced by TotalEnergies by 2030

~12%
ROACE* by 2028

Positive
net cash flow* by 2028

* Refer to the glossary for definitions and additional information on alternative performance measures (APM, Non-GAAP measures) and to point 1.9 of chapter 1 for reconciliation tables.

Productions, capacities, clients and sales

	2024	2023	2022
Net power production *(TWh)*[a]	**41.1**	**33.4**	**33.2**
of which production from renewables	*26.0*	*18.9*	*10.4*
of which production from gas flexible capacities	*15.1*	*14.5*	*22.8*
Net installed power generation capacity *(GW)*[b]	**21.5**	**17.3**	**12.0**
of which renewables	*15.1*	*13.0*	*7.7*
of which gas flexible capacities	*6.5*	*4.3*	*4.3*
Gross renewable power generation capacity *(GW)*[b][c]	**97.2**	**80.1**	**69**
of which installed capacity	*26.0*	*22.4*	*16.8*
Clients power– BtB and BtC *(millions)*[b]	**6.1**	**5.9**	**6.1**
Clients gas – BtB and BtC *(millions)*[b]	**2.8**	**2.8**	**2.7**
Power sales – BtB and BtC *(TWh)*	**50.7**	**52.1**	**55.3**
Sales gas – BtB and BtC *(TWh)*	**98.6**	**100.9**	**96.3**

(a) Solar, wind, hydroelectric and gas flexible capacities.
(b) End of period data.
(c) Includes 20% of Adani Green Energy Ltd's gross capacity, 50% of Clearway Energy Group's gross capacity effective third quarter 2022, and 49% of Casa dos Ventos' gross capacity effective first quarter 2023.

Net power production *(TWh)*

	December 31, 2024					
	Solar	Onshore Wind	Offshore Wind	Gas	Storage and hydroelectricity	Total
France	0.7	0.8	–	4.3	–	**5.8**
Rest of Europe	0.3	2.0	1.6	4.5	0.3	**8.8**
Africa	0.1	–	–	–	–	**0.1**
Middle East	0.9	–	–	1.0	–	**1.8**
North America	3.6	2.0	–	5.3	–	**10.9**
South America	0.6	3.5	–	–	–	**4.0**
India	6.7	1.2	–	–	–	**7.9**
Asia-Pacific	1.4	0.0	0.3	–	–	**1.7**
Total	14.2	9.5	2.0	15.1	3	41.1

Net power production in 2024 came to 41.1 TWh, up by 23% compared to the previous year.

Net installed power production capacity *(GW)*

	December 31, 2024					
	Solar	Onshore Wind	Offshore Wind	Gas	Storage and hydroelectricity	Total
France	0.7	0.4	–	2.6	0.2	**4.0**
Rest of Europe	0.6	0.9	0.3	2.1	0.2	**4.0**
Africa	0.0	–	–	–	–	**0.0**
Middle East	0.4	–	–	0.3	–	**0.8**
North America	2.3	0.8	–	1.5	0.3	**4.9**
South America	0.4	0.9	–	–	–	**1.3**
India	4.8	0.6	–	–	–	**5.3**
Asia-Pacific	1.1	0.0	0.2	–	–	**1.3**
Total	10.3	3.6	0.5	6.5	0.6	21.5

Results

(in millions of dollars)	2024	2023	2022
Adjusted net operating income	2,173	1,853	975
including adjusted income from equity affiliates	–	*137*	*201*
Organic investments[a]	2,355	2,582	1,385
Acquisitions of net assets sales[a]	1,514	2,363	2,136
Net investments[a]	3,869	4,945	3,521
Cash flow from operations excluding working capital (CFFO)[a]	2,555	2,152	970
Cash flow from operating activities	2,972	3,573	66

(a) Refer to the glossary for definitions and additional information on alternative performance measures (APM, Non-GAAP measures) and to point 1.9 of chapter 1 for reconciliation tables.

In 2024, Integrated Power adjusted net operating income and cash flow from operations excluding working capital (CFFO) were $2,173 million and $2,555 million, respectively, up nearly 20% year-on-year and in line with growth in the business. These results demonstrate the relevance of the integrated model, with all segments of the value chain contributing to achieving annual guidance (>$2.5 billion CFFO).

2.4.1 Presentation of the segment

Transition to carbon neutrality (net zero emissions) by 2050, together with society, involves a massive electrification of energy uses combined with a strong growth in renewable energies to meet this demand for electricity.

Electricity is a strong growth market in which TotalEnergies is developing a profitable and differentiated integrated business model, which it aims to make one of the drivers of the Company's cash flow (CFFO[1]), alongside oil and gas. In particular the Company aims to generate a positive cash flow (CFFO) by 2028. TotalEnergies plans to increase its net power production to more than 100 TWh, mainly from renewable sources by 2030. It was 41.1 TWh in 2024, compared to 33.4 TWh in 2023 and 33.2 TWh in 2022.

TotalEnergies intends to replicate its integrated oil & gas model in the Integrated Power segment in order to achieve profitability (ROACE[2]) of around 12% by 2028, equivalent to that of its oil & gas activities in a Brent price environment of $60/b.

The Company's strategy is to build a competitive portfolio of renewable (mainly solar, onshore and offshore wind) and flexible (CCGT, storage) assets in order to provide its customers with low-carbon electricity available 24 hours a day. In particular, TotalEnergies leverages its scale effect in equipment purchase to optimize its investment costs and industrialize the operation of its renewable assets using digital technology to lower operating costs. TotalEnergies also uses the strength of its balance sheet to maintain some market exposure, allowing the Company to capture additional margins in a volatile market.

TotalEnergies thus plans to increase its net electricity production to over 100 TWh by 2030, with approximately 70% renewable electricity and 30% of electricity from flexible generation assets in this time horizon.

More than 70% of TotalEnergies' power production in 2024 was in countries where markets are deregulated (mainly Europe, the United States, Brazil, and India). The Company intends to maintain this ratio and anticipates sustained and volatile electricity prices in these markets, in a context of strong demand growth and tensions on supply. In these deregulated markets, the Company implements its integration strategy throughout the power value chain and keeps approximately 30% of its power production exposed to market fluctuations, relying on its storage capacities and its flexible generation to cover the intermittence of renewable generation and developing power trading and sales activities to end customers. With this in mind, the Company is developing specific expertise in short-term trading on power markets, in activities linked to flexibility management, as well as on the Corporate PPA market.

In regulated markets, TotalEnergies implements a targeted growth strategy:

- in oil and gas producing countries, to support their energy transition by relying on the Company's local presence and its historical activities to develop multi-energy projects, particularly renewable ones;
- in the rest of the world, by selectively developing projects, particularly via strategic partnerships with local players.

2.4.2 Power generation from renewable sources

To develop its renewable electricity generation capacity, TotalEnergies is pursuing organic growth, targeted acquisitions and a capital recycling strategy. Consequently, in December 2024, TotalEnergies announced the signing of an agreement for the acquisition of the German developer VSB Group[3]. VSB Group has over 475 MW of renewable capacity in operation or under construction in Germany and France, and a pipeline of 18 GW of wind, solar and battery storage technologies mainly across Germany, Poland and France. In parallel with this acquisition, TotalEnergies announced the sale of 50% of its interest in a 2 GW solar and battery storage portfolio in the United States.

In July 2023, TotalEnergies finalized the increase from 30% to 100% of its shareholding in Total Eren. At this date, Total Eren had a net installed capacity of 3.5 GW worldwide, and a diversified portfolio of solar, wind, hydroelectric and storage projects of more than 10 GW in 30 countries. These assets are now fully integrated into TotalEnergies' portfolio of renewable power production assets. In 2022, TotalEnergies finalized the acquisition of a 50% stake in Clearway Energy Group in the United States and a 34% stake in Casa dos Ventos in Brazil.

Net renewable power production reached 26.0 TWh in 2024, compared to 18.9 TWh in 2023 and 10.4 TWh in 2022.

TotalEnergies is developing a renewable power generation portfolio of solar (including decentralized), wind (onshore and offshore), hydroelectricity and battery storage, for a net installed capacity of 15.1 GW at year-end 2024 compared to 13 GW at year-end 2023 and 7.7 GW at year-end 2022.

Gross installed renewable power generation capacity amounted to 26 GW at year-end 2024 compared with 22.4 GW at year-end 2023 and 16.8 GW at year-end 2022. At year-end 2024, TotalEnergies had a portfolio of renewable power generation gross capacities of close to approximately 97.2 GW (installed, under construction and in development).

(1) Refer to the glossary for definitions and additional information on alternative performance measures (APM, Non-GAAP measures) and to point 1.9 of chapter 1 for reconciliation tables.
(2) Refer to the glossary for definitions and additional information on alternative performance measures (APM, Non-GAAP measures) and to point 1.9 of chapter 1 for reconciliation tables.
(3) Finalization of the transaction is subject to approval from the relevant competition authorities.

Gross installed power generation capacity from renewables

Gross installed power generation capacity from renewables *(GW)*[a]	December 31, 2024				
	Solar	Onshore Wind	Offshore Wind	Storage and hydroelectricity	Total
France	1.2	0.7	0.0	0.2	**2.1**
Rest of Europe	0.6	1.1	1.1	0.3	**3.1**
Africa	0.1	0.0	0.0	0.0	**0.1**
Middle East	1.2	0.0	0.0	0.0	**1.2**
North America	5.4	2.2	0.0	0.7	**8.2**
South America	0.4	1.3	0.0	0.0	**1.7**
India	6.7	0.6	0.0	0.0	**7.3**
Asia-Pacific	1.6	0.0	0.6	0.0	**2.2**
Total	**17.2**	**6.0**	**1.7**	**1.1**	**26.0**

(a) Including 20% of Adani Green Energy Ltd's gross capacities, 50% of Clearway Energy Group's gross capacities and 49% of Casa dos Ventos' gross capacities.

Gross installed power generation capacity from renewables under construction

Gross installed power generation capacity from renewables under construction *(GW)*[a]	December 31, 2024				
	Solar	Onshore Wind	Offshore Wind	Storage and hydroelectricity	Total
France	0.3	0.0	0.0	0.0	**0.3**
Rest of Europe	0.5	0.2	0.8	0.0	**1.4**
Africa	0.4	0.1	0.0	0.1	**0.6**
Middle East	0.1	0.0	0.0	0.0	**0.1**
North America	1.2	0.0	0.0	0.5	**1.8**
South America	0.4	0.6	0.0	0.2	**1.2**
India	3.2	0.0	0.0	0.0	**3.2**
Asia-Pacific	0.1	0.0	0.1	0.0	**0.1**
Total	**6.2**	**1.0**	**0.8**	**0.9**	**8.9**

(a) Including 20% of Adani Green Energy Ltd's gross capacities, 50% of Clearway Energy Group's gross capacities and 49% of Casa dos Ventos' gross capacities.

Gross renewable power generation capacity in development

Gross renewable power generation capacity in development *(GW)*[a]	December 31, 2024				
	Solar	Onshore Wind	Offshore Wind	Storage and hydroelectricity	Total
France	0.9	0.5	0.0	0.1	**1.5**
Rest of Europe	5.0	0.7	13.3	2.7	**21.6**
Africa	0.6	0.2	0.0	0.0	**0.8**
Middle East	2.3	0.2	0.0	0.0	**2.6**
North America	10.3	3.1	4.1	4.4	**21.9**
South America	1.6	1.1	0.0	0.0	**2.8**
India	2.3	0.1	0.0	0.0	**2.5**
Asia-Pacific	3.4	1.1	3.0	1.2	**8.6**
Total	**26.5**	**7.1**	**20.4**	**8.3**	**62.3**

(a) Including 20% of Adani Green Energy Ltd's gross capacities, 50% of Clearway Energy Group's gross capacities and 49% of Casa dos Ventos' gross capacities.

SOLAR AND ONSHORE WIND

France

The subsidiary TotalEnergies Renouvelables France, develops, builds and operates **renewable electricity generation** projects.

In France, it operates more than 700 onshore wind, solar, hydroelectric and battery assets for an installed gross capacity of approximately 2.1 GW at year-end 2024, of which 1.8 GW in metropolitan France (compared to 1.6 GW at year-end 2023 and 1.5 GW at year-end 2022).

In 2024, TotalEnergies commissioned a 63 MW wind farm in the Marne region. In 2023, TotalEnergies inaugurated a solar power plant with a gross capacity of 25 MW and a battery energy storage facility at its Grandpuits site, as well as two wind farms and a solar power plant with a total installed capacity of approximately 29 MW and the Torrent de Gavet hydroelectric power plant, producing approximately 9.5 GWh/year.

In addition, the Company develops agrivoltaic projects that respond to the challenges of the agricultural world, as illustrated by the conclusion in March 2022 of an innovative partnership agreement with the National Federation of Farmers' Unions (FNSEA) with the aim of promoting the emergence of circular economic networks, the acceptability of projects and the sharing of value with farmers. In 2023, the Company acquired Ombréa, a leader in agrivoltaics in France. This acquisition will notably enable TotalEnergies to accelerate the development of its 1.5 GW portfolio of agrivoltaic projects.

Also, in line with its portfolio optimization strategy, at year-end 2022 TotalEnergies sold to Crédit Agricole Assurances 50% of a 234 MW portfolio of renewable projects in France, including 23 solar plants with a capacity of 168 MW and six wind plants with a capacity of 67 MW.

Rest of Europe and CIS

Gross installed capacity by technology and country at December 31, 2024 *(MW)*

	Gross installed capacity			
	Solar	Onshore Wind	Hydroelectric	Total
Portugal	46	526	33	**605**
Greece	154	265	–	**419**
Spain	272	–	–	**272**
Turkey	–	21	166	**187**
Italy	44	41	–	**85**
Poland	–	40	–	**40**
Bulgaria	14	–	–	**14**
Europe - other countries	25	246	–	**271**
Uzbekistan	131	–	–	**131**
Kazakhstan	128	–	–	**128**

In the **United Kingdom**, the portfolio of solar projects acquired by TotalEnergies from Bluestone reached 619 MW in 2024 (512 Mw at the end of 2023 and 330 MW at the end of 2022).

In **Germany**, TotalEnergies acquired two agrivoltaism projects in 2024 (163 MW, 100%). These projects are expected to enable TotalEnergies to complete its generation portfolio and further develop its Integrated Power strategy in the country.

In **Spain**, Guillena solar power plant (263 MW, 100%) was commissioned in December 2024 and final investment decisions of the San Pedro, Basilicas and Alamos solar projects (335 MW, 65%) were taken, increasing the capacity of the projects under construction to 410 MW.

In **Romania**, TotalEnergies acquired in July 2023 a portfolio of five solar farms in the northwest of the country from its partner PNE, a German developer.

In **Greece**, the Xirokambi solar project (70 MW, 100%) came into operation in February 2024.

In **Poland**, TotalEnergies announced in December 2024 the acquisition of a 130 MW portfolio of onshore wind projects, adding to the acquisition of 6 solar projects under development with an overall production capacity of 175 MW in 2023.

In **Turkey**, TotalEnergies finalized in October 2023 the acquisition of 50% interest in Rönesans Enerji. Following the signature of the agreement with Rönesans Holding in July 2023 to develop renewable projects in the country through this joint-venture, Rönesans Enerji aims to produce 2 GW of renewable energy by 2028. The power generated by these sites will be marketed in particular through direct sales on the electricity market or by concluding PPAs with end buyers. By the end of 2024, 168 MW of wind capacity is under construction.

In **Kazakhstan**, in parallel with the signing of a PPA for the totality of the electricity produced with a public purchaser in June 2023, the Company formalized the launch of the Mirny project, providing for the construction of a 1 GW onshore wind farm associated with a 600 MWh battery energy storage system.

The Company is also pursuing the development of its renewable activities in the region, notably in **Uzbekistan**, with the signature in November 2023 of a memorandum of understanding (MoU) formalizing the development of two solar power plants with a total gross capacity of around 1.3 GW.

Furthermore, opportunities in other European countries are currently being studied by TotalEnergies and European Energy, who agreed, in September 2023, to develop, build and operate, in a joint-venture (TotalEnergies, 65%), at least 4 GW of onshore renewable energy projects in several geographic zones.

In addition, TotalEnergies and other investors signed a preliminary agreement in August 2023 to invest in Zhero Europe to develop large-scale renewable energy projects in Europe and Africa, covering the production of renewable energy, electrical interconnectors and low-carbon molecules. By the end of 2024, 168 MW of wind capacity is under construction.

North America

In the **United States**, following the agreements signed in May 2022 with Global Infrastructure Partners (GIP), TotalEnergies acquired in September 2022 50% of Clearway Energy Group (CEG), one of the largest U.S. renewable energy players. At year-end 2024, TotalEnergies had a portfolio of approximately 31.7 GW of wind, solar and storage projects, of which approximately 8.2 GW are in operation.

In April 2022, TotalEnergies acquired Core Solar and its identified 4 GW pipeline of projects. Of this pipeline, the Hill solar project (525 MW) was launched in late 2022 and connected to the grid at the end of 2024.

In 2023, construction began on the Clinton (65 MW) and Brazoria (325 MW) solar projects.

In 2024, TotalEnergies commissioned Danish Fields (720 MW) and Cottonwood (455 MW), 2 utility-scale solar farms with integrated battery storage located in southeast Texas. These new projects are part of a portfolio of renewable assets totaling 5 GW in operation or under construction in Texas.

Danish Fields has a 225 MWh battery storage system supplied by Saft. 70% of this project's solar capacity has been contracted through long-term Corporate Power Purchase Agreements (CPPAs) signed with industry players like Saint-Gobain, featuring an upside sharing mechanism indexed on merchant price.The remaining 30% will support the decarbonization of TotalEnergies' industrial plants in the US Gulf Coast region. Danish Fields, with the Myrtle Solar plant commissioned in 2023, and Hill 1, are expected to cover the electricity consumption of TotalEnergies' industrial sites in Port Arthur and La Porte in Texas, and Carville in Louisiana.

Construction of the 225 MWh of battery storage supplied by Saft for the Cottonwood storage project also began in 2024. Cottonwood's electricity production is contracted under long-term PPAs indexed to merchant prices through an *upside-sharing* mechanism with LyondellBasell and Saint-Gobain, to support their decarbonization efforts.

SunPower Corporation

In 2011, TotalEnergies had acquired 60% of SunPower as part of its ambition to become a major player in solar energy. In 2022, TotalEnergies sold 50% of its stake to a partner. In August 2024, unfavorable market conditions (rising interest rates, legislative changes in California) forced SunPower to file for bankruptcy under Chapter 11 of the US Code and to liquidate its assets. This process ended in November 2024, with the cancellation of the remaining capital. As a result, TotalEnergies recognized a write-down in the value of its investment in the third quarter of 2024, in addition to the write-down announced in the first quarter of 2024.

Maxeon Solar Technologies, Ltd.

TotalEnergies acquired a 27% stake in Maxeon in 2020 when it was spun off from SunPower. Since then, the Company's stake has been progressively reduced through the sale of shares (second quarter 2023) and through dilution (second quarter of 2023 and third quarter of 2024). At the end of 2024 it was less than 1%.

Asia Pacific

In **Cambodia**, TotalEnergies operates the Battambang solar power plant (74 MW, 100%). To develop new renewable energy projects and other decarbonization initiatives, TotalEnergies signed a memorandum of understanding with Royal Group in October 2023 to study potential partnerships for the development of solar and wind projects.

In **Indonesia**, in 2023, under the leadership of its subsidiary Total Eren, TotalEnergies, together with its partners Adaro Power and PJBi, signed a PPA with the public operator PLN for a hybrid wind project (with storage) in the country with a planned capacity of 70 MW/10 MWh.

In **India**, TotalEnergies is present through its partnership with Adani Green Energy Limited (AGEL) and the EDEN joint-venture (50/50) with EDF. Through these two partnerships, at end 2024, TotalEnergies has a solar and wind portfolio with a gross installed capacity of 7.3 GW of which 6.6 GW with AGEL. As of December 31, 2024, AGEL was 60.9%-owned by the Adani family, 19.75% by TotalEnergies and 19.3% by public and institutional investors. In September 2024, TotalEnergies and AGEL signed an agreement to create a new 50/50 joint-venture with a portfolio of 1,575 MW at Khavda in the Indian state of Gujarat (refer to point 1.9.3 of chapter 1).

In **Japan**, TotalEnergies has interests in four solar power plants with a total gross installed capacity of 155 MW.

In **Singapore**, TotalEnergies and RGE (Royal Golden Eagle), through their joint-venture Singa Renewables Pte. Ltd., obtained conditional authorization from the Energy Market Authority ("EMA") in 2024 to import 1.0 GW of photovoltaic solar power from Indonesia.

In **South Korea**, TotalEnergies commissioned the Parang 1 wind farm (17 MW, 70%) in October 2024.

In 2023, TotalEnergies also partnered with Gentari Renewables Sdn Bhd, the Petronas subsidiary dedicated to sustainable energy solutions, to develop renewable energy projects in the Asia-Pacific region. It is within this framework that the 100 MW Pleasant Hills solar project is expected to be developed in Queensland, Australia, with the aim of supplying low-carbon electricity to the gas production and processing facilities of the Roma field.

In **Australia**, TotalEnergies has one solar asset in operation, Kiamal (256 MW, 57.5%).

Latin America

In **Brazil** TotalEnergies' portfolio includes the capacities of the joint-venture created in October 2022 between TotalEnergies (34%) and Casa dos Ventos (66%). The joint-venture also has a pre-emptive right on all projects developed by Casa dos Ventos. In 2024, the joint-venture commissioned the Umari onshore wind farm, with a gross installed capacity of 99 MW.

In addition, to further strengthen its presence in Brazil, TotalEnergies announced in September 2023 the signature of a memorandum of understanding with Casa dos Ventos and Petrobras to evaluate the prospects for joint projects in the field of renewable energies and low-carbon hydrogen in the country.

In **Chile**, TotalEnergies has interests in two solar power plants with a gross installed capacity of 213 MW.

In **Argentina**, TotalEnergies has interests in three wind farms with a gross installed capacity of 247 MW. In addition, in November 2024 TotalEnergies commissioned the Amanecer project (14 MW), the production of which is intended to reduce the carbon footprint of Total Austral, a subsidiary in TotalEnergies' Exploration & Production (EP) segment in the country. In addition, construction of a project to supply wind power to an EP site in Tierra del Fuego (9 MW; 100%) began in November 2024.

Middle East/Africa

In the **Middle East**, TotalEnergies is implementing its multi-energy strategy. TotalEnergies thus has an interest in the Wadi Ad Dawasir solar project (approximately 120 MW, 40%), currently under construction in **Saudi Arabia**, and the Shams project in **Abu Dhabi** (110 MW, 20%). In addition, in December 2024, the consortium comprising TotalEnergies and Saudi developer Aljomaih Energy and Water Company (AEW) signed a 25-year PPA with Saudi Power Procurement Company for the 300 MW Rabigh 2 solar project.

As part of a multi-energy agreement with **Iraq** signed in September 2021, TotalEnergies is developing a 1.2 GW solar power plant to supply the Basra region's grid. Qatar Energy has taken a 50% stake in the project.

In **Oman**, TotalEnergies signed agreements with its partner OQ Alternative Energy (OQAE) in December 2024 to develop 300 MW of renewable energy projects in the country. The electricity will be delivered through PPAs to Petroleum Development Oman (PDO), the leading exploration and production company in the Sultanate.

In **Qatar**, TotalEnergies and its partners commissioned the Al Kharsaah solar power plant (800 MW, 19.6%) in October 2022. As the country's first large-scale solar power plant, Al Kharsaah is held 40% by the consortium formed by TotalEnergies (49%) and Marubeni (51%) and 60% by QatarEnergy Renewables Solutions.

Elsewhere **on the African continent**, in **South Africa**, TotalEnergies began construction in November 2024 of an onshore wind project (140 MW, 33.5%) and a solar project (120 MW, 33.5%) awarded in 2022 under a competitive bidding process launched by Sasol and Air Liquide. These two projects are expected to enable TotalEnergies to decarbonize the energy supplying Sasol and Air Liquide's industrial sites, in accordance with the Corporate PPA signed between the parties in February 2023 covering the supply of 260 MW of renewable electricity over a period of 20 years. In December 2023, TotalEnergies also announced with its partners the launch of the construction of a hybrid renewable project comprising a 216 MW solar power plant (35%) as well as a 500 MWh battery storage system (35%) to supply renewable electricity via a PPA for 20 years to the national grid. TotalEnergies also owns a stake in the Prieska solar power plant (86 MW, 27%).

In **Angola**, TotalEnergies is developing the Quilemba solar project (35 MW, 51%).

In **Egypt**, TotalEnergies owns 100% of two solar power plants in operation for a total of 126 MW.

In **Morocco**, TotalEnergies invested £20 million in 2023 to acquire a minority stake in Xlinks First Limited, with the aim of developing a giant renewable project, combining wind and solar power coupled with large battery storage to supply renewable electricity to the UK.

In **Mozambique**, TotalEnergies launched the construction of the Metoro solar project (41 MW, 75%) in 2024 and develop a solar project (Dondo, 40 MW, 90%). The consortium comprising EDF (28%), TotalEnergies (21%), Sumitomo Corporation (21%) and Mozambican public entities (30%) continues to develop the 1.5 GW Mphanda Nkuwa hydroelectric project.

Finally, in July 2024, TotalEnergies signed an agreement with Scatec, a Norwegian renewable energy company, to acquire 100% of its subsidiary SN Power, which holds interests in renewable hydropower projects in Africa, through a joint-venture (51% SN Power) with Norfund and British International Investment (BII). As a result of this transaction, which is subject to certain previous conditions, TotalEnergies will acquire a 28.3% stake in the Bujagali hydropower plant (250 MW) currently in operation in **Uganda** and minority stakes in two projects under development in **Rwanda** (206 MW) and **Malawi** (360 MW).

OFFSHORE WIND

As part of its long-term strategy to develop renewable energy sources, TotalEnergies has been developing a strong presence in the offshore wind industry since 2020, drawing on its experience and know-how in the offshore oil segment as well as its ability to manage large projects and mobilize the necessary financing. At year-end 2024, TotalEnergies thus had gross capacity of approximately 21.2 GW in offshore wind projects under construction and in development. Offshore wind capacity is expected to represent approximately 10% of the Company's gross installed renewable capacity by 2030.

Europe

In **Germany**, the Company won the N-11.2 concession (1.5 GW) in the North Sea in June 2024, adding to the two offshore concessions, one in the North Sea and the other in the Baltic Sea, won in July 2023 to develop two fixed-bottom offshore wind farms with a combined capacity of 3 GW. In addition, the Company signed an agreement with RWE in October 2024 to acquire a 50% stake in two offshore wind projects in the North Sea. These two projects, N-9.1 (2 GW) and N-9.2 (2 GW), awarded in August 2024, have 25-year licenses, extendable to 35 years.

TotalEnergies envisages selling its share of the production either directly in the electricity market, or by entering into PPAs with end buyers, thus allowing them to reduce their carbon footprint. These projects illustrate the Company's strategy of becoming an integrated player in the electricity markets taking advantage of price volatility to achieve the profitability objectives of the Integrated Power activity.

In the **United Kingdom**, TotalEnergies is developing the 1.5 GW Outer Dowsing Offshore Wind fixed-bottom project in joint-venture with Corio Generation, a subsidiary of Macquarie and Gulf Energy Development Public Company Limited (GULF), following GULF's acquisition of half of Corio Generation's initial stake in March 2023. TotalEnergies holds 50% of this project alongside Corio Generation (25.01%) and GULF (24.99%).

In **Scotland**, TotalEnergies holds a 25.5% stake in the Seagreen project, following the sale of a 25.5% interest to PTTEP in December 2023, alongside SSE Renewables (49%). With a gross capacity of 1.1 GW, this is Scotland's largest offshore wind farm, and one of the deepest fixed-foundation wind farms in the world when commissioned in October 2023. It is located in the North Sea off the Angus coast. It is generating at its maximum capacity, approximately 5 TWh of renewable electricity per year.

In January 2022, following ScotWind's call for tenders, the joint-venture between TotalEnergies (38.25%), Corio Generation (46.75%) and RIDG (15%), a Scottish developer in offshore wind, obtained the N1 zone concession to develop a 2 GW offshore windfarm. This project, called the West of Orkney Windfarm, will be located 30 kilometers off the Orkney archipelago in Scotland.

In the **Netherlands**, TotalEnergies acquired a 50% stake from RWE in the 795 MW OranjeWind offshore wind farm project in July 2024. TotalEnergies will dedicate its share of the renewable electricity production from this project to power 350 MW electrolyzer projects. These should produce about 40,000 tons per year of green hydrogen for the decarbonization of TotalEnergies' refineries in Northern Europe.

In **France**, TotalEnergies is a 20% shareholder in the Eolmed pilot project for a 30 MW floating wind farm located in the Mediterranean off the coast of Gruissan and Port-la-Nouvelle, construction of which started in May 2022.

In January 2024, TotalEnergies also signed an agreement with European Energy to develop offshore wind projects in Denmark, Finland and Sweden. In **Denmark**, the agreement covers the acquisition by TotalEnergies of 85% of the Jammerland Bugt project (240 MW) and 72.2% of the Lillebaelt South project (165 MW), which was finalized in December 2024 with the granting of building permits by the Danish authorities for both projects.

Rest of the world

In the **United States**, TotalEnergies signed partnership agreements in October 2023 with Corio Generation and Rise Light & Power to develop the Attentive Energy project. This project, with a total capacity of 3 GW, was awarded to TotalEnergies after the New York Bight call for tenders in February 2022, and is located off the coasts of New York and New Jersey. In December 2023, the first federal permit (Site Assessment Plan) for the whole 3 GW of the site was approved.

In October 2023, the Attentive Energy One project, held by TotalEnergies (40%), Rise (35%) and Corio Generation (25%), won the New York State Energy and Research Development Agency's (NYSERDA) competitive solicitation for offshore renewable energy credits (ORECs) in the form of a 25-year contract to supply 1.4 GW of renewable electricity. This award was canceled in April 2024 by NYSERDA after it was announced that GE had modified the turbine design proposed in the tender documents.

The Attentive Energy Two project (TotalEnergies - 70%/Corio Generation - 30%) was selected in January 2024 by the New Jersey Board of Public Utilities (NJBPU) for a contract to supply 1.34 GW of renewable electricity to the state over a 20-year period, winning the state's third competitive solicitation for the allocation of offshore renewable energy credits (ORECs).

In November 2023 in North Carolina, TotalEnergies filed the first Site Assessment Plan for its Carolina Long Bay project (1 to 2 GW, 100%, a concession won in May 2022).

In **South Korea**, TotalEnergies is developing a portfolio of more than 2 GW of bottom fixed and floating wind power with the Bada project in partnership with Corio Generation. In November 2022, the SK Ecoplant group purchased a minority interest in the project.

In **Taiwan**, TotalEnergies held a 29% stake in the Yunlin project with a gross capacity of 640 MW at year end 2024. The installation of its 80 turbines was completed in 2024 and the project is now operating at its full capacity.

In February 2023, TotalEnergies and Corio Generation announced the creation of a joint-venture to develop the "Formosa 3" wind farms off the coast of Taiwan. The Formosa 3 project comprises three wind farms, Haiding 1, 2 and 3, located offshore Changhua County in western Taiwan. Formosa 3's Haiding 2 wind farm was awarded a grid capacity of 600 MW in December 2022 by the Taiwan Energy Bureau, in a third round of auctions.

DISTRIBUTED GENERATION

In the fast-expanding **decentralized power generation** segment, TotalEnergies is dedicated to developing and building photovoltaic systems, that may be combined with batteries or other means of generation installed at industrial or commercial sites for own consumption. Depending on each country's regulations, TotalEnergies can operate those systems or lease them to local players. TotalEnergies enters into private PPAs as part of its activities. In addition, it helps to roll out TotalEnergies' program for solarizing its own sites.

TotalEnergies had operational activities in more than 30 countries at year-end 2024, with a portfolio of over 600 clients spread among Asia, the Middle East, Africa, Europe and the United States. At the end of 2024, its portfolio amounted to approximately 1.1 GW of gross installed capacity spread over 650 sites and 0.7 GW in additional secured projects.

In **France**, TotalEnergies ranked first in the sixth competitive solicitation of the French Energy Regulatory Commission, winning more than 80 MW, or 22% of the volumes awarded in March 2024. This new success strengthens TotalEnergies' position as one of the major developers in France for solar installations on rooftops with a capacity exceeding 500 KW. This includes installations such as building rooftops, greenhouses, warehouses, canopies and agrivoltaic shades.

In the **United States**, TotalEnergies continues to develop decentralized projects, signing up over 300 MW of solar and battery capacity since 2023. TotalEnergies notably entered into a partnership with the Holcim group in 2023 to develop a solar project of more than 33 MW associated with a 19 MW BESS (battery energy storage system) on the Portland cement production site in Colorado. The project will cover more than 40% of the site's consumption. Holcim will receive approximately 71 GWh of renewable energy from the project annually under a Power Purchase and Storage Services Agreement ("PPSSA") with a minimum duration of 15 years.

In 2024, TotalEnergies began construction of New York State's largest on-site solar power generation and storage system at John F. Kennedy International Airport (JFK), combining 12 MW of solar shading with a 7.5 MW BESS storage system. Once commissioned, this project will contribute to the New York Port Authority's efforts to reduce its GHG emissions.

In **China**, TotalEnergies develops approximately 200 MW per year through its joint-venture TEESS (TotalEnergies 50% - Envision 50%). In 2024, TotalEnergies and investment fund Cathay Capital formed a joint-venture to finance and operate the assets initially developed by TEESS (600 MW of decentralized solar capacity for BtB customers).

In **South-East Asia**, in April 2022, TotalEnergies and ENEOS announced the creation of a 50/50 joint-venture to develop decentralized solar power production for their BtB customers in several Asian countries, with the ambition of developing 2 GW of decentralized solar power capacity in the next five years. At the end of 2024, TotalEnergies' portfolio of projects under development (including ENEOS) amounted to more than 300 MW of capacity in Southeast Asia.

In the **Middle East**, TotalEnergies joined forces with Veolia to construct a photovoltaic project in Oman to power a seawater desalination plant and provide drinking water to more than 600,000 people[1]. This 17 MW project, commissioned in 2023, is the first of its kind in the Middle East; it produces more than 30 GWh/y of renewable electricity and is expected to avoid nearly 300 kt of CO_2 emissions. In 2024, TotalEnergies passed the milestone of 100 MW installed in Africa and the Middle East.

2.4.3 Power generation from natural gas

TotalEnergies' construction of a production portfolio based on natural gas is part of its strategy of integrating the gas and electricity value chain in Europe, from production to marketing, gas constituting an ideal complement to intermittent renewable power generation sources. Thanks to the flexible production from those power plants, TotalEnergies can optimize its customers' electricity procurement costs. At year-end 2024, TotalEnergies had 16 production units (compared to nine at year-end 2023 and 2022) in Europe and the United States with a total gross power generation capacity of 6.7 GW and 2 cogeneration units (0.3 GW capacity). Total net electricity production from natural gas was 15.1 TWh in 2024, compared to 14.5 TWh in 2023 and 22.8 TWh in 2022.

Portfolio of electricity generation from natural gas in Europe and the United States at year-end 2024

Country	Plant	TotalEnergies' share (%)	Gross capacity (MW)
France	Bayet	100	442
	Pont-sur-Sambre	100	445
	Toul	100	445
	Saint-Avold (2 units)	76	892
	Landivisiau	50	446
Belgium	Marchienne	100	416
Spain	Castejón (2 units)	100	856
United Kingdom	West Burton B (3 units)	50	1,300
United States	Wolf Hollow I	100	745
	Colorado Bend I (2 units)	100	604
	La Porte	100	150

In **France**, at December 31, 2024, TotalEnergies owned six CCGT plants (unchanged from 2023 and 2022), including one with a capacity of 0.4 GW, which was commissioned in March 2022 in Landivisiau (50% of which was sold in 2022 to Asterion Industrial Partners, a Spanish investment fund) and one co-generation unit (Normandy refinery). Their gross gas-based power generation capacity thus stood at 2.7 GW at year-end 2024.

In **Belgium**, TotalEnergies has the Marchienne CCGT plant and access to Antwerp's co-generation power production (0.1 GW).

In the **United Kingdom**, in 2024 TotalEnergies acquired West Burton Energy, which owns and operates the West Burton B gas-fired power station. Located in the county of Nottinghamshire, it is equipped with three combined-cycle turbines (CCGT) with a total capacity of 1.3 GW. In December 2024, TotalEnergies announced the sale of 50% of its shares in West Burton Energy to EPUKI, the UK subsidiary of EPH. The plant will be operated by the joint-venture between TotalEnergies and EPUKI.

(1) TotalEnergies data.

In the **United States**, the Company acquired a set of three gas-fired power plants from TexGen in 2023, representing 1.5 GW of electrical generation capacity in Texas. Connected to the ERCOT (Electric Reliability Council of Texas) grid, the plants concerned are respectively located near Dallas and Houston. This 1.5 GW of additional flexible generation capacity acquired by TotalEnergies complements its renewable generation capacity in Texas, and will strengthen TotalEnergies' trading capabilities in the electricity and gas markets.

In **Abu Dhabi**, the Taweelah A1 gas-fired power plant, owned by the Gulf Total Tractebel Power Company (TotalEnergies, 20%), combines electricity generation and seawater desalination. The plant has a gross power generation capacity of 1.6 GW and a seawater desalination capacity of 385 km³/day. The plant's production is sold to Emirati Water and Electricity Company (EWEC) under a long-term agreement.

2.4.4 Electricity storage

Electricity storage is a major challenge for the future of power grids and a vital add-on to renewables, which are intermittent by nature. Large-scale electricity storage is essential to promote the growth of renewables and help them capture a significant share of the electricity mix.

TotalEnergies is developing stationary electricity storage through its subsidiaries Saft Groupe (Saft) and Kyon Energy, acquired in February 2024.

Saft is a century-old French company that specializes in the design, manufacture, and sale of high-tech batteries for industry. Saft develops batteries based on nickel, lithium-ion and primary lithium technologies. At the end of 2024, Saft was present in 19 countries mainly in Europe, the United States and Asia and benefits from the expertise and experience of its 4,300 employees. The company is active in transportation (aeronautics, rail and off-road electric mobility), industrial infrastructure, meters and the Internet of things, aerospace, defense and energy storage. Building on the strength of its technological know-how, and through its energy storage activities, Saft is well placed to benefit from the growth in renewables beyond its current activities, by offering massive storage capacities, combined with the generation of electricity from renewables. This is one of Saft's main sources of growth.

In 2024, Saft continued to develop its business, particularly in energy storage and mobility, with:

- the commissioning of battery energy storage equipment with a total capacity of 150 MW/225 MWh for TotalEnergies' Danish Fields solar power plant in Houston, Texas;
- the start-up of a 150 MW/225 MWh battery energy storage facility at TotalEnergies' Cottonwood solar power plant in Texas, scheduled for commissioning in 2025;
- the delivery of a battery energy storage system (BESS) to an oil and gas site in Argentina, underlining TotalEnergies' commitment to renewable energies. The 3.5 MW/9.2 MWh facility, the first battery storage project in the country, is scheduled for commissioning in 2025;
- the commissioning of battery energy storage equipment with a total capacity of 50 MW/172.5 MWh for Foxwell in Yilan, Taiwan, to support the Taiwanese grid;
- the signing of a contract with Genesis Energy in New Zealand to supply a 100 MW/200 MWh BESS to the Huntly power plant. This is Saft's third BESS for New Zealand. Saft signed a contract with Meridian Energy in 2023 to supply the first large-scale BESS (capacity 100 MW/200 Mwh) connected to the New Zealand grid and thus support grid stability as intermittent wind and solar power develop in the country.

This activity follows the start-up of battery energy storage equipment in 2023 for various TotalEnergies sites: the Myrtle solar power plant in Houston, Texas (with a capacity of 150 MW/225 MWh), Grandpuits and Carling in France (refer to below); and the Antwerp refinery in Belgium (25 MW/75 MWh). This installation, which has been operational since the end of 2024, will contribute 24/7 to the needs of the European and Belgian high-voltage transport network by ensuring daily smoothing of electricity on the national grid, particularly during tense winter periods, ensuring the security of the network by actively participating in the balancing reserves of the national grid and by allowing more renewable electricity to be integrated into the network.

In addition, in 2023, Saft delivered a BESS to replace diesel backup power at a sustainable Microsoft data center in Sweden, and began delivery to Siemens Mobility of two 100 kWh lithium-ion batteries per train for its state-of-the-art Mireo Plus H hydrogen trains in Germany.

The strong growth of renewables is changing the balance of grid operators. Consequently, TotalEnergies offers them services to manage the flexibility required to balance production and consumption.

TotalEnergies won a major lot in the long-term call for tenders launched by RTE in 2019 to strengthen the security of supply of the French electricity system, and thus started up a battery-based electricity storage facility in France in 2021. TotalEnergies won 129 MW/129 MWh, which are connected to the grid at three of the Company's sites: Dunkirk (61 MW), Carling (25 MW) and Grandpuits (43 MW). 86 MW have been operational since 2022 (Dunkirk and Carling). An additional 43 MW (Grandpuits) came on stream in April 2023. These facilities are composed of 60 2.5 MWh containers designed and assembled by Saft. This roll-out is in addition to installations combining photovoltaics and storage in French overseas territories (25 MW/76 MWh).

Saft continues its research into battery development using artificial intelligence and big data. Saft's R&D centers in Bordeaux and Cockeysville (Maryland, USA) are home to upstream research teams, the Incubator and the Tout Solide program. In 2023, Saft unveiled IBIS (Intelligent Battery Integrated System), a smart battery that is more efficient for stationary storage and electric vehicles.

In 2024, Saft continued to work on the development of a new, more efficient type of smart battery for stationary and mobile storage, representing a real technological breakthrough. In addition, the alliance launched in 2023, supported by France 2030 and bringing together six partners from academia and industry under the coordination of Saft, continues to develop batteries with new solid-state lithium-ion technologies for applications requiring high energy or power, while offering appropriate safety performance. The program also takes into account issues related to lifecycle analysis and battery recycling in order to help reduce national dependence on critical materials.

In addition, TotalEnergies also develops other electrical energy storage projects through partnerships. In September 2021, Stellantis, Saft and Mercedes-Benz entered into an agreement to welcome Mercedes-Benz to ACC (Automotive Cells Company), the joint-venture created in 2020 to design and manufacture batteries for electric vehicles. With an R&D center already operational since 2020 and a state-of-the-art pilot plant in the Nouvelle Aquitaine region in France, ACC inaugurated its first Gigafactory in Hauts-de-France in 2023, with a first production line with a capacity of more than 13 GWh to reach a capacity of 40 GWh in 2030.

In **Germany**, the Company acquired Kyon Energy, a leading battery storage developer, from its three founders in February 2024. When acquired, Kyon Energy had developed, since its creation in 2021, 770 MW of projects, of which 120 MW are already in operation, 350 MW are under construction and 300 MW are ready to build. In addition, Kyon's portfolio contained 2 GW of projects at an advanced stage of development.

TotalEnergies has launched the construction of a 100 MW/200 MWh battery electricity storage project in Dahlem, North Rhine-Westphalia. This project, carried out via Kyon Energy, will benefit from the expertise of Saft, which will provide the project with its latest-generation electricity storage technology (iShift LFP/lithium-iron-phosphate containers). The commercial commissioning of this unit is scheduled for the end of 2026, and the startup Quadra Energy, one of Germany's leading aggregators of renewable electricity production, acquired by TotalEnergies in October 2023, will monetarize the flexibility provided by these batteries on the electricity markets.

In **Belgium**, TotalEnergies announced in April 2024 the launch of a new battery electricity storage project at the TotalEnergies Feluy depot. It will have a power output of 25 MW and a capacity of 75 MWh thanks to the 40 "Intensium Max High Energy" lithium-ion containers supplied by Saft. Commissioning is scheduled for late 2025.

2.4.5 Natural gas and electricity marketing and electricity trading

CORPORATE PPA

On deregulated electricity markets, it is possible to sign long-term sales contracts, Corporate PPAs, for the output from solar or wind assets with corporate customers. Unlike in the distributed generation business, these assets are not located on the customer's property, but elsewhere on the electricity grid. The electricity generated by these assets is then injected into the electricity grid.

These contracts are usually signed on a long-term basis with fixed prices or with limited price variations. They enable customers to buy low-carbon electricity directly from the producer, while at the same time benefiting from a stable electricity price over the long term with access to the cost advantages offered by large-scale plants. These contracts enable TotalEnergies to secure long-term electricity sales and to promote the launch of new production assets.

Corporate PPAs exist in a growing number of countries. Today, the most dynamic markets are United States, Western Europe, Brazil and Australia. TotalEnergies is positioning itself locally in these different markets to offer its customers global solutions and thus support them in their decarbonization objectives. In 2024, several Corporate PPAs were signed, including a new renewable electricity supply contract with Saint-Gobain to supply its facilities in France with a total volume of 875 GWh over five years. This agreement follows on from the 15-year 100 MW electricity sales contract with Saint-Gobain in the United States and a renewable energy supply contract with Air Liquide/SASOL for a total capacity of 260 MW in South Africa, both signed in 2023.

At the end of January 2025, TotalEnergies has a portfolio of Corporate PPA in these markets of 5.5 TWh/year, equivalent to more than 1.7 GW of installed capacity. In addition to the companies mentioned above, these Corporate PPAs involve clients such as Amazon Web Services, Kilroy, LyondellBasell, Merck, Microsoft, and Orange. In January 2025, TotalEnergies and STMicroelectronics announced the signing of a PPA to supply 1.5 TWh of renewable electricity over a period of 15 years in France. This power comes with structuration services to transform intermittent production in a constant volume ("baseload") of low-carbon electricity. It is the first time in France that such a contract is provided over a period of 15 years.

ELECTRICITY AGGREGATION AND TRADING

TotalEnergies is active in electricity trading, mainly in Europe and North America. It sells its output to third parties and supplies its subsidiaries. To support its development in the field of renewable electricity, the Company has developed specific expertise in trading on short-term markets (intra-day, physical delivery), in the structured PPA-type products, in particular to transform intermittent renewable generation into the supply of continuous and constant volumes of low-carbon energy, aggregation, and flexibility management segments.

In **Europe**, TotalEnergies delivered 90 TWh of electricity in 2024, compared to 95 TWh in 2023 and 122 TWh in 2022, mainly from external sources. European electricity trading is mainly carried out from offices in Geneva, Paris, Düsseldorf, Madrid and Liège.

In **Germany**, TotalEnergies strengthened its electricity aggregation and trading activities through the acquisition of the German company Quadra Energy, finalized in April 2024 following approval by the competent authorities. Founded in 2012 and aggregating 10 GW, Quadra Energy is one of the three leading aggregators of renewable electricity generation in Germany. The Company also intends to leverage Quadra Energy's recognized expertise, as well as its innovative weather forecasting platform, to expand its marketing activities in order to offer its German customers competitive contracts for the sale of low-carbon electricity available around the clock.

In **Switzerland**, TotalEnergies announced the acquisition of Predictive Layer in December 2023. The latter's activity is to improve the performance of electricity trading operations, thanks to the internalization of machine learning and artificial intelligence solutions. In particular, they make it possible to make projections on energy prices, whether on physical markets or derivatives markets.

In **North America**, TotalEnergies delivered 16.6 TWh of electricity in 2024[1] compared to 6.2 TWh in 2023 and 4.6 TWh in 2022. In 2024, TotalEnergies took over management of the three gas-fired power plants acquired in 2023, as well as the Myrtle and Danish Field battery storage systems, commissioned between 2023 and 2024. TotalEnergies has also obtained authorizations to begin trading on the US SPP and CAISO markets.

(1) 2024 data: including production from gas-fired power plants; 2023 and 2022 data restated on comparable perimeter.

NATURAL GAS AND ELECTRICITY MARKETING

Europe

With a portfolio of 6 million BtB and BtC customer sites (gas and electricity) **in France**, 8.8 million BtB and BtC client sites in **Europe** and 51 TWh of electricity and 99 TWh of gas supplied in 2024, TotalEnergies has become a leading player in the sale of natural gas and electricity to both the residential and professional markets (commercial and industrial segments).

In a context of rising electricity and natural gas prices, since November 2022 TotalEnergies has committed to support its customers by encouraging them to save energy, through the development of new offers and the broadcasting of voltage alerts on the electricity grid.

For individual customers in France, TotalEnergies has implemented:

- the "Conso Master" program for winter 2024-2025, encouraging customers to discover the mobile application and take control of the consumption management tools it offers. This program replaces the "Bonus conso" program introduced during the winters of 2022-2023 and 2023-2024, which rewarded customers who reduced their electricity consumption over the winter period with bonuses deducted directly from their bills;
- the "Rendez-vous Solidaire" for customers eligible to the Chèque Energie energy subsidy or Fonds de Solidarité Logement housing subsidy. A free, personalized assessment is available to provide specific support in controlling and optimizing the customer's contract and energy consumption. In 2024, more than 1,100 appointments were made with a satisfaction rate of 87%;
- the "Avantage Carburants" offer whereby since September 2024 all TotalEnergies retail Electricity & Gas customers in France have been able to benefit from a ceiling price of €1.94/L instead of €1.99/L for all fuels at TotalEnergies filling stations;
- the "Inondations 62" operation in response to the flooding at the beginning of the year in Pas-de-Calais. TotalEnergies signed an agreement with local social organizations to provide exceptional assistance of €400 per customer affected by the disaster and experiencing payment difficulties.

In order to help its customers control their budgets, TotalEnergies has not passed on the July 1, 2024 increase in natural gas delivery tariffs (ATRD) decided by the French Energy Regulatory Commission (CRE) in the price of its fixed gas offers for private customers. In the winters of 2022-2023 and 2023-2024, the #TousAuCourant program allowed the relaying of good practices to save electricity as well as alerts on days of pressure on the grid.

In addition, TotalEnergies chose to subscribe to the 13 measures and best practices defined by the CRE to improve the transparency and readability of offers made to residential electricity and gas customers. By committing to respect them throughout the customer journey, TotalEnergies confirms its proactive approach to continuous improvement for the benefit of its customers.

For professional customers, businesses and local authorities in France, TotalEnergies has:

- extended the #TousAuCourant energy-saving awareness campaign during the winter period;
- granted a rebate of €100/MWh in 2023 before application of state aid for very small businesses that signed an electricity contract in the second half of 2022;
- topped up state aid (electricity buffer) in 2023 and 2024 for SMEs that signed an electricity contract in the second half of 2022, to guarantee them a maximum price of €230/MWh excluding tax and delivery.

TotalEnergies markets natural gas and electricity in the residential and professional segments in **France** through its subsidiary TotalEnergies Electricité et Gaz France (a merger of the TotalEnergies Énergie Gaz, TotalEnergies Spring France and Direct Énergie entities), in **Belgium**, through TotalEnergies Power & Gas Belgium subsidiary (formerly Lampiris SA), and in **Spain**.

TotalEnergies also markets natural gas and electricity to the professional segment in the **United Kingdom**.

(millions of BtB and BtC sites)	2024	2023	2022
Europe	**8.8**	**8.7**	**8.9**
France	5.6	5.5	5.6
Belgium	0.9	0.9	0.9
United Kingdom	0.3	0.3	0.3
Spain	2.0	2.0	2.0

(in TWh of electricity supplied)	2024	2023	2022
Europe	**50.7**	**52.1**	**56**
France	27.4	29.2	32.1
Belgium	3.1	3.5	3.9
United Kingdom	13.8	13.8	13.4
Spain	6.3	5.7	5.9

(in TWh of gas supplied)	2024	2023	2022
Europe	**98.6**	**100.9**	**96.3**
France	26.9	29.2	29.9
Belgium	7.5	7.1	7.6
United Kingdom	55.9	57.5	53.7
Spain	8.2	7.7	5.1

Rest of the world

In **Argentina**, TotalEnergies markets the natural gas that it produces. Annual gas sales volumes reached 4.8 Gm^3 in 2024, compared with 4.4 Gm^3 in 2023 and 4.4 Gm^3 in 2022.

In **India**, since 2020 TotalEnergies owns 37.4% of Adani Total Gas Limited (ATGL), which holds 34 City Gas Distribution licenses in India (100%) and another 19 licenses through IOAGPL, a 50/50 JV with Indian Oil Corporation Limited (IOC) (refer to point 1.9.3 of chapter 1).

2.4.6 Services in the field of energy efficiency and innovation in the electricity segment

GreenFlex, a wholly-owned subsidiary, offers services designed to improve the energy and environmental performance of its customers. GreenFlex had over 800 customers at year-end 2024.

As part of its transformation into an integrated energy company, in May 2022, TotalEnergies launched "TotalEnergies On", its startup acceleration program at Station F, the world's largest startup campus, located in Paris. In line with TotalEnergies' ambition, TotalEnergies On intends to support the development of new companies in the electricity and renewable energy segment.

The objective of this program is to identify and support startups developing digital solutions in the field of electricity, whether it is renewable production, storage, trading, sales, decentralized network management, or electric mobility.

Since its launch, TotalEnergies On has already supported 39 start-ups during 4 sessions of 6 months each. In December 2023, the Company announced the acquisition of three start-ups that have benefited from the TotalEnergies On program:

- thanks to the acquisition of Dsflow, TotalEnergies will offer its multi-site BtB customers who consume a large amount of electricity an innovative SaaS (Software-as-a-Service) solution to manage their assets in real time and thus optimize their procurement strategy;
- TotalEnergies has also decided to integrate the software platform developed by NASH Renewables in order to optimize the design and operation parameters of its renewable projects, in a design-to-value approach, taking into account the impact of the geographical specificities of the sites on the market prices effectively captured;
- TotalEnergies will improve the performance of its trading operations through the in-house insourcing of Predictive Layer's machine learning and artificial intelligence solutions. These include projections of energy prices, whether on physical or derivatives markets, as well as other tailor-made modelling of demand, supply, production, or non-commodity trading.

TotalEnergies has also taken control of Time2plug (with a 56% stake) to facilitate and accelerate the deployment of electric vehicle charging points in France for its small BtB customers. and signed 17 commercial contracts with other start-ups that participated in the acceleration program.

2.5 Refining & Chemicals segment

The Refining & Chemicals segment includes the Refining & Chemicals activities described in point 2.5.1 and the Trading-Shipping activities described in point 2.5.2.

Main indicators

Among the world's **10** largest integrated producers[1] based on refining and petrochemical capacities

1.8 Mb/d
Refining capacity at year-end 2024

One of the **leading** traders of oil and refined products worldwide

-1.1 Mt CO_2e
Decrease of the CO_2 emissions Scope 1+2 during year 2024

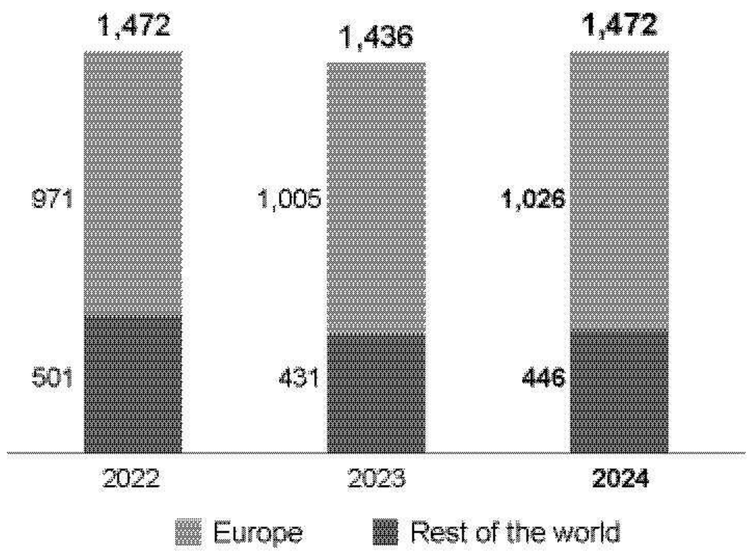
$1.7 B
Organic investments[2] in 2024 for Refining & Chemicals activities

Main objectives/ambitions

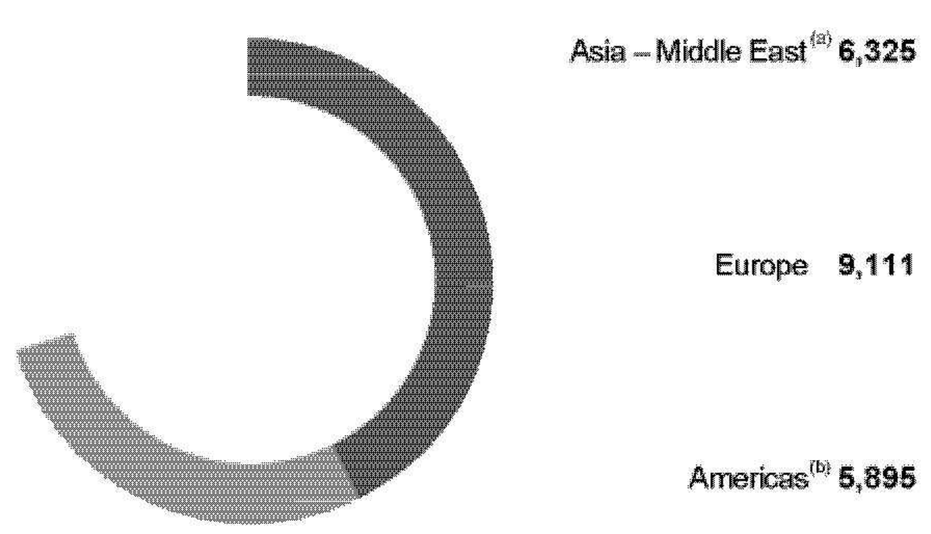
1.5 Mt/y
Production of SAF by 2030

Ambition to produce **1 Mt/y** of polymers from recycled or renewable material by 2030

Refinery throughput *(in kt/d)*

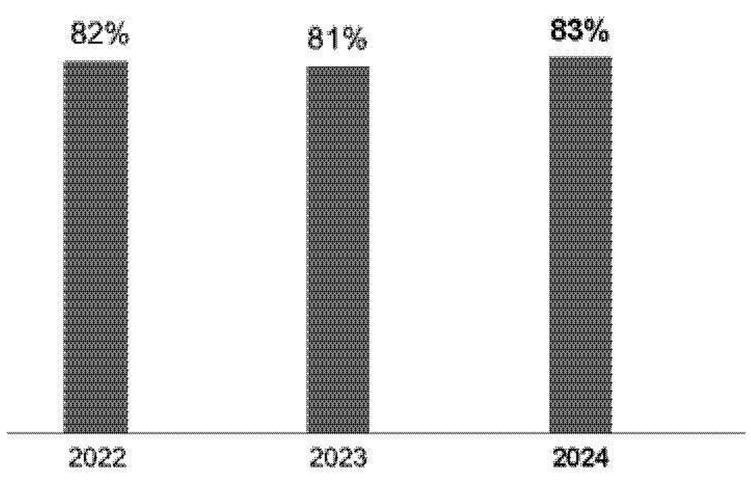


Petrochemicals production capacity by geographical area *(kt)*



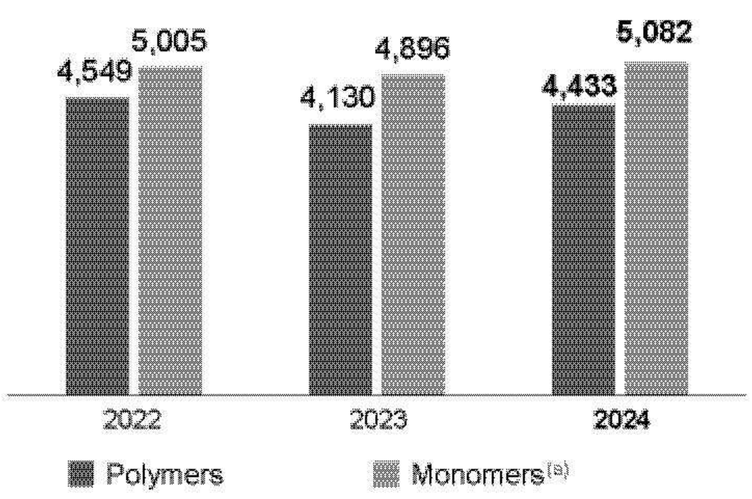
(a) Including interests in Qatar, 50% of Hanwha TotalEnergies Petrochemical Co. Limited and 37.5% of SATORP in Saudi Arabia.
(b) Including 50% of the joint-venture between TotalEnergies and Borealis.

Refining utilization rate[a] *(in %)*



(a) Based on distillation capacity at the beginning of the year.

Production of petrochemicals *(in kt)*



(a) Olefins.

Refinery throughput was up by 2% year-on-year in 2024, reflecting a slightly higher refinery utilization rate given the light major turnaround schedule of the year.

Petrochemicals production was up 4% year-on-year in 2024 for monomers and 7% for polymers due to an increase in cracker utilization rates.

(1) Based on publicly available information, refining and petrochemical capacities at year-end 2022.
(2) Refer to the glossary for the definition and further information on alternative performance measures (Non-GAAP measures) and to point 1.9 of chapter 1 for reconciliation tables.

REFINING & CHEMICALS SEGMENT FINANCIAL DATA

Results *(in M$)*	2024	2023	2022
Adjusted net operating income	2,160	4,654	7,302
Organic investments[a]	1,711	2,040	1,319
Acquisitions net of assets sales[a]	(173)	(118)	(38)
Net investments[a]	1,538	1,922	1,281
Cash flow from operations excluding working capital (CFFO)[a]	3,760	5,853	7,704
Cash flow from operating activities	3,808	7,957	8,663

(a) Refer to the glossary for definitions and additional information on alternative performance measures (APM, Non-GAAP measures) and to point 1.9 of chapter 1 for reconciliation tables.

Refining & Chemicals adjusted net operating income was $2,160 million in full-year 2024, down 54% year-on-year, due to the decrease in refining margins in Europe and in the rest of the World.

Cash flow from operations excluding working capital (CFFO) was $3,760 million in full-year 2024, down 36% year-on-year for the same reasons although partially offset by dividends received from equity affiliates.

2.5.1 Refining & Chemicals

Refining & Chemicals' activities include refining, base petrochemicals (olefins and aromatics); polymer derivatives (polyethylene, polypropylene, polystyrene and hydrocarbon resins), including biopolymers and recycled polymers obtained from chemical or mechanical recycling, as well as the production of biofuels from the transformation of biomass and, since January 1, 2022, the production of specialty fluids, previously reported in the Marketing & Services segment. The Refining & Chemicals activities also include the processing of elastomers by Hutchinson.

Refining & Chemicals aims to constitute a safe, efficient and innovative industrial complex. The Refining & Chemicals strategy integrates the constant requirement for safety, a core value of TotalEnergies, and is embedded in the Company's climate ambition. It does so through controlling the CO_2 emissions of its operations (Scope 1+2), developing low-carbon solutions, particularly in biomass, and adapting its activities in Europe in line with the net zero emission objective set by the European Union.

Its strategy is based on:

- continuously improving the competitiveness of refining and petrochemicals activities by making optimal use of production assets, concentrating investments on its large, integrated platforms and reducing CO_2 emissions linked to its operations;
- growing petrochemicals, mainly in the United States and the Middle East, by exploiting the proximity of cost-effective oil and gas resources in order to supply growing markets, particularly in Asia; and
- developing low carbon activities, on the one hand in biofuels (in particular more Sustainable Aviation Fuel (SAF)), synthetic fuels produced from CO_2 and green hydrogen (e-fuels), biopolymers and plastic recycling solutions, and on the other hand in materials that help enhance the energy efficiency of TotalEnergies' customers, particularly in the automotive market.

Biofuels

Biofuels meeting European standards reduce CO_2 emissions by at least 50% compared to their equivalent fossil fuels[1] and demand for these products is supported by government policies aimed at achieving carbon neutrality (net zero emissions).

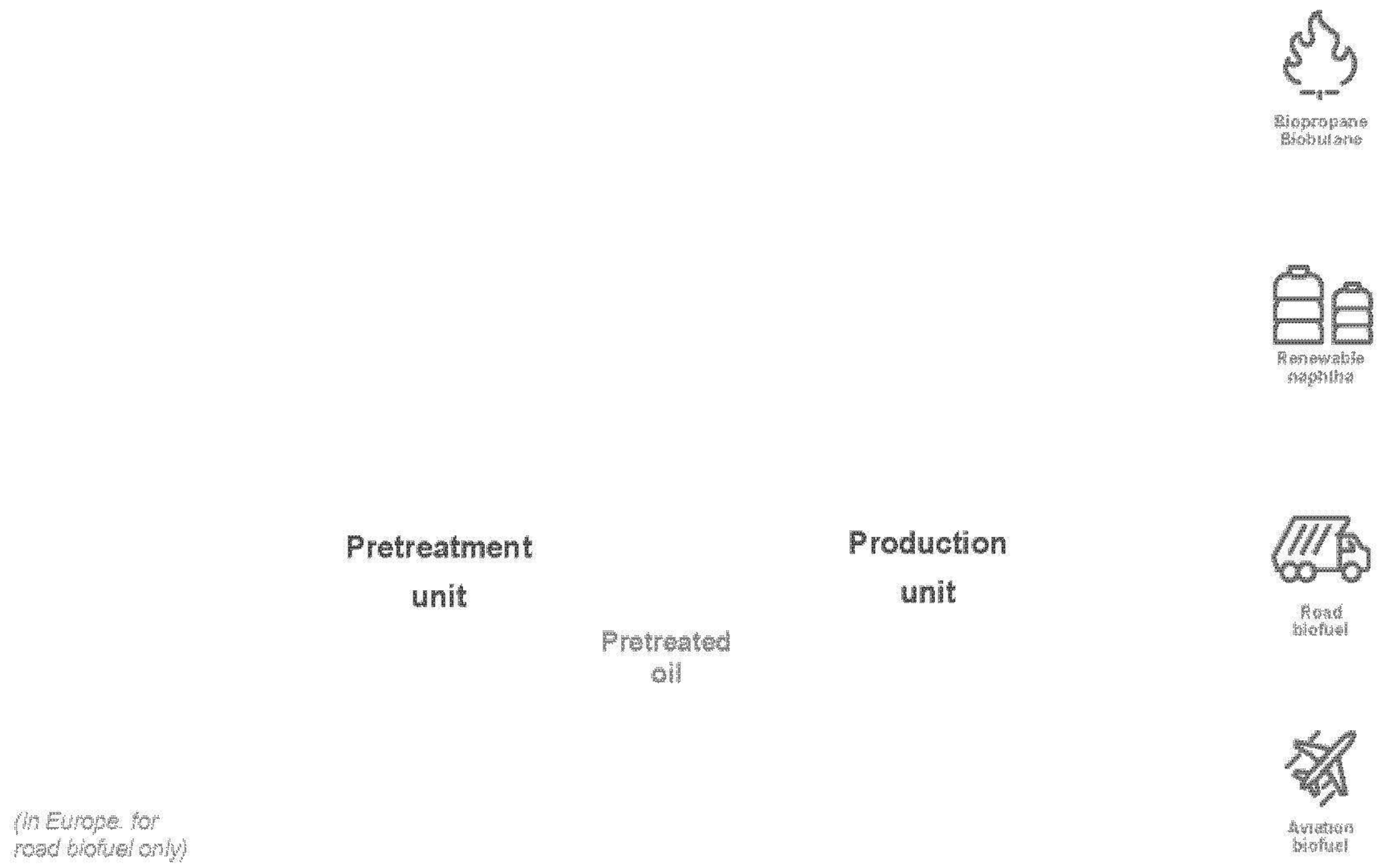
The growth of the biofuels market is driven by the segment covering the renewable diesel and SAF produced by hydrotreating vegetable oils or raw materials from the circular economy (animal fat and used cooking oil, etc.). This segment is expected to grow by over 25% a year[2] over the next few years.

The aviation sector has set itself the goal of achieving carbon neutrality by 2050[3]. Achieving this target is expected to involve the incorporation in fossil fuels of a growing portion of SAF, which is the most effective solution for reducing CO_2 emissions from air transport, in the absence of an industrial alternative to liquid fuel in the short to medium term.

The outlook for growth in demand for SAF is also supported by the various regulations. For example, in Europe, the ReFuelEU Aviation regulation, launched as part of the EU's "Fit for 55" legislative package, favors the development of SAFs in the European Union with, among other things, the implementation of obligatory progressive minimum incorporation mandates: 2% in 2025, 6% (of which 1.2% synthetic fuel) in 2030 and 70% (of which 35% synthetic fuel) in 2050. In the U.S., the 2022 Inflation Reduction Act provides tax incentives for the domestic production of aviation fuel allowing GHG emissions to be reduced.

The hydrotreatment of raw materials from the circular economy, including animal fats and used cooking oils (as well as vegetable oils depending on local regulations), constitutes one of the main production routes for SAF.

Diagrammatic representation of production of biofuels by hydrotreatment



TotalEnergies intends to become a leader in the production of SAF, relying mainly on its existing refining assets (conversion, co-processing and developments on existing platforms).

In France, in order to respond to the call from its aeronautical customers, the Company is mobilizing its platforms in Grandpuits, Normandy and La Mède to be able to produce, from 2028, half a million metric tons of SAF, thus covering the gradual increase in the European SAF blending mandate, set at 6% for 2030. In December 2022, TotalEnergies and Air France signed a Memorandum of Understanding (MoU) for the delivery of 800 kt of SAF by TotalEnergies to Air France-KLM Group airlines over a 10-year period. In September 2024, this agreement has been re-evaluated, increasing the volume to 1.5 Mt of SAF over 10 years to 2035, thus contributing to Air France's objective of incorporating at least 10% of SAF on all its flights, which goes beyond regulatory obligations.

The Company has the ambition to produce 1.5 Mt/y of SAF in 2030 with units in Europe, the U.S., the Middle East and Asia, which is expected to correspond to a global market share of around 7% of volumes produced[4] at this horizon.

In 2024, TotalEnergies produced 292 kt of biofuels (renewable diesel, SAF and ETBE), compared to 331 kt in 2023 and 242 kt in 2022, and 69 kt of other co-produced chemical biocomponents (bionaphtha, etc.), compared to 78 kt in 2023 and 64 kt in 2022, mainly at the La Mède and Feyzin sites in France.

(1) According to the EU's RED III (Renewable Energy Directive).
(2) TotalEnergies data.
(3) Source: IATA.
(4) TotalEnergies data.

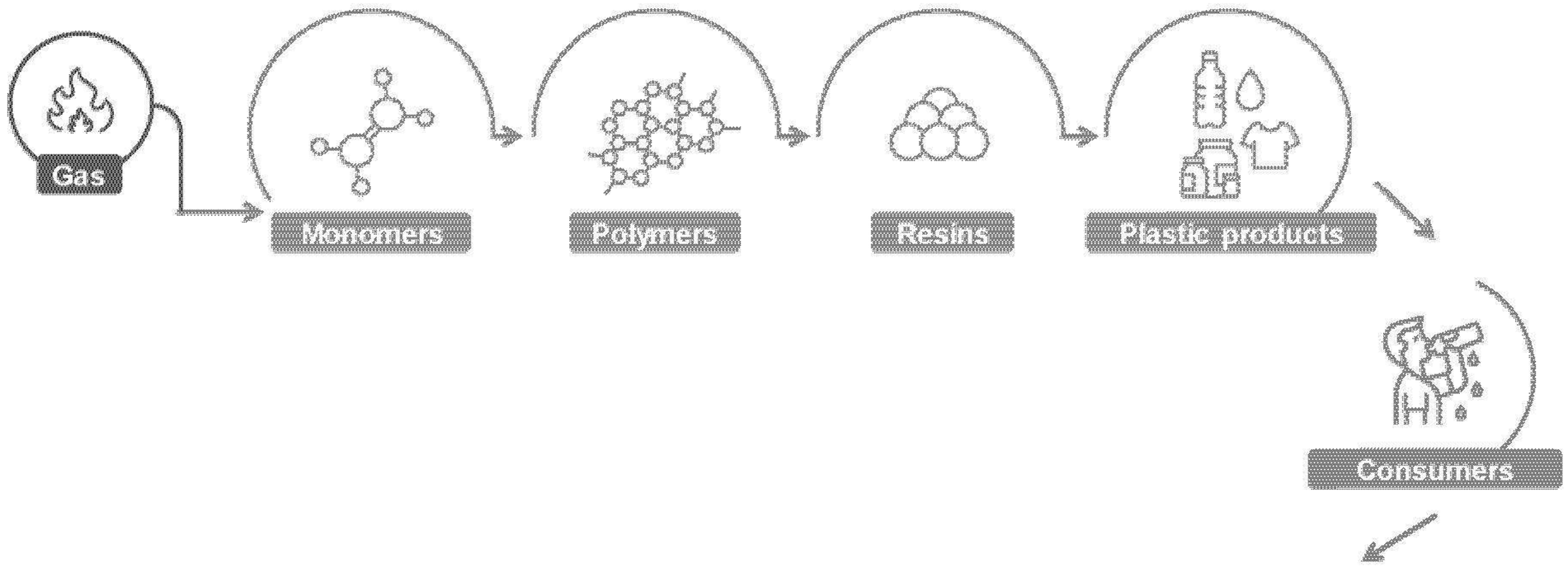
Biopolymers and plastics recycling

Biopolymers are produced either by replacing fossil feedstock in a steam cracking unit with biomass feedstock such as vegetable oils or hydrogenated residues, or directly by making low-carbon molecules such as polylactic acid (PLA) from sugar.

Mechanical recycling, the technology for which is more mature than that for chemical recycling, requires highly processed feedstock and cannot be used for every application of plastic, particularly most of those involving contact with food. This technology is suited to the needs of markets such as automotive and construction.

Advanced or chemical recycling, on the other hand, makes it possible to process waste that cannot be recycled mechanically and to address other markets, such as those of plastics for food use; it requires more capital-intensive technologies and is still at the stage of industrial development. The purpose of the chemical recycling process is to break down used polymer in order to return, in one or more stages, to a monomer, which is the raw material of any polymer.

Plastics recycling process



In order to support its customers in reducing their greenhouse gas emissions and addressing the end-of-life problem of plastics, TotalEnergies has resolutely committed to the development of both biomass conversion into polymers and plastic recycling activities. It has set the ambition of producing 1 Mt/y of polymers from recycled or renewable materials by 2030. In 2024, TotalEnergies produced 89 kt of recycled or renewable polymers (including recycled or renewable base), compared to 80 kt in 2023 and 50 kt in 2022.

In addition to the development of low-carbon polymers, TotalEnergies has been involved since 2019, as a founding member of the Alliance to End Plastic Waste, in an initiative to reduce the environmental impact of plastics. The Alliance, bringing together more than 80 members and project partners, aims to develop and implement solutions to reduce plastic waste in the environment.

2.5.1.1 Refining and petrochemicals

At the end of 2024, TotalEnergies held stakes in 14 refineries[1] (compared with 16 at the end of 2023) located in Europe, the United States, the Middle East, Asia and Africa, eight of which are operated by TotalEnergies companies, including two biorefineries in France (La Mède, and the Grandpuits plant which is in the process of being converted). At December 31, 2024, TotalEnergies' refining capacity was 1,761 kb/d, compared to 1,792 kb/d at year-end 2023 and 2022. The reduction in capacity in 2024 is due to the sale of TotalEnergies Marketing South Africa's 36.36% minority interest in the Natref (National Petroleum Refiners of South Africa) refinery and of TotalEnergies Marketing Côte d'Ivoire's 20.35% minority interest in the SIR (Société Ivoirienne de Raffinage) refinery.

TotalEnergies' petrochemicals operations are located in Europe, the United States, Qatar, South Korea and Saudi Arabia. Being either adjacent to or connected by pipelines to TotalEnergies refineries, the vast majority of the petrochemical operations are integrated with its refining operations, thereby maximizing synergies.

At December 31, 2024, TotalEnergies' global petrochemicals capacity (olefins, aromatics and polymers) was 21,330 kt, compared with 22,165 kt at the end of 2023 and 21,885 kt at the end of 2022. The capacity decrease in 2024 was due to the Lavéra disposal (France).

For the main sites of Refining & Chemicals at year-end 2024, please refer to point 1.7.3 of chapter 1.

(1) The Company finalized the sale of its minority interests in the Natref and SIR refineries in December 2024 and July 2024 respectively.

CRUDE OIL REFINING CAPACITY

The table below sets forth TotalEnergies' crude oil refining capacity[a]:

As of December 31 *(kb/d)*	2024	2023	2022
Refineries operated by TotalEnergies companies	**1,384**	**1,384**	**1,384**
France			
Normandy-Gonfreville (100%)	253	253	253
Donges (100%)	219	219	219
Feyzin (100%)	109	109	109
Grandpuits (100%)	–	–	–
Rest of Europe			
Antwerp (100%)	338	338	338
Leuna (100%)	227	227	227
North America			
Port Arthur refinery and condensate splitter (100%)	238	238	238
Other refineries in which TotalEnergies has interests[b]	**377[c]**	**408**	**408**
Total	**1,761**	**1,792**	**1,792**

(a) Capacity data based on crude distillation unit stream-day capacities under normal operating conditions, less the average impact of shutdowns for regular repair and maintenance activities.
(b) TotalEnergies' share at December 31, 2024 in capacity of the six refineries in which it has interests ranging from 0.1% to 55% (in the Netherlands, South Korea, Qatar and Saudi Arabia and two in Africa).
(c) The reduction in refining capacity between 2023 and 2024 is due to the sale of TotalEnergies Marketing South Africa's 36.36% minority interest in the Natref (National Petroleum Refiners of South Africa) refinery and of TotalEnergies Marketing Côte d'Ivoire's 20.35% minority interest in the SIR (Société Ivoirienne de Raffinage) refinery.

REFINERY AND BIOREFINERY PRODUCTION

The table below sets forth TotalEnergies' net share[a] of the refined quantities produced by TotalEnergies' refineries, by product category:

(kb/d)	2024	2023	2022
Gasoline (excluding ETBE)	258	252	259
Aviation fuel (excluding SAF)[b]	156	140	122
Diesel and fuels (excluding renewable diesel)	623	620	644
Heavy fuels	69	70	68
Other products[c]	331	314	326
Renewable diesel, SAF and ETBE	6	7	5
Total	**1,443**	**1,403**	**1,424**

(a) For refineries not 100% owned by TotalEnergies, the production shown corresponds to TotalEnergies' equity share in the site's overall production.
(b) Jet fuel, kerosene and Avgas (aviation fuel specially designed for piston engined aircraft).
(c) Mainly refining bases, petcoke, naphta, refinery propylene and other petrochemical bases.

The difference with refinery throughput and the refined volumes is due to self-consumption of crude oil and losses during the refining process.

UTILIZATION RATE OF REFINERIES

The table below sets forth the average utilization rates of TotalEnergies' refineries:

	2024	2023	2022
On crude and other feedstock[a][b]	83%	80%	82%
On crude[a][c]	83%	81%	82%

(a) Including equity share of refineries in which TotalEnergies has an interest.
(b) Crude + crackers' feedstock/distillation capacity at the beginning of the year.
(c) Crude/distillation capacity at the beginning of the year.

PETROCHEMICALS: BREAKDOWN OF MAIN PRODUCTION CAPACITIES

As of December 31 *(in kt)*	2024 Europe	2024 North America[a]	2024 Asia and Middle East[b]	2024 Worldwide	2023 Worldwide	2022 Worldwide
Olefins[c]	3,471	2,040	1,958	7,469	8,174	8,174
Aromatics[d]	2,846	1,512	2,581	6,939	7,069	7,064
Polyethylene	1,140	535	1,065	2,740	2,740	2,438
Polypropylene	1,245	1,200	605	3,050	3,050	3,070
Polystyrene	409	608	–	1,017	1,017	1,024
Other[e]	–	–	116	116	116	116

(a) Including 50% of the joint-venture between TotalEnergies and Borealis.
(b) Including interests in Qatar, 50% of Hanwha TotalEnergies Petrochemicals Co. Ltd. in South Korea and 37.5% of SATORP in Saudi Arabia.
(c) Ethylene + propylene + butadiene.
(d) Including styrene monomer.
(e) Mainly monoethylene glycol (MEG), polylactic acid polymer (PLA) and cyclohexane.

PETROCHEMICALS PRODUCTION AND UTILIZATION RATE

	2024	2023	2022
Monomers[a] *(kt)*	5 082	4,896	5,005
Polymers *(kt)*	4 433	4,130	4,549
Steamcracker utilization rate[b]	79%	69%	76%

(a) Olefins.
(b) Based on olefins production from steamcrackers and their treatment capacity at the start of the year.

ACTIVITIES BY GEOGRAPHICAL AREA

Europe

TotalEnergies is the second largest refiner and the second largest petrochemicals operator in Western Europe[1] TotalEnergies also positions itself in the production of biofuels, mainly renewable diesel and SAF, as well as ether (ETBE) produced from ethanol and isobutene for incorporation into gasoline.

In a context of adaptation to the demand for petroleum products in Europe, TotalEnergies reduced its refining capacities in 2021 with the sale of its stake in the Lindsey refinery in the United Kingdom and the cessation of crude oil processing at the Grandpuits refinery, as part of its transformation into a zero-crude platform.

Furthermore, TotalEnergies continued to pursue its projects aimed at decarbonizing all the hydrogen consumption of its European refineries by 2030. As part of this ambition, TotalEnergies has entered into agreements for the supply of green and low-carbon hydrogen on several of its sites, and in September 2023 it launched a call for tenders for the supply of 500 kt/y of green hydrogen, which is expected to allow it to avoid the emission of approximately 3 Mt/y CO_2 (Company share) from its European refineries by 2030. Following this call for tenders, TotalEnergies and Air Products signed an agreement in June 2024 for the supply of 70 kt/year of green hydrogen in Europe for 15 years from 2030.

In July 2024, TotalEnergies signed agreements with the German renewable developer RWE to acquire a 50% stake in OranjeWind, a 795 MW offshore wind farm under development in the Netherlands, with full commissioning expected in early 2028. In February 2025, TotalEnergies has signed agreements with Air Liquide to develop two projects in the Netherlands, for the production and delivery of green hydrogen, using renewable power generated mostly by this wind farm. These two projects, aimed at decarbonizing the refineries in Zeeland, Netherlands, and Antwerp, Belgium, will reduce CO_2 emissions by up to 450 kt/year: (i) To supply green hydrogen to the Zeeland refinery, the two companies set up a joint-venture, equally held by TotalEnergies (50%) and Air Liquide (50%), to build and operate a 250 MW electrolyzer near the refinery. This project, which will enable the production of up to 30 kt/year of green hydrogen, most of which will be delivered to the refinery, represents a global investment of around €600 million and has made requests for support under European and national subsidy programs. (ii) For the Antwerp platform, TotalEnergies signed a tolling agreement with Air Liquide for the supply of 15 kt/year of green hydrogen. TotalEnergies will supply the renewable electrons produced by the OranjeWind project to be transformed into green hydrogen by Air Liquide's ELYgator electrolyzer, located in Maasvlakte (Netherlands).

TotalEnergies continues to improve the competitiveness of its industrial assets, notably with the sale finalized in 2024, to Ineos of its stake in the Lavéra assets (steam cracker, aromatics, polypropylene) as well as part of its stakes in the pipeline and ethylene storage network in eastern France. This operation allowed the two companies to realign their ethylene production and internal consumption. TotalEnergies is thus consolidating the integration of its Feyzin and Carling petrochemical sites.

Western Europe represents 70% of TotalEnergies' refining capacity, or 1,227 kb/d at the end of 2024, unchanged from year-end 2023 and 2022. TotalEnergies operates five refineries in Europe (one in Antwerp, Belgium, three in France, at Donges, Feyzin and Gonfreville, and one in Leuna, Germany) and one biorefinery in La Mède, France, pending the start-up of the Grandpuits zero-crude platform, and holds a 55% interest in the Zeeland refinery in Vlissingen, the Netherlands.

(1) Publicly available information, based on refining and petrochemicals production capacities at year-end 2023.

TotalEnergies' main petrochemical sites in Europe are located in Belgium, in Antwerp (steam crackers, aromatics, polyethylene) and Feluy (polyolefins, polystyrene), and in France, in Carling (polyethylene, polystyrene, polypropylene compounds), Feyzin (steam cracker, aromatics) and Gonfreville (steam crackers, aromatics, styrene, polyolefins, polystyrene). Europe accounts for 43% of TotalEnergies' petrochemicals capacity, namely 9,111 kt at year-end 2024, compared to 9,946 kt at year-end 2023 and 9,931 kt at year-end 2022:

- In **France**, TotalEnergies is continuing its development in low-carbon products while at the same time improving its operational efficiency, particularly through the conversion and modernization of assets.
  - The project to transform the **Grandpuits refinery** into a zero-crude platform focused on new energies and low-carbon activities continued in 2024.

  For the development of **biofuel** production activities, a major milestone was reached in September 2022 with the signing of an agreement with SARIA, a leader in the European market for the collection and recovery of organic materials into sustainable products. Thanks to this partnership which made it possible to secure the supply of used cooking oils and animal fats (raw materials eligible for SAF production), the biorefinery is expected to have a SAF production capacity of 210 kt/y at its start planned for 2025. In June 2023, TotalEnergies announced a new investment to produce an additional 75 kt intended to increase the SAF production capacity of the biorefinery to 285 kt/y; which is expected to make it possible to respond to the gradual increase in European obligatory incorporation requirements. In November 2022, TotalEnergies partnered with Air Liquide to produce and recover renewable, low-carbon hydrogen, which will be used to produce more sustainable aviation fuel. Under a long-term contract, committing TotalEnergies to purchase the hydrogen produced for the needs of its platform, Air Liquide plans to invest over €130 million in the construction and operation of a new unit producing hydrogen, which will partly use biogas from the TotalEnergies biorefinery, and will be equipped from the start with Air Liquide's Cryocap™ CO_2 capture technology. These innovations are expected to avoid emissions amounting to 150 kt/y CO_2 compared to current processes.

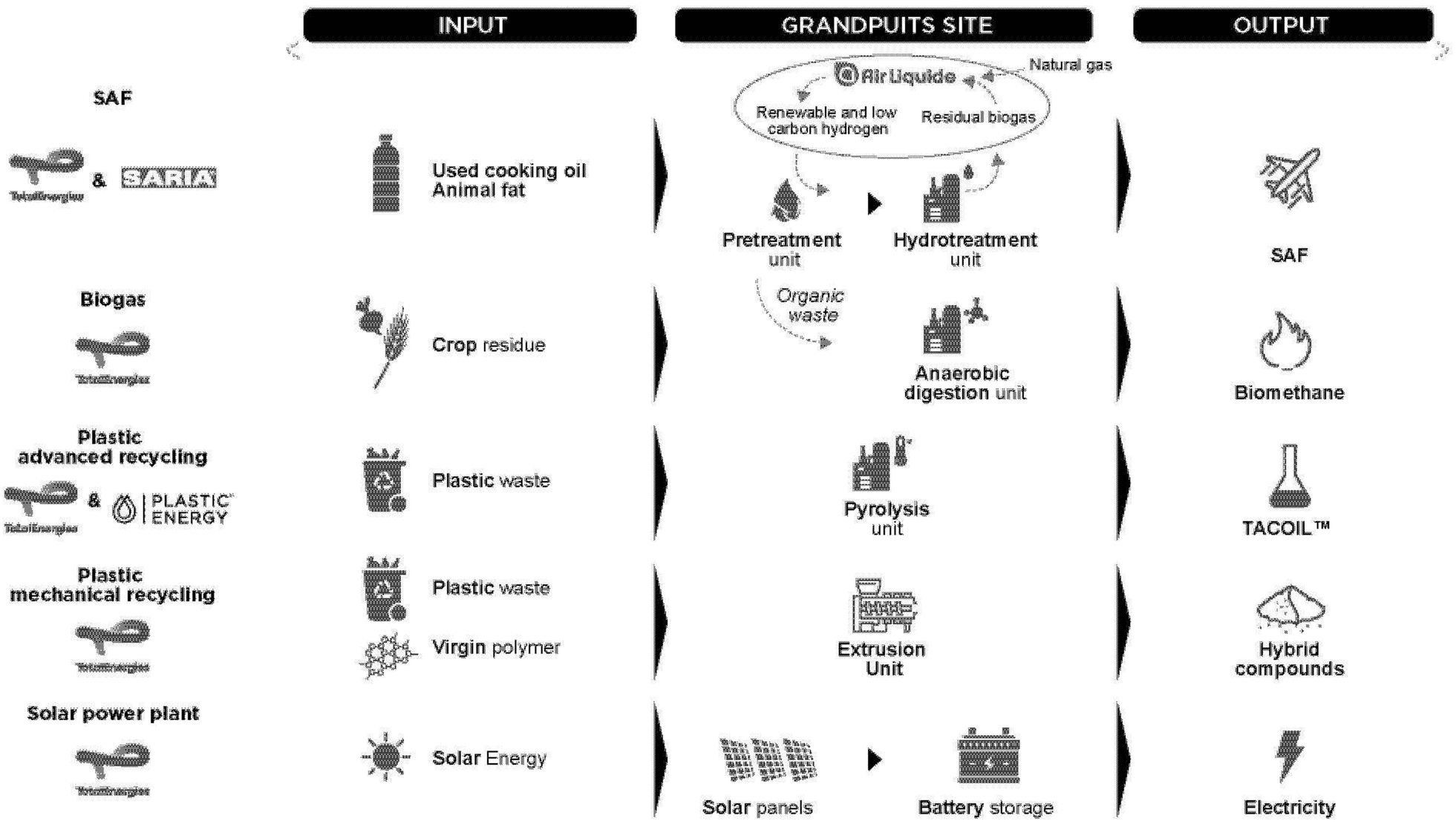
  For the development of **plastic recycling** activities, in partnership with Plastic Energy, TotalEnergies has built an advanced recycling plant in France, with the capacity to process 15 kt/y of plastic waste. This unit will be able to convert plastic waste by pyrolysis into a recycled raw material called TACOIL™. This raw material will then be transformed by TotalEnergies into polymers with properties identical to those of virgin polymers, and in particular compatible with food use. whose start-up has been underway since the end of 2024. In March 2023, TotalEnergies and Paprec, a leader in plastic recycling in France, entered into a long-term commercial agreement to develop the first French value chain for chemical recycling of plastic film waste. This agreement allows TotalEnergies to secure supplies for the future Grandpuits chemical recycling plant.

  To this initial project is added a new project announced by TotalEnergies in September 2023: the construction of a mechanical recycling unit. This new unit, which is scheduled to be commissioned in 2026, is expected to produce 30 kt/y of high added value compounds consisting of up to 50% recycled plastic materials.

  In addition, TotalEnergies announced in 2023 the construction on this same site of a **biomethane** unit with a capacity of 80 GWh/y, equivalent to the average annual consumption of 16,000 inhabitants(1). Fed with organic waste coming largely from the biorefinery, it is expected to avoid the emission of nearly 20 kt/y CO_2. TotalEnergies has also commissioned a **solar power plant** expected to generate 31 GWh/y of green electricity, the equivalent of the electricity consumption of 19,000 people(2), as well as a battery storage park with a capacity of 43 MWh, contributing to security of supply and the balance between electricity production and consumption in France.

  Finally, TotalEnergies ended the biopolymer project on the site in 2023, following the decision of its partner Corbion to withdraw due to rising costs.

Grandpuits site conversion project



(1) TotalEnergies data.
(2) TotalEnergies data.

- At the **La Mède** site, the first French biorefinery, with a 500 kt/y capacity, has produced renewable diesel since 2019. Since 2021, part of this diesel has been processed by the Oudalle plant near Le Havre to produce SAF.

  To coincide with the major shutdown in 2024, TotalEnergies invested €70 million to modernize the site's facilities and enable it to process up to 100% waste from the circular economy and produce SAF by 2025.

  In addition, in November 2024, TotalEnergies and Air Liquide launched a project to produce 25 kt/year of renewable hydrogen, representing a total investment of €150 million. Air Liquide will build and operate a unit to produce renewable hydrogen by recycling co-products from the biorefinery, which will use this hydrogen to produce biodiesel and SAF. Scheduled to start up in 2028, this new project complements the Masshylia project to produce 10 kt/year of green hydrogen by water electrolysis, led by TotalEnergies in partnership with ENGIE. With regard to Masshylia, the two partners are aiming for the start-up of a first electrolyzer in 2029, subject to confirmation of European and French subsidies and the necessary public authorizations. These projects are expected to reduce CO_2 emissions from the La Mède biorefinery by 130 kt/year.

- On its integrated **Normandy** platform, TotalEnergies began producing SAF from co-processing of used oil in March 2022. Following ASTM's[1] September 2023 approval of this method of producing SAF, TotalEnergies began producing SAF by co-processing HVO biodiesel, also produced at La Mède, in 2024.

  In addition, TotalEnergies and Air Liquide have joined forces to decarbonize the site's hydrogen production and in 2022, TotalEnergies transferred the hydrogen production unit with a capacity of 255 t/d to Air Liquide, which now operates it. This cooperation between Air Liquide and TotalEnergies is part of their common ambition to contribute to decarbonizing industrial activities in the Seine axis. Studies are underway alongside other manufacturers on the Seine axis to develop CO_2 capture and storage projects in Normandy.

  TotalEnergies and Air Liquide also signed an agreement in September 2023 for the long-term supply of the platform with 10 kt/y of green hydrogen and up to 5 kt/y of low-carbon hydrogen, which is expected to make it possible to reduce the site's CO_2 emissions to 150 kt/y. The project has two components: TotalEnergies is expected to benefit from access to half of the green and low-carbon hydrogen production capacity of the Normand'Hy electrolyzer (200 MW) built and operated by Air Liquide and in return provide renewable and low-carbon electricity, intended to power the electrolyzer at a rate of 100 MW.

  In February 2023, TotalEnergies and the Le Havre Seine Métropole Urban Community joined forces to supply heat to the urban network of Le Havre Sud, thus actively participating in the decarbonization and energy savings of the region. By 2025, the residual heat recovered on the platform's installations will replace the heat currently produced by gas combustion, supplying the equivalent of 12,000 homes[2] and avoiding the emission of 16 kt/y of CO_2.

- The **Donges** refinery, which had been shut down since the end of 2020 (economic shutdown in a context of sharp deterioration in refining margins as a result of the COVID-19 pandemic, followed by a major planned shutdown) restarted in May 2022, returning to its level of activity. In addition, the project to modernize the site, representing a total investment of more than €400 million, continues: the new section of the railway bypassing the site was commissioned in October 2022 and the construction of the diesel desulfurization unit is continuing. This unit, start-up of which is scheduled to take place during 2025, is expected to improve the refinery's competitiveness by producing fuel containing less sulfur that meets EU standards.

- **Synova** is one of the French leaders in the production of high-performance recycled polypropylene from plastics from industrial waste, the selective collection of waste from households and automotive parts such as bumpers. Its production capacity for mechanically recycled polypropylene is 45 kt/year.

- In **Belgium**, TotalEnergies operates the Antwerp platform, comprising refining units with a capacity of 338 kb/d, flexible steam crackers that can process ethane or gases from the refining process, and polyethylene production units. On this platform, TotalEnergies also produces chemically recycled polymers, using the TACOIL™ produced by Plastic Energy, with which TotalEnergies joined forces in 2020 to build the advanced recycling unit at Grandpuits, as well as mechanically recycled polymers. In December 2024 TotalEnergies also commissioned a battery park project intended for energy storage with a capacity of 75 MWh, the equivalent of the daily consumption of nearly 20,000 homes[3]. At the Feluy site, TotalEnergies operates high value-added polypropylene, polyethylene and expanded polystyrene production units, as well as a catalyst production facility.
- In **Germany**, TotalEnergies operates the Leuna refinery. Since the end of 2022, in accordance with the Company's announcements at the start of Russia's invasion of Ukraine, TotalEnergies has ended supplies of Russian oil to the refinery and in close consultation with the German government, deployed alternative solutions to supply the refinery, in particular by importing oil via Poland. In June 2023, TotalEnergies and VNG, a German natural gas distribution company, signed an agreement for the future supply of green hydrogen to the refinery. Green hydrogen, which will be produced by a 30 MW electrolyzer built and operated by VNG and its partner Uniper, is expected to enable a reduction in CO_2 emissions at the site of up to 80 kt/y by 2030.
- In **Spain**, TotalEnergies announced the acquisition of Iber Resinas (100%) in May 2023. With two plants near Valencia, Iber Resinas is a player in the mechanical recycling of plastics (polypropylene, polyethylene and polystyrene) from household and industrial waste. Thanks to this operation, TotalEnergies increases its production of circular polymers in Europe, completes its range of recycled products and strengthens access to the raw material thanks to the network of Iber Resinas suppliers.
- In **Finland**, TotalEnergies announced in July 2024 the acquisition of Tecoil (100%), which specializes in the manufacture of RRBO (re-refined base oils). Tecoil has its own collection circuit for used lubricants from the circular economy in Europe, and currently operates a plant in Hamina, a port on the Baltic Sea in eastern Finland, with a production capacity of 50 kt/year of re-refined base oils, with properties comparable to the best virgin base oils.

(1) ASTM International is a standards organization that drafts and produces technical standards for materials, products, systems and services.
(2) TotalEnergies data.
(3) TotalEnergies data.

North America

TotalEnergies' main sites in North America are located in Texas, at Port Arthur (refinery, steam crackers), Mont Belvieu (propylene splitter), Bayport (polyethylene) and La Porte (polypropylene), and in Louisiana, at Carville (styrene, polystyrene).

- At Port Arthur, TotalEnergies has, at the same site, a refinery with a capacity of 178 kb/d, a condensate splitter with a capacity of 60 kb/d as well as a 40% interest in BASF TotalEnergies Petrochemicals (BTP), which mainly owns and operates a steam cracker with the capacity to produce more than 1 Mt/y of ethylene, of which more than 85% from ethane, propane and butane, which are produced in abundance locally. On this site, TotalEnergies also operates, on behalf of the Baystar joint-venture, created in 2018 in equal parts between TotalEnergies and Borealis, an ethane cracker with an ethylene production capacity of 1 Mt/year, commissioned in the third quarter of 2022.
- In Mont Belvieu, TotalEnergies owns 33% of a propylene splitter, with a capacity of 410 kt/y in TotalEnergies' share, which purifies propylene from the refining process into propylene for the production of polypropylene at the La Porte site.
- At the Bayport site, the 50/50 joint-venture, Baystar established between TotalEnergies and Borealis commissioned its new Borstar® polyethylene unit in October 2023, with a production capacity of 625 kt/y and representing an investment of $1.4 billion. This new unit, which more than doubles the site's polyethylene production capacity to over 1 Mt/y, completes the two partners' integrated petrochemical project, which includes the extended polyethylene site in Bayport as well as the ethane cracker located on the TotalEnergies platform in Port Arthur.
- At La Porte, TotalEnergies operates a large polypropylene plant, with a capacity of 1.2 Mt/y, which is 100% owned.
- At Carville, TotalEnergies operates a styrene plant with a capacity of 1.2 Mt/y, through a joint-venture (50% with SABIC), and a polystyrene unit with a capacity of 600 kt/y, which is 100% owned.

TotalEnergies concluded in July 2023 the sale of three lines of activity of its subsidiary Cray Valley (in charge of the production and marketing of resins). The transaction covers four production sites in the United States and the Cray Valley Italian subsidiary as well as the associated customer portfolio.

Asia, Middle East and Africa

TotalEnergies holds interests in first-rate platforms that are ideally positioned, with easier access to feedstock under competitive conditions, enabling it to pursue its development in order to supply growth regions.

- In **Saudi Arabia**, TotalEnergies has a 37.5% shareholding alongside Saudi Aramco in SATORP (Saudi Aramco Total Refining and Petrochemical Company), which operates the Jubail refinery. This 460 kb/d refinery, located close to Saudi Arabia's heavy crude fields, can process heavy crude oil and produce fuels and other light products that meet the European and American strictest specifications and are largely earmarked for export. The refinery is also integrated with petrochemical units: an 800 kt/y paraxylene unit, a 200 kt/y propylene unit, and a 140 kt/y benzene unit.

  SATORP is responsible for the Amiral project, for which the partners TotalEnergies (37.5%) and Saudi Aramco (62.5%) took the final investment decision in December 2022. The Amiral project is a petrochemical complex integrated with the Jubail refinery, consisting of the construction of a mixed feed steam cracker (70% ethane and refinery off-gas) with a capacity of 1.65 Mt/y and polyethylene units with a capacity of 1 Mt/y. The project represents an investment of $11 billion.

  In December 2024, construction of the petrochemical complex was one-third complete, in line with its initial schedule which calls for commissioning in 2027. Additionally, this project is expected to attract more than $4 billion in additional investments in various areas of industrial activity (carbon fibers, lubricants, special fluids, detergents, additives, automobile parts and tires) and create approximately 7,000 jobs, direct and indirect, in the country.

  In 2023, SATORP's activity was marked by two "firsts" for low-carbon activities in the Middle East:

  - in July, oil from plastic waste, called pyrolysis oil, was treated at the SATORP refinery, then used as feedstock for Petrokemya (a subsidiary of SABIC) to produce circular polymers certified ISCC+ (International Sustainability and Carbon Certification). This first paves the way for the creation of a local value chain for the chemical recycling of plastics and the production of circular polymers in the Saudi Arabia;
  - in August, the SATORP refinery succeeded in treating, by co-processing, used cooking oil to produce a fuel meeting all the quality criteria of the ISCC+ certified SAF specifications. This certification is expected to enable SATORP to meet the expected increase in demand for SAF in Saudi Arabia.
- In **South Korea**, TotalEnergies owns 50% of Hanwha TotalEnergies Petrochemical Co. (HTC), which operates an integrated platform at the Daesan site, comprising a condensate splitter, a steam cracker, polyethylene and polypropylene production units, each with a capacity of 1.1 Mt/year, and styrene and paraxylene production units with capacities of 1 and 2 Mt/year respectively. HTC is positioned on high value-added sustainable applications and specialty markets, such as underfloor heating pipes or automotive, contributing in particular to making vehicles lighter.
- In **Qatar**, TotalEnergies holds interests[1] in two ethane-based steam crackers: Qapco and Ras Laffan Olefin Cracker (RLOC) as well as four polyethylene lines operated by Qapco in Messaied, including a linear low-density polyethylene plant with a capacity of 550 kt/y (Qatofin) and a 300 kt/y low-density polyethylene line (Qapco). TotalEnergies also holds a 10% interest in the Ras Laffan condensate refinery, with a total capacity of 300 kb/d.
- In the **United Arab Emirates**, after a successful test flight on the sidelines of COP28 in Dubai in December 2023, which demonstrated the potential of methanol conversion into SAF, TotalEnergies and Masdar signed a collaboration agreement in July 2024 to jointly study the feasibility of producing e-methanol and then converting it into SAF from green hydrogen and CO_2. This feasibility study began in September 2024 and will continue through 2025.
- In **Africa**, following the sale of its non-strategic interests in the Natref (National Petroleum Refiners of South Africa) refinery in December 2024 and the SIR (Société Ivoirienne de Raffinage) refinery in July 2024, TotalEnergies holds minority interests in two refineries (Cameroon and Senegal).

  In Algeria, TotalEnergies withdrew in 2023 from the STEP (Sonatrach Total Entreprise de Polymères) joint-venture formed in 2019 with Sonatrach (51%) to study a petrochemical project in Arzew, in the north-west of the country.

(1) TotalEnergies holdings: Qapco (20%); Qatofin (49%); RLOC (22.5%).

R&D AND PARTNERSHIPS

As part of the consolidation of its R&D activities within OneTech (refer to point 1.6 of Chapter 1), TotalEnergies has intensified its research efforts in the field of biofuels through the creation of a dedicated program. This strategic program, aimed at the development of lasting sustainable solutions based on waste, calls on a wide range of skills (modeling, agronomics, life cycle analysis, biotechnology, catalysis, thermochemicals, chemicals, industrial processes) to identify the most promising technologies.

TotalEnergies develops R&D partnerships and actions in the field of low-carbon products (fuels and polymers).

- In May 2024, China Petroleum and Chemical Corporation (SINOPEC) and TotalEnergies signed a strategic cooperation agreement aimed at deepening their collaboration, particularly in low-carbon energies. Specifically, the two companies plan to combine their R&D expertise in the fields of biofuels, green hydrogen, CCUS (carbon capture, utilization and storage), and decarbonization.
- In February 2024, Airbus and TotalEnergies signed a strategic partnership to meet the challenges of aviation decarbonization with SAF. The partnership will cover two main areas: TotalEnergies will supply Airbus with SAF for more than half of its needs in Europe; a research and innovation programme aimed at developing 100% sustainable fuels.
- Thanks to the strategic partnership with Safran, initiated in 2021, TotalEnergies was able to formulate an SAF that is fully compatible with the fleets of aircraft currently in service, and February 2023 saw the flight of an army helicopter with this SAF, produced by TotalEnergies from used cooking oil.
- In March 2022, TotalEnergies and FNSEA, a French umbrella organization charged with the national representation of 20,000 local agricultural unions and 22 regional federations, formed a partnership to support and accelerate the energy, environmental and economic transition of the agricultural sector in France. This partnership aims in particular to promote solutions to produce biofuels by developing new agricultural sectors through the recovery of agricultural residues, low greenhouse gas crops or intermediate crops.
- In October 2024, TotalEnergies and Plastic Omnium renewed their strategic partnership agreement signed in December 2021 aimed at the joint development of compounds based on recycled polypropylene that meet the demanding standards of automotive body parts, particularly in terms of aesthetics and safety.

2.5.1.2 Elastomer processing (Hutchinson)

Hutchinson, specialized in the transformation of elastomers and composite materials is one of the world leaders[1] in anti-vibration systems, fluid management, precision sealing and body sealing and transmission systems. These solutions are used worldwide, especially in the automotive, aeronautical and industrial manufacturing sectors (energy, railroads, naval, defense).

Hutchinson draws on wide-ranging expertise and leverage its know-how from the custom design of materials to the integration of connected solutions: structural sealing solutions, precision sealing, management of fluids, materials and structures, anti-vibration systems and transmission systems.

After being heavily impacted by the fall in demand linked to the health crisis, its activity has returned to the pre-crisis level. Hutchinson continues its efforts to improve competitiveness in a context of inflation and lower production levels for the automotive sector, and is ramping up its aerospace activities in line with the needs of this sector. Hutchinson continues to support its customers' transition to sustainable development and electric mobility.

As of December 31, 2024, Hutchinson had 84 production sites worldwide and approximately 40,000 employees.

2.5.2 Trading & Shipping

The activities of Trading & Shipping are focused primarily on serving the needs of TotalEnergies, and mainly include:

- selling and marketing the TotalEnergies' crude oil production;
- providing a supply of crude oil for TotalEnergies' refineries;
- importing and exporting the appropriate petroleum products for TotalEnergies' refineries to be able to adjust their production to the needs of local markets;
- chartering appropriate ships for these activities; and
- trading in various derivatives markets.

In addition, with its acquired expertise, Trading & Shipping is able to expand its scope of operations beyond its primary scope of activities.

Trading & Shipping conducts its activities worldwide through various subsidiaries that are wholly owned by TotalEnergies and are established in strategically important oil markets in Europe, Asia and North America.

The LNG and gas trading activities are reported by the Integrated LNG segment and the power trading activities by the Integrated Power segment (refer to points 2.3 and 2.4).

2.5.2.1 Trading

TotalEnergies is one of the world's largest traders of crude oil and petroleum products on the basis of volumes traded[2]. The table below presents Trading's global sales and supply sources for crude oil and petroleum products for each of the past three years. Trading of physical volumes of crude oil and petroleum products[3] amounted to 7.0 Mb/d in 2024, compared to 6.4 Mb/d in 2023 and 6.1 Mb/d in 2022.

TRADING'S CRUDE OIL AND PETROLEUM PRODUCTS SALES AND SUPPLY

(kb/d)	2024	2023	2022
Total of trading's crude supply	**4,298**	**3,973**	**3,817**
Exploration & Production	1,264	1,372	1,282
External suppliers	3,034	2,601	2,535
Total of trading's crude sales	**4,298**	**3,973**	**3,817**
Refining & Chemicals and Marketing & Services	1,260	1,218	1,257
External customers[a]	3,038	2,755	2,560

(a) Including inventory variations.

(1) TotalEnergies data.
(2) TotalEnergies data.
(3) Excluding LPG volumes, which are reported in point 2.3.5.

(kb/d)	2024	2023	2022
Total of trading's petroleum products supply	**2,736**	**2,373**	**2,269**
Refining & Chemicals	680	626	630
External suppliers[a]	2,056	1,747	1,638
Total of trading's petroleum products sales	**2,736**	**2,373**	**2,269**
Refining & Chemicals and Marketing & Services	452	424	422
External customers	2,284	1,949	1,847

(a) Including inventory variations.

Trading operates extensively in physical and derivatives markets, both organized and over the counter. In connection with its Trading activities, TotalEnergies uses derivative energy instruments (futures, forwards, swaps *and options)* in order to adjust its exposure to fluctuations in the price of crude oil and petroleum products. These transactions are entered into with a wide variety of counterparties.

For additional information concerning derivatives transactions by Trading & Shipping, refer to Note 16 (Financial instruments related to commodity contracts) to the Consolidated Financial Statements (refer to point 8.7 of chapter 8).

All of TotalEnergies' Trading activities are subject to a strict risk management policy and trading limits.

2.5.2.2 Shipping

The transport activities of crude oil and petroleum products as well as the transport of petrochemical products, LNG, petcoke and sulfur are grouped under a common organization, One Shipping, whose objective is to respond in a coordinated manner to security challenges and decarbonization of TotalEnergies maritime transport activities. The transportation of these products that is necessary for the activities of TotalEnergies is coordinated by One Shipping. One Shipping maintains a rigorous safety policy rooted primarily in the strict selection of chartered vessels that meet the highest international standards.

Within the scope of crude oil, petroleum products and petrochemical products transport activities, the need for maritime transport is fulfilled through the balanced use of spot and time-charter markets. Excess transport capacity can be sub-chartered to third parties. The number of charters reached approximately 3,300 voyages in 2024 (compared to 3,200 in 2023 and 2,800 in 2022) to transport 150 Mt of crude oil, petroleum products and petrochemical products, compared to 148 Mt in 2023 and 134 Mt in 2022. As of December 31, 2024, the mid-term and long-term chartered fleet numbered 61 vessels (including 13 LPG vessels), compared to 67 in 2023 and 59 in 2022. The average age of the fleet of this perimeter is approximately seven years (also approximately seven years including LNG carriers).

The integration into the time-chartered fleet of the latest generation vessels capable of operating with alternative fuels (LNG, LPG, methanol) and equipped with the latest technologies to provide the best performance and the lowest greenhouse gas emissions in their category continues.

Thus, TotalEnergies' time-chartered fleet includes 11 vessels capable of operating on LNG (excluding LNG carriers), 4 vessels capable of operating on LPG, and 1 vessel capable of operating on methanol. Additionally, 14 other vessels capable of operating with alternative fuels are under construction and are expected to gradually join TotalEnergies' time-chartered fleet in 2025 and 2026.

TotalEnergies is also pursuing other initiatives, particularly in favor of energy sobriety:

- in 2024, TotalEnergies, in collaboration with its partners, deployed a pilot installation of two rotating masts on board an oil product transport vessel. The sails allow an average saving of 50 tons of fuel per month, representing 1,800 tons of CO_2 avoided each;
- TotalEnergies promotes the adoption of digital technologies among shipowners to optimize the voyages of its chartered vessels. For example, regular use of weather routing allows an average reduction of 3 to 5%[1] in fuel consumption of vessels.

The use of alternative fuels that emit less greenhouse gases and the implementation of innovative technologies to improve the energy efficiency of ships are concrete actions which aim to immediately support the Company's efforts to reduce the environmental footprint of its maritime transport activities.

The Company also participates to various initiatives in the maritime transport industry aiming to contribute to the energy transition:

- TotalEnergies is a signatory of the Sea Cargo Charter, an association launched in 2020 by the main shipping players to create a consistent, transparent method for measuring emissions in support of efforts to decarbonize the shipping industry. The association establishes a common baseline for determining, on the basis of defined standards, whether shipping activities are aligned with the International Maritime Organization's climate ambitions. In 2023, the association increased the decarbonization ambition for the maritime transport sector, in line with the IMO's new ambition to achieve carbon neutrality in 2050. For the third consecutive year, Sea Cargo Charter published the climate alignment score of the various signatories. The Company's 2024 score (relative to 2023 activities) is lower due to a change in methodology but remains aligned with the score of other signatories;
- TotalEnergies has been a strategic partner of the Mærsk Mc-Kinney Møller Center for Zero Carbon Shipping since February 2021. Through this collaboration, renewed in 2024 for three years, TotalEnergies accelerates its R&D program in carbon-neutral shipping solutions, in line with its commitment to work with its major customers. This partnership allows TotalEnergies to join forces with leading players across the shipping sector to develop and promote new low carbon alternative fuels as well as carbon neutrality solutions.

To manage the economic performance of its fleet in the context of fluctuations in the maritime transport market, TotalEnergies uses financial instruments to manage the price risk of maritime freight.

(1) TotalEnergies data.

2.6 Marketing & Services segment

Marketing & Services (M&S) includes the worldwide supply and marketing activities of petroleum products and services, low-carbon fuels and new energies for mobility. It contributes to the transition strategy of TotalEnergies and proactively supports its customers in their own transition towards more sustainable energy and mobility.

M&S, with a direct presence in nearly 100 countries, caters to a wide range of professional customers in terms of size and industry (transportation, manufacturing, agriculture, etc.), and to individual customers, through its retail network of over 13,000 service stations and close to 78,000 charging points for electric vehicles[1].

Main indicators

1st
retail distribution network in France and in Africa[2]

4th
worldwide distributor of inland lubricants[3]

More than 13,000
branded service stations[4] as of December 31, 2024

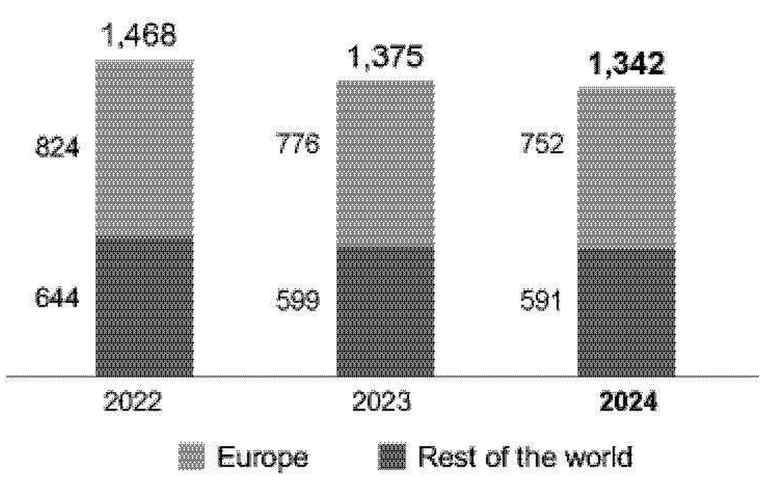
Close to 78,000
charging points operated and supervised at December 31, 2024

Main objectives

More than 300
multi-energy sites in France by 2028

1,000
sites equipped with high-power charging in Europe by 2028

Petroleum products sales[a] *(in kb/d)*



Sales of petroleum products were down by 2% in full-year 2024, mainly due to the downward trend in the diesel market in Europe, partially offset by stronger Aviation and Lubricants sales.

(a) Excludes international (trading) and bulk refining sales.

Marketing & Services segment financial data

Results *(in M$)*	2024	2023	2022
Adjusted net operating income	1,360	1,458	1,550
Organic investments[a]	951	1,065	1,035
Acquisitions net of assets sales[a]	(1,089)	(1,924)	(121)
Net investments[a]	(138)	(859)	914
Cash flow from operations excluding working capital (CFFO)[a]	2,319	2,318	2,365
Cash flow from operating activities	2,901	1,957	3,124

(a) Refer to the glossary for definitions and additional information on alternative performance measures (APM, Non-GAAP measures) and to point 1.9 of chapter 1 for reconciliation tables.

Adjusted net operating income of the Marketing & Services segment was US$1,360 million in 2024, down by 7% over the course of the year, mainly due to the divestment of the network in Germany and in the Benelux countries.

Cash flow from operations excluding working capital (CFFO) was stable compared with the previous year, with $2,319 million in 2024.

(1) Operated and supervised charging points.
(2) France: *Fuel Marketing and Retail, December 2024* report, S&P Global, based on the number of branded service stations / Africa: TotalEnergies data, based on the number of service-stations at year-end 2023.
(3) *Global Lubricants - Company Positioning Overview (2025)*, S&P Global, based on 2023 market shares.
(4) TotalEnergies (including TotalEnergies Contact), Access, Elf, Elan, and AS24. Including service stations owned by third parties under the Company's brands. Third-party service stations with only terminals accepting the AS24 card are not counted.

2.6.1 Presentation of the segment

M&S formulates and markets various ranges of petroleum fuels, lubricants, and associated services, both through the service station network (shops, catering, washing, etc.) and to industrial customers. It also offers its clients new forms of energy and mobility services such as biofuels (including aviation fuel containing SAF), electric charging, LNG for ships, natural gas, biomethane or also hydrogen for road transportation.

M&S has a strong presence in Western Europe and in Africa, regions in which it is one of the leaders in the distribution of petroleum products (based on the number of branded service-stations)[1].

The M&S strategy aims to provide as many people as possible with more affordable, more reliable, and more sustainable energy.

To this end, M&S diversifies its sales by developing its revenues from low-carbon energies, while arbitrating the sales of low-margin petroleum products. Thus, the Company intends to reduce, between 2015 and 2030, Scope 3 emissions[2] of petroleum products sold to its customers by 40%.

Market environment and trends

The development of regulatory frameworks or tax incentives aimed at reducing greenhouse gas emissions promotes the development and adoption of low-carbon energies, and contributes to the markets' transformation, with contrasting geographic dynamics.

Therefore, by 2050, global energy demand for transportation is expected to have changed significantly, with different energy mixes depending on the types of use. The Company made public in November 2024 the TotalEnergies Energy Outlook 2024, which updates the scenarios of the global energy system evolution by 2050 developed by TotalEnergies, and which anticipates that:

- for light vehicles, electrification will tend to become more widespread and will reduce absolute energy demand due to the better efficiency of electric motors (compared to thermal engines);
- for heavy goods vehicles, electrification will become significant in gradual substitution for fuels (including biofuels) and hydrogen will be able to serve the use cases most difficult to electrify; and
- in the aviation and maritime transport segments, more sustainable fuels will be derived from biomass, the circular economy and hydrogen derivatives (synthetic fuels), despite uncertainties surrounding the technologies and the transition to an industrial scale.

However, these trends will be implemented at different paces depending on the geographical regions. The Company estimates that:

- in Europe, oil demand for road transportation (liquid fuels, including biofuels) should decline as the vehicle fleet electrification progresses, supported by the European Green Deal (set of European Union measures aiming in particular to achieve carbon neutrality by 2050);
- in Africa, the pace of growth in oil demand should remain strong until 2030 and then gradually slow down, while remaining positive until 2050; and
- in China, demand for liquid fuels should peak around 2030, despite an increasing motorization rate (more than 60% of new light vehicles being electric or plug-in hybrid by then).

M&S strategy

In this rapidly changing environment, M&S seeks to proactively anticipate its sales' footprint reduction, particularly in Europe, and to meet the demand growth in Africa.

- **Network**

M&S intends to continue developing selectively its network of service stations with the following objectives:

- to increase revenues from services in stations (stores branded Bonjour, washing carried by the Wash brand, and catering where M&S develops partnerships with leading brands, etc.), as well as mobility services;
- to develop a service stations offering in Europe, including 300 multi-energy sites in France by 2028; and
- to grow in Africa and in certain key markets.

- **Lubricants**

The production and marketing of lubricants represents a significant share of M&S's results. These products, which in the vast majority of cases do not generate GHGs when used, continue to exhibit a strong potential for value creation. M&S aims to:

- maintain a continuous upmarketing effort (with premium and specialty products);
- incorporate technologies and services in the field of industrial lubricants;
- expand the network of TotalEnergies Lubricants centers and develop new digital offers on "Online to Offline" platform; and
- develop a circular and more sustainable approach with the incorporation of re-refined base oils into its products and the eco-design of new products and packaging.

- **B2B activity**

TotalEnergies also aims to develop low-carbon solutions for its professional customers, relying on its portfolio of more than one million B2B customers. Growth in this segment is based on supporting customers in their energy transition. An example of such service is the signing of a memorandum of understanding between TotalEnergies and Holcim in October 2022, to jointly work on fully decarbonizing one of their cement plants being modernized in Obourg, Belgium, to efficiently capture, store and use nearly 1.3 Mt of CO_2 emitted yearly by this site.

- **New energies for mobility**

With regards to new energies for mobility, M&S is laying the groundwork for strong positions in the various segments of the transportation market:

- for **light vehicles**, M&S is developing electromobility:
  - by prioritizing the development of charging points over 150 kW (in its motorway network and urban hubs, mainly in Europe). In this context, the company is aiming to equip 1,000 sites with high-power chargers in Europe by 2028;
  - M&S supports its B2B customers in their fleet electrification, drawing on its European Fleet customer portfolio (around 200,000 customers subsequent to the sale of part of its European service station network to Couche-Tard, described in point 2.6.5.1);
  - M&S also develops selectively in the B2G[3] segment, through partnerships;
  - The Company provides for integrated solutions ranging from electricity supply to full charging services;

(1) TotalEnergies data.
(2) GHG Protocol - Category 11 (refer to the glossary or to point 5.2.1.3.B of chapter 5 for further details).
(3) Business to Government: public sector (aiming to develop mainly on-street charging infrastructures).

- for **heavy trucks**: TotalEnergies launched, in Europe, an electric charging solution dedicated to road transport carriers, addressing their charging needs in-depot (including electricity supply) and on-the-go. M&S plans to build a network of electric charging points along the main European corridors;
- in **maritime transportation**, TotalEnergies offers its customers a diversified range of marine fuels, including LNG - which it intends to develop in Europe and Asia - biomethane and biofuels. The company draws on strong logistics positions and also offers lubricants and related services to actors in the segment;
- in **aviation**, M&S develops the sales of aviation fuels including SAF, in line with the SAF mandates and its clients' demand.

M&S's roadmap is based on a significant multi-year organic investment plan (approximately $1 billion in 2024), which provides for a reallocation of investments to support activities which are growing: new energies (mainly electric), services (catering, washing, shops, etc.), and low-carbon solutions (lubricants, bitumens, clean cooking[1], etc.).

As part of its activities, M&S holds minority interests, through its subsidiaries, in two refineries in Africa[2]. The activities of Refining & Chemicals are presented in point 2.5.

2.6.2 Sales of petroleum products

The following table shows M&S's sales of petroleum products[a] by geographical area as of December 31:

(kb/d)	2024	2023	2022
Europe	752	776	824
France	401	410	439
Europe, excluding France	351	366	385
Africa	351	357	388
Middle East[b]	48	46	45
Asia Pacific[c]	108	111	123
Americas	83	85	88
Total	**1,342**	**1,375**	**1,468**

(a) In addition to M&S's petroleum product sales, TotalEnergies' sales include international trading (2,492 kb/d in 2024, 2,173 kb/d in 2023, and 2,012 kb/d in 2022) and bulk refining sales (384 kb/d in 2024, 405 kb/d in 2023, and 411 kb/d in 2022).
(b) Including Turkey.
(c) Including the Indian Ocean islands.

2.6.3 Service stations breakdown

The table below shows the geographical breakdown of the Company-branded[a] service stations:

As of December 31	2024	2023	2022
Europe[b]	5,331	5,568	5,617
including France	*3,279*	*3,319*	*3,360*
Africa	4,521	4,501	4,607
Middle East	1,162	1,125	1,058
Asia Pacific[c]	984	2,217	2,173
Americas	781	782	784
AS24 network (for heavy trucks)	369	378	408
Total	**13,148**	**14,571**	**14,647**

(a) TotalEnergies (including TotalEnergies Contact), Access, Elf, Elan and AS 24, including service stations owned by third parties and those currently being converted. Turkey is included under the Middle East region.
(b) Excluding the AS 24 network.
(c) Including the Indian Ocean islands.

2.6.4 Electric vehicles charging points breakdown

As of December 31	2024	2023	2022
France	24,295	21,361	17,285
Benelux	35,669	25,575	16,089
Germany	6,969	5,210	3,902
United Kingdom	2,825	2,478	2,112
Rest of Europe	684	576	219
Asia-Pacific	7,358	4,745	2,912
Rest of world	164	123	0
Total	**77,964**	**60,068**	**42,519**

(1) Meant as "improved cooking solutions".
(2) The Company finalized the sale of its minority interests in the Natref *(National Petroleum Refiners of South Africa)* and SIR (Société Ivoirienne de Raffinage) refineries in December 2024 and July 2024 respectively.

2.6.5 Activities by geographical area

The information below describes M&S's main activities by geographical region and main business lines.

2.6.5.1 Europe

NETWORK

In the framework of the agreements signed on March 16, 2023 between the Company and Alimentation Couche-Tard ("Couche-Tard"), the Company completed on December 28, 2023, the sale to Couche-Tard of 100% of the service station network in Germany (approximately 1,200 service stations). The Company also completed on January 3, 2024, the sale of 100% of the network in the Netherlands (close to 380 service stations) and the creation of a joint-venture (TotalEnergies 40% and Couche-Tard 60%) in order to operate the networks in Belgium and in Luxemburg (more than 600 service stations). The agreements provide that these four networks will remain branded TotalEnergies as long as the fuel is supplied by the Company, for at least five years. In these countries, TotalEnergies remains present in the electric charging, hydrogen distribution, and fuels wholesale activities.

At year-end 2024, the network accounted for more than 5,330 branded service stations.

In **France**, at year-end 2024, the dense network of service stations consisted of close to 3,280 service-stations, of which close to 2,320 branded TotalEnergies (including TotalEnergies Contact), close to 710 branded Access (service stations combining low prices with fuel quality) and more than 250 branded Elan (mainly located in rural areas)[1]. TotalEnergies remains the country's leading distributor of superethanol E85 in the country, in number of service stations[2] with more than 930 sites offering this largely renewable fuel. In order to offer greater proximity to its French customers, the Company has reopened 20 service stations in rural areas since August 2023. At year-end 2024, the Company had over 1,000 service-stations in rural areas, mainly branded TotalEnergies Contact or Elan. In addition, TotalEnergies recruited over 250 pump attendants in order to improve its customer relationships.

NEW ENERGIES FOR MOBILITY

Electricity

In the field of electro-mobility, M&S addresses the on-the-go charging needs through charging points installed in its multi-energy service stations and on its charging hubs.

In France, since it first opened a 100% electric station in 2021, the Company has been offering charging services across more than 240 stations, representing more than 1,400 charging points over 150 kW, making it the country's number one player in high-power charging on motorways and expressways[4].

In the United Kingdom and Ireland, TotalEnergies and SSE signed an agreement in July 2024 to set up a joint-venture to launch a major new player in electric charging, called "Source" to deploy 3,000 ultra-fast charging points (150 kW and above) in 300 hubs over the next five years.

In Spain, in January 2024, TotalEnergies acquired Nordian CPO, a subsidiary of the Wenea Group, which owns 200 charging sites. These sites, supplied entirely with renewable electricity, are located along major highways and in urban and peri-urban areas.

In Germany, TotalEnergies was awarded, in September 2023, three regional lots under the Deutschlandnetz ("Germany network") call for tenders to implement 1,100 charging points (up to 200 kW) across 134 urban and rural sites. In 2024, TotalEnergies was awarded the roll-out of 33 fast-charging sites on freeways under a call for tender by the German federal government's Autobahn GmbH.

Since 2023, TotalEnergies is committed to supporting drivers' purchasing power by capping fuel prices at €1.99/l at all its French service stations, initiative reconducted for the year 2025, and at €1.94/l for its electricity and gas customers in France (instead of €1.99/l), since September 2024.

In logistics, TotalEnergies holds interests in 27 storage terminals in France, including 7 operated by Group companies.

In heavy-goods transportation, through its AS24 brand, TotalEnergies rolls out an offer specific to this growing segment. The Company offers a fuel card accepted in a network of more than 1,700 dedicated stations in Europe. AS24 is seeking to expand its geographical presence on the major European transportation roads, mainly in Eastern Europe. AS24 supports the energy transition of the road carriers by offering NGV in several European countries (and in particular biomethane in France), and developing a multi-energy offering in its network.

AS24 also offers services simplifying road carriers' mobility, such as a satellite geolocation and payment system for the main European road tolls.

Benefiting from a close proximity with its customers, service-stations carrying one of the Company's brands meet their daily needs with a multi-service and multi-product offering (allowing them in particular to optimize their energy consumption, such as the use of Excellium® fuels allows for). Non-fuel activities (catering, Bonjour-branded stores, Wash-branded washing centers - France's leading washing network[3] – local partnerships and cards) are growing steadily, contributing significantly to the network's operating cash flow excluding working capital (CFFO).

TotalEnergies continues to selectively develop its offering for on-street and car park charging in the main European cities, with in particular:

- in 2024, the award of contracts for Lyon airport (approximately 800 charging points), METPARK in Bordeaux (approximately 1,500 charging points), Sibelga in Brussels (approximately 1,400 charging points), or also the Borough of Camden in London (approximately 150 charging points);
- in June 2023, the award of contracts in Berlin (Germany, approximately 500 public charging points), Lille (France, close to 900 charging points), Utrecht and Amsterdam (the Netherlands, approximately 3,700 charging points), and Madrid (Spain, approximately 50 charging points);
- in 2022, the award of contracts in the Flanders region (Belgium,approximately 4,400 charging points) and in Rotterdam (Netherlands, approximately 90 high-power chargers).

To promote electromobility for heavy goods vehicles, TotalEnergies began deploying in 2024 ultra-high-power charging points in its French service station network and in logistics depots (where nearly 170 charging points were installed during the year).

In 2023, TotalEnergies also joined forces with Enedis, VINCI Autoroutes and six European manufacturers – Volvo Trucks, Renault Trucks, Mercedes-Benz Trucks, MAN Truck & Bus France, Scania and Iveco – to assess requirements for electric charging of heavy trucks in France by 2030 and 2035.

(1) In 2024, close to 150 Elan-branded service-stations were rebranded TotalEnergies.
(2) Metropolitan France (excluding Corsica). Source: "Superethanol-E85 data, December 2024", Bioéthanol France.
(3) TotalEnergies data, in number of wash stations at the end of December 2024.
(4) TotalEnergies data, in number of service stations at the end of December 2024.

Natural gas and biomethane

At year-end 2024, TotalEnergies operated more than 200 NGV stations in Europe (under the TotalEnergies and AS24 brands), geared to road carriers.

In the field of shipping, TotalEnergies develops a commercial offering incorporating biomethane into LNG as a marine fuel to reduce local air pollutants (NO_x, SO_x and fine particles) as well as reducing the marine transportation segment's carbon footprint.

TotalEnergies charters two bunkering vessels: Gas Vitality, positioned in the Marseille-Fos region in France, and Gas Agility based in the Rotterdam region in the Netherlands. At year-end 2024, Gas Agility and Gas Vitality had completed over 300 LNG bunkering operations overall (including close to 150 in 2024).

Hydrogen

In 2024, TotalEnergies and Air Liquide created TEAL Mobility, an equally-owned joint-venture, to develop a pan-European network of hydrogen stations for heavy goods vehicles under the TotalEnergies brand. The joint-venture is planning to expand primarily in Benelux, France, and Germany, on major European transport routes, as the market develops. At year-end 2024, TEAL Mobility operated eight hydrogen stations.

In Germany, the Company holds a stake close to 12.1% in the H2 Mobility joint-venture, alongside its historical shareholders and Hy24.

In France, TotalEnergies held a stake of nearly 15% in HysetCo at year-end 2024, which is dedicated to hydrogen-based urban mobility for business light vehicles fleets, with eight distribution stations in the Ile-de-France (Greater Paris) region.

LUBRICANTS AND SPECIALTIES

Lubricants

Third-largest inland lubricants distributor[1] in Europe, TotalEnergies offers a wide range of products for motorists, automotive suppliers, industrialists and shipping companies, covering a vast spectrum of applications.

In July 2024, TotalEnergies announced the acquisition of Tecoil, a Finnish company specializing in the manufacture of re-refined base oils[2]. Its integration is expected to accelerate the use of these oils in the manufacture of top-of-the-range lubricants, to meet its customers' growing demand for increasingly high-performance and circular products.

TotalEnergies relies on a direct and indirect sales presence, and on 11 operated production sites for lubricants and greases[3] (in Belgium, France, Germany, the Netherlands, Romania, Spain, Turkey, and the United Kingdom). In Russia, TotalEnergies stopped producing lubricants at the end of May 2022 in accordance with its principles of action published on March 22, 2022.

Aviation fuel, including SAF

TotalEnergies produces and distributes aviation fuels containing SAF. The SAF sold is currently produced in Europe from used cooking oils or animal fats from the circular economy. It enables TotalEnergies to meet regulatory mandates for the incorporation of SAF in aviation fuel (including the European ReFuelEU Aviation mandate for the minimum incorporation of 2% SAF from January 1, 2025) and to support its strategic customers in decarbonizing their activities.

As a result:

- in February 2024, Airbus and TotalEnergies signed a strategic partnership to meet the challenges of aviation decarbonization. This partnership covers the supply of a more sustainable aviation fuel to Airbus to meet more than half of its needs in Europe, and a research and innovation program aimed at developing 100% sustainable fuels.
- in July 2024, Air France-KLM and TotalEnergies confirmed their agreement for the supply of up to 1.5 Mt of SAF over 10 years, until 2035 (agreement initially signed in 2022 for the supply of 800 kt over the 2023-2032 period). The SAF is planned to be produced in the Company's biorefineries (refer to point 2.5.1) and made available to the Air France-KLM group's airlines.

At year-end 2024, TotalEnergies offers aviation fuel containing SAF, physically available at Bordeaux, Clermont-Ferrand, Paris-Le Bourget, Saint-Nazaire and Toulouse airports. Thus, this offering participates in the shared ambition of public and private players to address a two-fold challenge: to continue decarbonizing air transportation while at the same time supporting the dynamism of regional economies and tourist industries.

Other Products

In Europe, TotalEnergies produces and markets to professionals fuels (heating oil), bulk fuels, special fluids, bitumens, and specialty bitumens (low-temperature bitumens, recycling and low-carbon solutions, etc.). The Company offers its professional customers based in Europe Bitume Online, a digital platform for buying bitumen online.

PROFESSIONAL MARKETS AND MOBILITY SOLUTIONS

TotalEnergies supports companies in managing their vehicle fleets through multi-service and multi-energy offers.

- In France, the Fleet card enables to pay for fuel fill-ups, electric recharging, parking, tolls, automotive maintenance, washing, and purchases at stores within the TotalEnergies or partnering network;
- The Mobility Corporate card, an international payment card available in France, enables customers to pay for all business travel expenses (including hotels, catering, transportation, vehicle rentals, taxis, as well as energy purchases, parking, maintenance expenses, etc.); and
- The Charge+ Business card, marketed in the Benelux countries, combines access to electric charging with complementary mobility services such as tolls, parking, etc.

Specific electromobility services are available through offers, including:

- access to a network of over 770,000 charging points in Europe;
- access to a mobile application to make journeys easier (geolocation of charging stations, available power, etc.); and
- the provision of charging stations at customer sites or employees' homes.

(1) Global Lubricants - Company Positioning Overview (2024 report), S&P Global, based on 2022 market shares.
(2) In a process known as "re-refining", used oils are treated to give them properties comparable to those of virgin base oils. These high-quality base oils are used in the manufacture of lubricants that meet customers' expectations in terms of circularity and sustainability.
(3) After the closure of a site in Spain in 2024.

To facilitate the roll out of charging points for its B2B customers in France, TotalEnergies took control of the start-up Time2plug in December 2023. Time2plug offers a marketplace where customers can obtain instant quotes and tap into a certified in-house installer network.

In 2024, to support electromobility adoption among private customers, TotalEnergies launched the Charge+ card, providing access to a network over 100 000 public charging points in France. Private customers who signed an Electricity & Gas supply contract with TotalEnergies can access the Company's branded charging network on preferential terms.

At year-end 2024, TotalEnergies remained a major player in professional mobility in Europe, with approximately 3.6 million active mobility cards and electronic toll badges.

2.6.5.2 Africa

NETWORK

TotalEnergies is the leading petroleum products retailer in Africa in 2024 with a 16%(1) market share.

The African network comprised more than 4,520 branded service stations in over 30 countries at year-end 2024. TotalEnergies has significant networks, particularly in Egypt, Morocco, Nigeria and South Africa, and continues to proactively manage its assets portfolio, as illustrated by the sale, in July 2022, to ADNOC of 50% of TotalEnergies Marketing Egypt as part of a strategic partnership.

M&S diversifies its service stations offering and provides a range of products and services in restaurants, convenience stores and car wash sites.

LUBRICANTS

TotalEnergies is the leading distributor(2) of lubricants on the African continent and pursues its growth strategy in the B2B and B2C markets. M&S relies on nine operated lubricant production sites, in Algeria, Egypt, Kenya, Morocco, Nigeria (two sites), Senegal, South Africa and Tanzania. TotalEnergies continues to provide car maintenance services in the Quartz Auto Services, Rubia Truck Services and Hi-Perf Moto Services centers.

PROFESSIONAL MARKETS AND MOBILITY SOLUTIONS

TotalEnergies is an established partner for industrial customers in Africa irrespective of their line of business: agri-food, construction, electricity generation, mining, or transportation. TotalEnergies provides innovative fuel management solutions and adds hybrid offers incorporating solar energy to its existing portfolio of products and services.

Additionally, TotalEnergies is progressively developing across the continent a new payment card offering, via the Mobility business solutions and its fleet management tool.

2.6.5.3 Asia-Pacific/Middle East

M&S directly markets its products and services in more than 20 countries in this area.

NETWORK

At the end of 2024, following the sale of its interests in Total PARCO Pakistan Limited and in three joint-ventures in the Philippines, TotalEnergies had over 2,140 service stations in the Asia-Pacific/Middle East region. These operations illustrate M&S selective growth strategy on key markets. TotalEnergies continues to distribute fuels through its branded service station networks in Cambodia, China, Jordan, Lebanon, Saudi Arabia, the Pacific Islands, and Turkey.

In 2022, TotalEnergies launched its own range of automotive maintenance products, including fuel additives and high-end cooling liquids, across the region.

NEW ENERGIES FOR MOBILITY

Electricity

TotalEnergies continues to develop in the field of electric mobility in Asia:

- in China, the joint-venture set up in 2021 by TotalEnergies with China Three Gorges Corporation rolls out a fast charging network for electric vehicles in the city of Wuhan and in the Hubei province. At year-end 2024, this network numbered close to 4,200 charging points;
- in Singapore, since the acquisition of Bluecharge in February 2022, the Company has continued to supervise and develop its urban charging network, which at the end of 2024 numbered nearly 1,600 public charging points;
- in India, ATEEL (Adani TotalEnergies E-Mobility Ltd), a wholly-owned subsidiary of ATGL, a joint-venture with the Adani Group in which TotalEnergies holds a 37.40% stake, has been active in the electric vehicle charging infrastructure market since March 2022 (refer to point 1.9.3 of chapter 1).

(1) Market share estimated based on volumes sold (TotalEnergies data).
(2) TotalEnergies data.

Natural gas and biofuel

TotalEnergies develops a network of CNG and LNG stations in India (more than 600 stations at year-end 2024), through its stake in the ATGL joint-venture.

TotalEnergies Marine Fuels, long standing partner of the shipping industry, caters to approximately 200 clients and intends to develop the LNG and low-carbon fuels bunkering activity in Singapore:

- it pursues the development of a LNG bunkering supply chain, together with its partner Pavilion Energy Singapore. The Brassavola LNG bunkering vessel (with a capacity of 12,000 m^3) was delivered in January 2024 in the port of Singapore;
- in October 2024, TotalEnergies signed a charter agreement for a LNG bunkering vessel (with a capacity of 18,600 m^3), scheduled for delivery late 2026;
- in July 2022, TotalEnergies successfully supplied and fueled with sustainable marine biofuel[1] the CMA CGM's *Montoir* container ship in Singapore. This biofuel consisted of very low sulfur fuel oil mixed with 24% of second-generation methyl ester made from used cooking oil. This transaction demonstrates TotalEnergies' ambition to become a key supplier of marine biofuels by 2030.

LUBRICANTS

The lubricants business contributes to the growth of TotalEnergies in Asia-Pacific and the Middle East. The lubricants production capacity in this area is spread among nine operated production sites, including in China, Dubai, and Singapore. In addition, two technology research centers, in China and India, support the Company's products and services development for its various clients, including automobile manufacturers. As an example, TotalEnergies has been a leading lubricants supplier to Great Wall Motors (GWM) since 2012, with whom it has also been developing EV fluids since 2020, in China.

The Company also develops its business line with other industries (including cement, energy, mining, and textiles) and builds partnerships with Online to Offline digital platforms (such as Tuhu and Tmall Auto Care in China, and Speedworks in Indonesia) to market its products.

COMMERCIAL SALES, MOBILITY SOLUTIONS, AND OTHER SPECIALTIES

TotalEnergies has signed several partnership agreements with industrial customers, allowing it to extend its presence in markets such as construction and mining, in several countries in the region.

TotalEnergies supplies lubricants and services to close to 80 mining sites, including in Australia and in India.

In specialty products, TotalEnergies is present on the LPG market in Bangladesh, India, New Caledonia, and Vietnam, as well as in the bitumen specialties segment through an equally-owned joint-venture with Indian Oil Corporation Ltd.

In addition, TotalEnergies markets multi-energy payment cards for its B2B and B2C customers in countries where it has developed a branded service station network.

2.6.5.4 Americas

In the network, TotalEnergies had approximately 780 service stations under the Company's brands at the end of 2024. In October 2024, the Company signed a contract with SIM Distribuidora, for the sale of approximately 240 service stations and several logistics depots in Brazil. This transaction illustrates the selective growth strategy of the Company, which focuses its fuel retailing activity in the Caribbean region.

In lubricants and other specialty products (mainly aviation fuels), TotalEnergies pursues its development throughout the area. TotalEnergies has four operated lubricants blending sites in North America (Canada, Mexico, and the US) and three more in South America (Argentina, Brazil and Chile).

In new energies for mobility, TotalEnergies is a shareholder (19.06% at December 31, 2024) in US-based, NASDAQ-listed Clean Energy Fuels Corp., which specializes in the distribution of natural gas for vehicles. Clean Energy Fuels Corp. had a network of close to 610 NGV service stations in Canada and the U.S. at year-end 2024.

In mobility solutions, TotalEnergies also provides multi-energy payment cards for its B2B and B2C customers.

2.6.5.5 Local projects promoting access to low-carbon and affordable energy

In line with SDG 7 to "ensure access to affordable, reliable, sustainable and modern energy for all", in November 2024 TotalEnergies, BP, Equinor and Shell announced their decision to jointly invest $500 million[2] in a private equity fund to promote access to electricity (via solar home systems, micro-grids, electric mobility, energy storage and management) and improved cooking conditions, mainly in sub-Saharan Africa and in Asia.

Through its subsidiaries, TotalEnergies also offers solar solutions to help people in underserved communities gain access to electricity and to more sustainable cooking solutions.

(1) ISCC-certified biofuel (International Sustainability & Carbon Certification).
(2) A private equity firm has been selected to manage the funds. The joint investment aims to support promising, high-impact projects, mainly in sub-Saharan Africa and in South and Southeast Asia.

ACCESS TO ENERGY

TotalEnergies Off-grid Solar Solutions teams develop and market solar solutions in nearly 30 countries (mainly in Africa).

The range includes solar lamps and kits[1] to meet household needs. The teams also developed a solar streetlights offer for collective use. These solutions make it possible to provide energy access to populations living in remote areas without a connection or reliable access to the electricity grid, particularly in Africa and Asia.

In 2024, TotalEnergies sold more than 335,000 solar lamps and kits through distributors and its network of service stations.

CLEAN COOKING

In May 2024, TotalEnergies announced its ambition to provide 100 million people in Africa and India access to clean cooking[2] by 2030. To achieve this, the Company plans to invest in the development of LPG for cooking, and intends to develop the use of digital technologies enabling customers to pay for LPG as they use it ("pay-as-you-cook").

2.6.6 Products & Services development

By fostering technical partnerships with car and equipment manufacturers, industries and universities, TotalEnergies develops products with a high technological content, designed to meet specifications increasingly geared to sustainable development and reduction of CO_2 emissions, in addition to performance. These partnerships have given rise to ranges such as *EV Fluids* for new mobility applications, Quartz EV3R for motor oils produced from re-refined base oils, and *Fuel Economy* for conventional motor and industrial applications.

In the field of motor sport, TotalEnergies has established partnerships that illustrate its technical know-how in the formulation of fuels and lubricants used under extreme conditions and constrained to reduce energy consumption. The Company is developing a similar approach to new energies for mobility, to meet the demands of tomorrow's power trains. As such, TotalEnergies:

- signed in 2021 a five-year extension to the partnership agreement with Stellantis in the areas of lubricants, R&D, motor racing and mobility;
- has been the official fuel supplier to the main endurance car championships[3] since 2018, including the 24 Hours of Le Mans, through its partnership with Le Mans Endurance Management and the Automobile Club de l'Ouest, renewed in February 2024 until 2028. The Company has thereby become its multi-energy partner and intends to support its energy transition[4];
- introduced a certified 100% sustainable[5] fuel for the FIA (Fédération Internationale de l'Automobile) championships in March 2022. This partnership rounds out that dedicated to supplying hydrogen, in order to support the development of a hydrogen-powered endurance car for a dedicated category in the 24 Hours of Le Mans in 2028;
- supplies lubricants specifically developed for the DS Penske team in the FIA electric formula.

Furthermore, TotalEnergies pursues its digital innovation strategy so as to develop new offers tailored to different markets and to improve its operational efficiency.

M&S uses a CRM (Customer Relationship Management) tool to leverage customer data[6] to more efficiently develop sales offers and improve the management of claims. As a consequence, more than 18 million customers in more than 20 countries can benefit from customized offers.

(1) Solar kits are made up of lamps and can include accessories such as a radio or television.
(2) Meant as "improved cooking solutions".
(3) The FIA World Endurance Championship, Le Mans 24 Hour race, the European Le Mans Series and the Asian Le Mans Series.
(4) This involves carrying out an energy audit of its infrastructures, installing charging stations for electric vehicles and solarizing its buildings and parking lots.
(5) Fuel certified 100% sustainable by the ISCC (international Sustainability & Carbon Certification).
(6) Data is used with the clients' consent, in accordance with the regulations in force.

3

Risks and control

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3.1 Risk factors

TotalEnergies conducts its business in a constantly changing environment and is exposed to risks that, if they were to occur, could have a material adverse effect on its business, financial condition, reputation, outlook, or the price of financial instruments issued by TotalEnergies SE.

This section presents the significant risk factors specific to TotalEnergies, to which the Company believes it is exposed at the filing date of the Universal Registration Document. However, TotalEnergies may be exposed to other non-specific risks, or risks of which it may not be aware, or the potential consequences of which may be underestimated, or the materialization of which is not considered, at that date, to be likely to have a material adverse impact on TotalEnergies, its business, financial condition, reputation or outlook.

In particular, TotalEnergies could be exposed to systemic risks, such as unexpected major disruptions (health, such as the COVID-19 pandemic, security, monetary or cyber), leading to large-scale disturbances with global human and economic repercussions.

In such a context, the management of the COVID-19 health crisis or Russia's military aggression against Ukraine proved the effectiveness of TotalEnergies' resilience mechanisms, its responsiveness, its ability to mobilize its crisis units, to implement its business continuity plans and to be agile in its organization.

The risk factors identified in this section are the results of an ongoing risk analysis and identification process, which TotalEnergies uses to determine risks that could prevent it from achieving its objectives, and a major element of which is the mapping of TotalEnergies' risks.

Risk factors are grouped by category according to their nature. Their materiality was assessed according to their probability of occurrence, their level of impact and taking into account the management systems in place. The impact level assessment was performed according to different criteria: financial, strategic, environmental, safety, image/reputation, legal and human resources.

In each category, the risks presented are those considered to be the most material according to the assessment based on the above-mentioned criteria. The assessment by TotalEnergies of this level of materiality may be changed at any time, in particular should new facts, whether external or specific to TotalEnergies, come to light.

	Materiality assessment
Climate challenges	
Pace of deployment of the energy transition, evolution of demand	**4**
Risk of legal actions	**3**
Financing of oil and gas reserves	**3**
Operational risks relating to the effects of climate change and of extreme events	**3**
Reputational risk	**3**
Risk of skill management and evolution of the professions	**3**
Market environment parameters	
Sensitivity of results to oil and gas prices, refining margins, exchange rates and interest rates	**4**
Risks relating to external threats	
Cybersecurity risks	**3**
Security risks	**3**
Geopolitics and developments in the world	
Protectionist measures affecting free trade and economic sanctions regimes	**3**
Deterioration of operating conditions	**3**
Regulatory developments	**2**
Risks relating to operations	
HSE: risk of major accident or damage to third parties and the environment	**3**
Development of major projects	**3**
Business ethics	**3**
Integration of strategic acquisitions	**3**
Supply chain management	**3**
Exposure to partnerships	**2**
Innovation	
Technological development and digital transformation	**3**

Materiality assessment scale: **1** = less material, **4** = more material

The main internal control and risk management procedures implemented by TotalEnergies are described in point 3.3.

3.1.1 Climate challenges

PACE OF DEPLOYMENT OF THE ENERGY TRANSITION, EVOLUTION OF DEMAND

TotalEnergies is exposed to the implementation of the energy transition, particularly by States, and to the evolution of demand

Civil society, numerous stakeholders and States are encouraging reductions in the consumption of carbon-based energy products and the establishment of an energy mix more geared towards low-carbon energies, so as to meet the requirements of the fight against the climate change, particularly in view of the objectives set by each State in the context of the Paris Agreement.

The COP28, that took place in Dubaï in December 2023, concluded with an agreement which enshrines the willingness of the states to "*transitioning away from fossil fuels in energy systems, in a just, orderly and equitable manner*" and that mentions the usefulness of transitional fuels, such as gas. The agreement sets the objectives of tripling the renewable energy capacity and doubling energy efficiency by 2030, as well as eliminating most methane emissions by that time. The COP29, which was held in Baku in November 2024, agreed a new carbon credit mechanism under Article 6 of the Paris Agreement – the Paris Agreement Crediting Mechanism (PACM) – in particular allowing the member States to transfer greenhouse gas emission reductions to meet their Nationally Determined Contributions (NDCs). This mechanism is also to be open to public and private entities.

The pace of change in the energy mix of countries must, however, take into consideration the needs and ability to adapt of the various energy consumers, who expect energy players to supply them with energy that is both cost-effective and environmentally friendly.

In this context, companies in the energy sector are led to deploy actions aiming at reducing their greenhouse gas emissions. They will also be able to help create solutions that contribute to reducing the CO_2 emissions associated with the customers' use of their energy products, as well as technologies and processes to capture, store and reuse CO_2. Consequently, they may be led to change the energy mix of the products they offer while at the same time having to manage the cost and the execution of projects supporting the energy transition.

An insufficient ability to adapt to the pace of deployment of the energy transition, as well as an inadequate anticipation of the climate or sustainability regulations, of the evolution of the demand or, of the energy cost which could be considered excessive by the populations, could affect TotalEnergies' outlook as well as its financial position (lower profitability, loss of operating rights, loss of revenues, increased funding difficulties), reputation or shareholder value.

RISK OF LEGAL ACTIONS

TotalEnergies is exposed to legal actions

Increased pressure from stakeholders linked to climate issues relating to oil & gas activities of the Company could lead to future climate-related legal actions against it. These actions could aim to suspend or prohibit oil & gas projects being considered or under development and equally target the challenges linked to greenhouse gas emissions from projects as well as other societal aspects. In a similar way to legal actions launched in France under the vigilance duty (*devoir de vigilance*) against the Company or, other litigations engaged in Europe or in the United States, including against other companies, these legal actions could target the global emissions of the Company and its stakeholders as well as the objectives set by the Company for reducing its emissions, thereby obliging it to go beyond these objectives or even reduce its production of fossil fuels at a faster pace than envisaged in the current strategy. In all cases, these legal actions could have the effect of impeding the Company from achieving its medium- and long-term objectives, as well as its ability to finance the energy transition, and its ambition of carbon neutrality by 2050, together with society.

FINANCING OF OIL AND GAS RESERVES

TotalEnergies' profitability and its capacity to finance the energy transition depend on its ability to finance the development of its reserves profitably and in sufficient quantities

A large portion of TotalEnergies' revenues and operating results comes from the sale of oil and gas extracted from reserves developed as part of its exploration and production activities. The development of oil and gas fields, the construction of facilities and the drilling of production or injection wells are capital intensive and require advanced technologies.

In order to preserve its profitability and finance its growth levers, TotalEnergies must renew its reserves with reserves that can be developed and produced in an economically viable manner and that are compatible with the Company's climate ambition (low technical cost, low-emission reserves). Various factors may undermine TotalEnergies' ability to discover, acquire and develop its reserves, which are inherently uncertain, including:

- the geological nature of oil and gas fields, notably unexpected drilling conditions, including pressure or unexpected heterogeneities in geological formations; the risk of dry wells or failure to find sufficient quantities of hydrocarbons for commercial use;
- failure to anticipate market changes in a timely manner;
- applicable governmental or regulatory requirements, whether anticipated or not, that may prevent the development of reserves or give a competitive advantage to companies not subject to such regulations;
- competition from oil and gas companies for the acquisition and development of assets and licenses;
- disputes relating to property titles as well as increases in taxes and royalties, including retroactive claims and changes in regulations and tax reassessments;
- economic or political risks, including threats specific to a certain country or region;
- pressure from investors and non-governmental organizations (NGOs).

These factors may impair TotalEnergies' ability to complete development projects and to make production profitable. They may also affect TotalEnergies' projects and facilities further down the oil and gas chain.

If TotalEnergies failed to develop reserves cost-effectively, in sufficient quantities and in accordance with its climate ambition, its financial condition, operating income and cash flows could be materially affected. TotalEnergies could also be required to recognize impairments of assets, which could have a negative impact on its results for the period in which they are recognized. For additional information on impairments recognized on TotalEnergies' assets, please refer to Note 3D to the consolidated financial statements (point 8.7 of chapter 8).

For the calculation of the impairments of its Upstream oil & gas assets, the Company assumes a trajectory of oil prices which remain sustained at $\$_{2024}$70/b from 2025 to 2030, decreasing then linearly to reach $\$_{2024}$50/b in 2040 and decreasing after 2040 towards the price retained in 2050 by the NZE scenario published by the IEA in 2022, *i.e.*, $\$_{2024}$25.8/b. Gas prices used in Europe and Asia decrease and stabilize as from 2027 until 2040 at $\$_{2024}$8/MBtu and $\$_{2024}$9/MBtu respectively, with the Henry Hub price staying at 3$\$_{2024}$/MBtu during this timeframe. They all converge thereafter towards the IEA's NZE scenario prices in 2050.

TotalEnergies assessed the impact of using the NZE price scenario published by the IEA in 2024 on the discounted present value of its assets (upstream and downstream). Such a scenario would reduce the discounted present value of the Company's upstream and downstream assets by around 10% compared to its reference scenario used to value its investments.

In addition, the average life of the Company's proved and probable oil and gas reserves is 18,5 years and the discounted value of the Upstream oil & gas assets of the Company of more than 20 years represents less than 15% of their total value.

Furthermore, TotalEnergies' proved reserves figures are estimates made in accordance with SEC rules. Proved reserves are those reserves which, by analysis of geoscientific and engineering data, can be estimated with reasonable certainty to be economically recoverable (from a given date forward, from known reservoirs and under existing economic conditions, operating methods and government regulations) prior to the time at which contracts providing the right to operate expire, unless evidence indicates that renewal is reasonably certain, regardless of whether deterministic or probabilistic methods are used for the estimation. They involve making subjective judgments (particularly regarding the quantity of hydrocarbons initially in place, initial production rates and recovery rates) based on available geological, technical and economic data.

TotalEnergies' reserves estimates may therefore require substantial downward revisions should its subjective judgments based on available geoscientific and engineering data prove not to have been sufficiently conservative, or if TotalEnergies' assumptions regarding factors or variables that are beyond its control prove to be incorrect over time. Any downward adjustment could indicate lower future production amounts, which could adversely affect TotalEnergies' financial condition, operating income and cash flow.

TotalEnergies is exposed to a risk of more difficult access to the financial resources that the Company needs in particular to develop its activities in the oil and gas sectors

The growth and profitability of TotalEnergies depend on its ability to successfully execute development projects that are capital-intensive.

A number of non-governmental organizations tend to increase the number of campaigns targeting investors and financial institutions, to encourage them to reduce their investments in projects or companies related to fossil fuels.

Some of these institutions have adopted policies aimed at restricting the funding of activities related to the exploration, production and marketing of hydrocarbons, particularly non-conventional hydrocarbons, for example from shale or those produced in the Arctic region.

Different actors, including in particular institutional investors and financial institutions, are also adopting investment and lending policies that take account of extra-financial criteria particularly in Europe.

Regulations aimed at guiding investment flows towards sustainable activities, as well as the growing concern of civil society and stakeholders about climate change, could therefore influence investors in their investment choices and make access to external funding more difficult or costly for TotalEnergies or some of its projects.

If TotalEnergies were unable to obtain adequate financing for its activities from investors, notably in the oil and gas sectors, the significant increase in the cost of financing likely to result from this could hinder its ability to undertake projects in satisfactory economic conditions, impair its financial position or shareholder value.

OPERATIONAL RISKS RELATING TO THE EFFECTS OF CLIMATE CHANGE AND OF EXTREME EVENTS

The effects of climate change and of extreme events may expose TotalEnergies to a cost increase and a disturbance of the continuity of its activities

Climate change and extreme events (natural disasters, pandemics, etc) potentially have multiple effects that could harm TotalEnergies' operations. The increasing scarcity of water could be detrimental to operations, rising sea levels could harm certain coastal activities, and the proliferation of extreme natural or weather events (such as floods, landslides, etc.) could damage onshore and offshore facilities and/or the associated logistical infrastructures.

All these factors could increase the difficulties to operate, as well as the costs of the facilities and adversely affect TotalEnergies' operating income.

Moreover, climate change can expose TotalEnergies to an increase in its costs. For instance, more and more countries are likely to adopt carbon pricing mechanisms to accelerate the transition to a low-carbon economy, which could have an adverse impact on some of the Company's activities and lead to a loss of competitiveness and a cost increase. In Europe, TotalEnergies' industrial facilities participate in the CO_2 emissions trading system (EU-ETS). The financial risk associated with the purchase of these allowances on the market could increase following the reform of the system approved in 2018. This emission allowance market entered its fourth phase in 2021. The share of emissions in the EU-ETS scope not covered by free allowances increases over time from phase to phase, as in the 2021-2030 period (phase 4). At the end of 2024, the price of these allowances was about €70/t CO_2, and TotalEnergies estimates that this price could reach more than €100/t CO_2 in phase 4.

Even if CO_2 pricing does not currently apply in all the countries where the Company operates, TotalEnergies includes as a base case, a minimum CO_2 price of $100/t in its investment criteria (or the prevailing price in a given country, if higher); beyond 2030, the CO_2 price is inflated by 2% per year. On the assumption that this CO_2 price would be at $200/t, then inflated by 2%/year beyond 2030, *i.e.*, an increase of $100/t compared to the base scenario from this date, TotalEnergies estimates a negative impact around 15% on the discounted present value of all the Company's assets (upstream and downstream).

REPUTATIONAL RISK

TotalEnergies is exposed to a reputational and media scrutiny risk that can damage its reputation

The attention of many stakeholders to major industrial groups is increasing, particularly given the challenges of climate change and the support needed to be put in place in a responsible manner for a just transition. As a major energy player, TotalEnergies faces media scrutiny, mainly from NGOs. This is magnified through the use of social networks.

If TotalEnergies were not in a position to adequately address the concerns of its stakeholders, the public image of the Company and its reputation could be negatively impacted. Hence, the relationships with its counterparties could be affected, its access to markets and its growth could be limited and its financial condition or the price of TotalEnergies shares could be adversely impacted.

RISK OF SKILL MANAGEMENT AND EVOLUTION OF THE PROFESSIONS

TotalEnergies could face difficulties having key skills and talents required in the context of its transition strategy

Maintaining the long-term employability of employees is one of the Company's social challenges and is one of the key factors in the success of the company's project, in the context of a just transition. Deploying the transition strategy of the Company into an integrated energy company requires supporting employees in their skills development and creating bridges between the current business lines and the renewable energy or electricity business lines, in order to have the key skills available at the pace of the transition.

In addition, TotalEnergies' ability to attract, retain and motivate the talents needed for its transition strategy is also a challenge for the Company.

Employees and new generations expect companies to be committed to environmental and climate issues and to workplace wellness. These expectations could materialize both in the recruitment process and during careers. Finally, increased competition with fast-growing sectors such as information technology and new energies can make the recruitment and retention of certain key skills more complex.

If TotalEnergies were unable to appropriately address these social challenges, it could face difficulties building the teams required to achieve its transition strategy.

3.1.2 Market environment parameters

SENSITIVITY OF RESULTS TO OIL AND GAS PRICES, REFINING MARGINS, EXCHANGE RATES AND INTEREST RATES

The results of TotalEnergies are sensitive to various market environment parameters, the most significant being oil and gas prices, refining margins, exchange rates and interest rates

Prices for oil and natural gas may fluctuate widely due to many factors over which TotalEnergies has no control, such as:

- international and regional economic and political developments in natural resource-producing regions, particularly in the Middle East, Africa, South America and Russia; along with the security situation in certain regions, the magnitude of international terrorist threats, wars or other conflicts;
- the ability of OPEC and other producing nations to influence global oil and gas production levels and prices;
- prices of unconventional energies as well as evolving approaches for developing oil sands and shale oil, which may affect TotalEnergies' selling prices, particularly in the context of its long-term gas sales contracts, and the valuation of its assets, particularly in North America,
- global economic and financial market conditions;
- regulations and governmental actions;
- variations in global and regional supply of and demand for energy due to changes in consumer preferences or to pandemics such as the COVID-19 pandemic.

Generally, a decline in oil and gas prices has a negative effect on TotalEnergies' results due to a decrease in revenues from oil and gas production. Conversely, a rise in oil and gas prices generally has a positive effect on TotalEnergies' results.

In addition to the adverse effect on revenues, margins and profitability of TotalEnergies, a prolonged period of low oil or natural gas prices may lead TotalEnergies to review its development projects, adjust downward its reported reserves, and revise the price assumptions on which asset impairment tests are based, which could have an adverse effect on its results for the period in which they occur. For additional information on impairments recognized on TotalEnergies' assets, refer to Note 3D to the consolidated financial statements (point 8.7 of chapter 8).

Prolonged periods of low oil and natural gas prices may reduce the economic viability of projects in production or in development and reduce TotalEnergies' liquidity, thereby limiting its ability to finance capital expenditure and/or causing it to cancel or postpone investment projects.

Conversely, in a high oil and gas price environment, TotalEnergies may experience significant increases in costs and government withholdings, and, under some production-sharing contracts, may see its production rights reduced. An increase in prices can also lead to a fall in demand for TotalEnergies' products.

The results of the Refining & Chemicals and Marketing & Services segments are primarily dependent on the supply of and demand for petroleum products and the margins on sales of these products, with a strong dependence on the transportation sector. Changes in oil and gas prices affect results in these segments, depending on the speed at which the prices of petroleum products adjust to reflect movements in oil and gas prices. In markets still impacted by the import ban on petroleum products originating in Russia, TotalEnergies' refining margins continue to be characterized by high volatility.

The activities of trading and shipping (oil, gas and power trading and maritime transportation) are particularly sensitive to market risks and more specifically to price risks resulting from the volatility of oil, gas and electricity prices, to liquidity risk (inability to buy or sell cargoes at market prices) and to counterparty risks (when a counterparty does not fulfill its contractual obligations).

In 2024, oil and gas markets remained steady and with a relatively low volatility. Brent price settled between $80/b and $85/b in the first 3 quarters before decreasing to approximatively $75/b in the 4th quarter, in a context of geopolitical tensions, of the willingness of OPEC+ countries to balance oil market facing the supply growth from non-OPEC countries and of a growth demand below 1%, returning to pre-Covid levels. Gas prices in Europe (NBP[1]) and Asia (JKM[2]) remained at high levels, although lower than in 2023, between $11 and $12/Mbtu on average over the year for these two markers in a market with lower volatility due to high European stocks at the end of a mild winter, but still tense; gas prices remain very reactive to production interruptions.

After two years in which they reached a historically high level in the context of Russia's military aggression against Ukraine in February 2022 and the implementation of European sanctions on Russian oil since December 5, 2022, refining margins have "normalized" to below $25/ b (ERM).

Electricity demand has grown since 2010 with global annual growth of around 2.5%[3] between 2010 and 2023, mainly driven by China (~65% of the increase). After years of stability, 2024 would indicate a rebound in demand also in the US and Europe (~+3%[4] in the US and ~+1.2%[5] in Europe). Wholesale electricity prices in Europe and the US in 2024 were at relatively high levels, although lower compared to 2023.

For fiscal year 2025, in the retained scenarios applied below, TotalEnergies estimates that a change of $10 per barrel in the average annual liquids sales price would lead to a change of approximately $2.3 billion in the same direction in adjusted net operating income[6] for the year and of approximately $2.8 billion in the cash flow from operations excluding working capital (CFFO)[7] for the year. In addition, TotalEnergies estimates that a change in the average annual European gas sale price - TTF of $2 per Mbtu would result in a change in the same direction in the adjusted net operating income for the year and in the cash flow from operations excluding working capital (CFFO) of approximately $0.4 billion.

The impact of changes in crude oil and gas prices on downstream operations depends on the speed at which the prices of finished products adjust to reflect these changes. TotalEnergies estimates that a change in the European refining margin marker (ERM)[8] of $10 per ton would lead to a change of approximately $0.4 billion in the same direction in adjusted net operating income for the year and of approximately $0.5 billion in the cash flow from operations excluding working capital (CFFO) for the year.

All TotalEnergies' activities are, for various reasons and to varying degrees, sensitive to fluctuations in the dollar exchange rate. TotalEnergies estimates that a year-on-year decrease of $0.10 per euro (strengthening of the dollar against the euro) would increase annual adjusted net operating income by approximately $0.1 billion and would have a limited impact on the cash flow from operations excluding working capital (CFFO) for the year. Conversely, a year-on-year increase of $0.10 per euro (weakening of the dollar against the euro) would decrease adjusted net operating income for the year by approximately $0.1 billion and would have a limited impact on cash flow from operations excluding working capital (CFFO) for the year.

Sensitivities 2025[a]	Change	Estimated impact on adjusted net operating income	Estimated impact on cash flow from operations excluding working capital (CFFO)
Dollar	+/- $0.1 per €	-/+ $0.1 B	~ $0 B
Average liquids sales price[b]	+/- $10/b	+/- $2.3 B	+/- $2.8 B
European gas price - TTF[c]	+/- $2/MBtu	+/- $0.4 B	+/- $0.4 B
European refining margin marker (ERM)	+/- $10/t	+/- $0.4 B	+/- $0.5 B

(a) Sensitivities are revised once per year upon publication of the previous year's fourth quarter results. Sensitivities are estimates based on assumptions about TotalEnergies' portfolio in 2025. Actual results could vary significantly from estimates based on the application of these sensitivities. The impact of the $-€ sensitivity on adjusted net operating income is essentially attributable to Refining & Chemicals.
(b) Brent environment at $70-80/b.
(c) TTF (Title Transfer Facility) is a virtual trading point in the Netherlands for transferring rights in respect of physical gas. It is the most liquid and widely used price benchmark for the natural gas markets in Europe. TTF is operated by Gasunie Transport Services (GTS), the owner and operator of the national transmission network in the Netherlands. It is traded in €/MWh.

In addition, as part of its financing, TotalEnergies is exposed to fluctuations in interest rates. Based on its portfolio of bond debt, short-term debt securities ("commercial paper"), and credit lines available at the level of the Company's central financing entities (undrawn in 2024), TotalEnergies' floating rate debt (after taking into account hedging instruments) was approximately $15.6 billion on average over the course of 2024. Within this portfolio, a fluctuation in the various reference rates, from now mainly the SOFR, of +/- 1% would have resulted in a variation in the cost of debt, the theoretical impact of which on TotalEnergies' adjusted net income and cash flows is estimated at approximately -/+ $0.2 billion.

(1) NBP (National Balancing Point) is a virtual natural gas trading point in the United Kingdom for transferring rights in respect of physical gas and which is widely used as a price benchmark for the natural gas markets in Europe. NBP is operated by National Grid Gas plc, the operator of the UK transmission network.
(2) JKM (Japan-Korea Marker) measures spot LNG trading prices in Asia. It is based on the prices reported in spot market trades and/or bids and offers of LNG collected after the close of the Asian trading day at 16:30 Singapore time.
(3) Source: Enerdata Global Energy Data, January 2025.
(4) Source: EIA In-Brief Analysis, January 2025.
(5) Source: Ember, *European Electricity Review 2025*, January 2025.
(6) Refer to the glossary for the definition and further information on alternative performance measures (Non-GAAP measures) and to point 1.9 of chapter 1 for reconciliation tables.
(7) Refer to the glossary for the definition and further information on alternative performance measures (Non-GAAP measures) and to point 1.9 of chapter 1 for reconciliation tables.
(8) The European Refining margin marker (ERM) is a new market indicator for European refining, introduced from the 1st quarter 2024 to replace the "Variable Cost Margin, European refining". This indicator is be calculated based on public market prices ($/t) with a formula using a basket of crudes, petroleum product yields and variable costs representative of the European refining system of TotalEnergies.

3.1.3 Risks relating to external threats

CYBERSECURITY RISKS

TotalEnergies is exposed to cybersecurity risks that may compromise the integrity or availability of its IT systems or cause losses of sensitive data

The very fast evolution of cyberattack threats exposes TotalEnergies' IT systems and requires a dynamic and proactive management of cybersecurity.

In the current geopolitical context of strong tensions, cyberattacks constitute significant means of destabilization. Moreover, organized crime continues to multiply cyberattacks that are more and more sophisticated and targeted at large companies, in order to maximize profits. As a major economic player, the Company is a potential target.

In 2024, several million attacks were blocked by the Company's IT defense systems and several thousands required the intervention of TotalEnergies' technical teams.

The Company is exposed to constantly evolving cybersecurity risks through diverse attack vectors, such as phishing, malware, human intervention or exploited vulnerabilities in software or hardware. Ransomwares have become one of the biggest threats. They are notably used in cyberattacks targeting the suppliers of large companies, sometimes less protected but benefitting from legitimate access to the IT systems of their clients. Moreover, numerous factors associated with the digital transformation increase the exposure and vulnerability of TotalEnergies' IT systems. The adoption of new technologies such as the Artificial Intelligence (AI), Internet of Things, migration to the Cloud, remote working or changes in technical architectures that favor system interconnectivity are factors that increase the range of attacks of the TotalEnergies IT systems. Further, service providers on which the Company relies on for a number of its IT systems may also be the target of cyberattacks that could disrupt the Company's IT systems or cause the loss of sensitive data.

If TotalEnergies and its service providers were unable to detect and remediate cyber-attacks, and more generally to preserve the integrity and availability of its IT systems and sensitive data (which may include confidential information or personal data), TotalEnergies' activities and assets could be affected: services could be interrupted, protected intellectual property rights could be usurped or confidential information or personal data stolen, and in some cases, personal injury, property damage, environmental harm and regulatory violations could occur, which could have an adverse effect on the financial condition and the reputation of the Company and expose it to legal proceedings.

SECURITY RISKS

TotalEnergies is exposed to risks that may jeopardize the security of its personnel, operations and facilities, which may result from acts of malice, violence, terrorism or armed conflicts

In addition to armed conflicts in certain regions or countries where TotalEnergies operates, political, economic and social instability may favor the emergence of acts of malice, violence or terrorism, either by isolated individuals or by more or less organized groups.

TotalEnergies and its partners may therefore be exposed to direct or collateral risks that may jeopardize the safety of their personnel, operations and facilities (plants, industrial or operational sites, transport systems). In particular, major industrial accidents could result.

Depending on their scale, such acts of malice, violence, terrorism or armed conflicts, could cause damage to people, property and/or the environment, and be detrimental to TotalEnergies' operating income, financial situation, and reputation.

3.1.4 Geopolitics and developments in the world

PROTECTIONIST MEASURES AFFECTING FREE TRADE AND ECONOMIC SANCTIONS REGIMES

The development of protectionist measures affecting free trade between nations may have an impact on TotalEnergies' business, its strategy or its financial condition

Against a backdrop of increased geopolitical tensions and of risks of deglobalization and fragmentation between nations in the form of protectionist measures, trade tensions between certain countries contribute to restricting the free trade of goods and services, financial flows, along with international transfers of labor or knowledge.

These tensions, particularly when they require the modification to the contractual framework of partnerships or the operating conditions of projects, are likely to have a negative impact on TotalEnergies' business and its operating income. If TotalEnergies were unable to manage the impacts of these commercial tensions in an appropriate manner, it would potentially incur significant increases in costs for the development of its projects, lose markets, see its production or the value of its assets fall, which could adversely affect its financial situation.

TotalEnergies also faces an increased risk of the imposition of international economic sanctions, as well as a tightening of regulations relating to export controls

Economic sanction regimes, combined with export controls, can target those countries in which TotalEnergies operates, and thus restrict certain types of financing or access to critical technologies, impose restrictions on the import, export or re-export of a number of goods and services, and hinder TotalEnergies' ability to continue its operations. In certain situations, the economic sanctions multiply without being necessarily coordinated at the international level.

In addition to particularly heavy financial sanctions, the breaching of economic sanction regimes adopted by the United States may lead the authorities to impose measures that freeze companies out of the US market, such as a ban on using the US dollar, the currency in which most of TotalEnergies' financings are denominated.

The international economic sanction regimes are described in point 3.2, notably against Russia that were reinforced in the context of the invasion of Ukraine by Russia. The impact of the situation in Russia on the Company is detailed in point 1.9.3 of chapter 1.

DETERIORATION OF OPERATING CONDITIONS

TotalEnergies is exposed to risks related to adverse changes in operating conditions in some geographical areas or strategic countries

A substantial part of TotalEnergies' activities is located in strategic geographical areas or countries that may face conditions of political, geopolitical, social and/or economic instability, or the deterioration of the security conditions. Some of these countries or areas have experienced such situations in recent years, to varying degrees. Whether these conditions appear alone or in combination, they could disrupt TotalEnergies' economic and commercial activities in the countries or geographical areas concerned. In addition, the occurrence of epidemics or pandemics may significantly affect the operating conditions of certain projects or even delay their execution.

In Africa (excluding North Africa), which accounted for 19% of TotalEnergies' 2024 oil and gas production, some of these situations of political, social and/or economic instability arose in countries where TotalEnergies has production, notably in Nigeria, which is one of the main contributing countries to TotalEnergies' production (refer to point 2.3.3 of chapter 2). In the north of Mozambique, given the evolution of the security situation in the Cabo Delgado province where the Mozambique LNG project is being developed, TotalEnergies confirmed on April 26, 2021 the withdrawal of all Mozambique LNG personnel from the Afungi site. This situation led Mozambique LNG to declare force majeure.

In the Middle East and North Africa, which accounted for 33% of TotalEnergies' 2024 oil and gas production, some countries are the setting for political instability that could be associated with violent conflicts and terrorist acts, such as in Libya and Iraq. In Yemen, which is in a state of civil war, the deterioration of security conditions in the vicinity of the Balhaf site caused Yemen LNG, in which TotalEnergies holds an interest of 39.62%, to stop its commercial production and export of LNG and to declare force majeure to its various stakeholders in 2015. The plant has been put in preservation mode.

In South America, which accounted for 12% of TotalEnergies' 2024 oil and gas production, several countries in which TotalEnergies has production have recently experienced political or economic instability, notably Argentina.

In Asia-Pacific, TotalEnergies announced on July 20, 2022 its final withdrawal from Myanmar, repeating its condemnation of the abuses and human rights violations taking place in this country and reaffirming its support to the people of Myanmar (refer to point 2.2.3.3 of chapter 2).

The occurrence and scale of incidents related to political, geopolitical, economic, health or social instability in certain strategic geographical areas or countries may be unpredictable. Such incidents are likely to adversely affect operating conditions, generate cost increases and lead to a significant decline in production, delays in and even halting of certain projects, or the loss of market shares. Such incidents may also expose employees and jeopardize their safety, as well as that of TotalEnergies' facilities. These risks may have an adverse impact on TotalEnergies' operating income and financial condition.

REGULATORY DEVELOPMENTS

The increasing number of regulations, and the constant developments, whether anticipated or not, in the legal and tax frameworks in countries where TotalEnergies operates, may have significant operational and financial effects, jeopardize TotalEnergies' business model and affect the conduct of its business and its financial conditions, especially given the size of TotalEnergies and its international dimension

Conducting its activities in about 120 countries throughout the world, TotalEnergies is subject to increasingly numerous, complex and restrictive laws and regulations, particularly regarding health, safety and the environment, or business ethics, which can generate significant compliance costs. In Europe and the United States, TotalEnergies' sites and products are subject to increasingly stringent laws governing the protection of the environment (water, air, soil, noise, protection of nature, waste management and impact assessments, etc.), health (occupational safety and chemical product risk, etc.), the safety of personnel and residents, product quality and consumer protection.

In some jurisdictions, the legal and fiscal framework of operations may be changed unexpectedly. The application of rights, including contractual rights, may prove uncertain and the economics of projects called into question. The legal and fiscal framework of TotalEnergies' activities, in particular regarding exploration and production, established through concessions, licenses, permits and contracts granted by or entered into with a government entity, a state-owned company or private owners, remains exposed to risks of renegotiation that, in certain cases, can reduce or call into question the protections offered by the initial legal framework and/or the economic benefit to TotalEnergies.

In recent years, in various regions of the world, TotalEnergies has thus seen governments and state-owned companies impose more stringent conditions on companies, increasing the costs and uncertainties of TotalEnergies' business operations. This trend is expected to continue.

Government intervention in such countries, which is likely to increase, may concern various areas, such as:

- the award or denial of rights necessary to explore and exploit oil & gas or renewable resources;
- the imposition of specific drilling obligations;
- price and/or production quota controls and export limits;
- nationalization or expropriation of assets;
- cancellation or unilateral modification of license or contract rights;
- increases in taxes and royalties, including those related to retroactive claims, changes in regulations, tax reassessments and implementation of new mechanisms of taxation;
- the renegotiation of contracts;
- the imposition of increased social and environmental responsibility requirements;
- the imposition of increased local content requirements;
- payment delays; and
- currency exchange restrictions or currency devaluation.

The development of TotalEnergies' new energy activities and those in the electricity sector also expose it to new, essentially local regulations which may change at an unexpected pace.

The increasing number of legal and tax regulations, which are sometimes not very compatible with one another, and the constant changes, whether anticipated or not, in legal and fiscal frameworks in the countries in which TotalEnergies operates create legal instability, which heightens the risk of legal proceedings and promotes an increase in the number of national or transnational disputes. They may have the effect of causing a material increase in tax withholdings and customs duties, as well as costs relating to operations, thus affecting the profitability of projects or the economic value of a number of TotalEnergies assets, or even oblige TotalEnergies to shorten, change and/or stop certain activities or to implement temporary or permanent site closures

If TotalEnergies were unable to anticipate changes in regulations and legal and tax frameworks or comply with them in time in one or more countries in which it operates, TotalEnergies could face increased litigation, be forced to modify and/or stop some of its activities, which could lead to a downturn in the profitability of certain projects and adversely affect its financial condition and reputation.

3.1.5 Risks relating to operations

HSE: RISK OF MAJOR ACCIDENT OR DAMAGE TO THIRD PARTIES AND THE ENVIRONMENT

TotalEnergies' activities entail multiple operational risks such as the risk of a major industrial accident, or damage to third parties or to the environment

TotalEnergies must face the risk of a major industrial accident both at its sites and during transport (by sea or land), or during activities related to its operations.

TotalEnergies' Upstream activities are exposed, during drilling and production operations, to risks related to the properties of oil and gas fields, which can cause blow outs, explosions, fires or other events in particular to the environment, and can lead to a disruption or interruption of TotalEnergies' operations and limit its production. The activities of the Integrated LNG, Integrated Power, Refining & Chemicals and Marketing & Services business segments are also subject to the risk of a major industrial accident such as fires, explosions, significant damage to the environment, as well as risks related to the overall life cycle of the products manufactured, and the materials used. In addition to its drilling and pipeline transport operations, TotalEnergies had identified, at year-end 2024, 181 sites and operating zones more exposed to significant industrial accidents, given the quantity and potential harmfulness of the products used, and to damages to persons, goods and the environment.

The conduct of TotalEnergies' activities, and the nature of some of the products sold, may also entail risks of direct and repeated exposure which have longer-term effects on health and the environment (soil, air, water).

TotalEnergies' entities and their legal representatives may be exposed to legal proceedings, notably in the event of damage to human life, bodily injury and material damage, chronic damage to health and environmental damage. Such proceedings could also damage TotalEnergies' reputation.

The crisis management plans put in place at TotalEnergies level and at subsidiary level to cope with emergency situations may not be able to minimize the impacts on third parties, health or the environment, or exclude the risk that TotalEnergies' business and operations may be severely disrupted in a crisis situation. An inability for TotalEnergies to resume its activities in a timely manner could prolong the impact of any disruption and thus could have an adverse effect on its financial condition.

TotalEnergies is not insured against all potential risks, and if a major industrial accident were to occur, TotalEnergies' liability could exceed the maximum coverage provided by its third-party liability insurance. TotalEnergies cannot guarantee that it will not suffer any uninsured loss, and there can be no guarantee that such loss would not have an adverse effect on TotalEnergies' financial condition and its reputation (refer to point 3.4).

DEVELOPMENT OF MAJOR PROJECTS

TotalEnergies' energy production growth and profitability depend on the delivery of its major development projects

TotalEnergies is engaged in large development projects in the upstream, or in the decarbonized energies, in particular in solar energy and onshore and offshore wind power.

Growth of energy production and profitability of TotalEnergies rely heavily on the successful execution of those major development projects that are increasingly complex and capital-intensive. These major projects, as any other projects, may be affected by the occurrence of a number of difficulties, including, in particular, those related to:

- the extra-financial requirements of stakeholders;
- economic or political risks, including threats specific to a certain country or region, such as terrorism, social unrest or other conflicts;
- negotiations with partners, governments, local communities, suppliers, customers and other third parties;
- obtaining project financing;
- controlling capital expenditure and operating costs;
- earning an adequate return on investment in a low price environment (oil, gas and energy prices, etc.);
- respecting project schedules;
- difficulties in supplying the necessary goods and services; and
- the timely issuance or renewal of permits and licenses by public agencies.

Failure to deliver any major project that underpins TotalEnergies' energy production or its growth could have a material adverse effect on TotalEnergies' financial condition.

BUSINESS ETHICS

Ethical misconduct or non-compliance of TotalEnergies, its employees or third parties acting in its name and/or on its behalf with applicable laws and regulations in particular concerning corruption or fraud may expose TotalEnergies to criminal and civil proceedings and be damaging to its reputation and shareholder value

In the energy sector, generally considered as strategic, where the amounts invested can be very substantial, governments and public authorities are the leading counterparties. TotalEnergies is present in about 120 countries, some of which have a high perceived level of corruption according to the index established by Transparency International. TotalEnergies advocates a zero tolerance principle for fraud of any kind, particularly corruption and influence peddling.

Non-compliance with laws and regulations as well as ethical or human rights misconduct by TotalEnergies, its employees or a third party acting on its behalf could expose TotalEnergies and/or its employees to investigations, administrative or legal proceedings, criminal and civil sanctions and to additional penalties (such as debarment from public procurement). Further measures could, depending on applicable legislation (notably the US Foreign Corrupt Practices Act, the French law No. 2016-1691 dated December 9, 2016, relating to transparency, the fight against corruption and the modernization of the economy or Regulation (EU) 2016/679 relating to the protection of personal data), be imposed by competent authorities, such as the review and reinforcement of the compliance program under the supervision of an independent third party. Any of the above may be damaging to the financial condition, shareholder value or reputation of TotalEnergies (also refer to point 3.6).

INTEGRATION OF STRATEGIC ACQUISITIONS

The integration of an asset or a company that presents a strategic interest for TotalEnergies may not produce the effects initially expected

TotalEnergies has made and may make further acquisitions in various geographical markets, in various activities, and with companies of various sizes, in particular in the low-carbon energies sector.

Acquisitions made by TotalEnergies stood at a total of $4.6 billion in 2024 (refer to point 1.5 of chapter 1).

Acquisitions present many challenges (synergies, governance, operating model, key employees, sufficient availability of TotalEnergies' teams) and require specific adaptation on a case-by-case basis.

If TotalEnergies were unable to integrate the acquired assets under the planned conditions, achieve the expected synergies, retain and integrate the key employees of the newly acquired companies, or if TotalEnergies had to bear liabilities that were not yet identified or appropriately assessed at the time of the transaction, then TotalEnergies' financial condition and reputation could be adversely affected.

SUPPLY CHAIN MANAGEMENT

TotalEnergies faces various risks related to its supply chain management

TotalEnergies' supply chain is especially wide, with a network of over 100,000 suppliers of goods and services over more than 150 countries.

TotalEnergies is exposed to various risks in the management of its supply chain, in particular in a context of geopolitical tensions or pandemics (containment measures or closure of borders) impacting a geographical area or a country representing, for the Company, a significant source of supply.

Disruptions or interruption of its supply chain (such as insufficient inventories, unavailability of raw materials, lack of personnel, transport difficulties, suppliers' vulnerabilities in financial and cybersecurity terms) can lead of an increase in costs and/or delays impacting the continuation of certain activities or projects.

TotalEnergies may also be exposed if a supplier fails to comply with the Company's regulations or requirements, particularly with respect to extra-financial issues.

If the Company did not ensure that its supply chain is sufficiently diversified, or did not select suppliers in adequation with its requirements, TotalEnergies could be negatively impacted on the management of its operations or projects, its financial condition and its reputation.

EXPOSURE TO PARTNERSHIPS

TotalEnergies could inadequately manage or anticipate the multiplication and diversification of the partnerships that it implements for its activities

Almost all upstream projects and an increasing number of projects undertaken by TotalEnergies' other business segments, are carried out through partnerships (including joint-ventures) in all of the areas in which the Company operates. In some countries, specifically in Africa, legislation and/or the authorities make TotalEnergies' presence conditional on the establishment of a joint-venture with a local company. Some partnerships include companies exposed to specific risks linked to the financial markets, such as Clearway Energy or Adani Group.

A partnership's success depends on many factors, primarily the quality of the partner (specifically technical skills and financial capacity), the quality of agreements negotiated, and the efficiency of the governance framework implemented. Inappropriate or incomplete contractual agreements, or a partner's breaching of its obligations, specifically those that are financial, legal or ethical, may harm or prevent the development of projects, give rise to disputes and damage TotalEnergies' reputation.

Projects developed in partnership may be operated by TotalEnergies, by the partners, or by joint-ventures set up for this purpose in the form of a company or via contractual agreements. In cases where TotalEnergies' companies are not operators, these companies may have limited influence over, and control of, the behavior, performance (including extra-financial) and costs of the partnership, and their ability to manage risks may be limited. Even when they are not operators, TotalEnergies companies may be sued by the authorities or by plaintiffs.

If the Company did not choose high-quality partners or failed to manage its partnerships in an optimum way or to establish an appropriate governance framework, TotalEnergies could suffer profitability losses at the level of its projects, be obliged to incur costs in relation to potential litigation and face the risk of damage to its reputation.

3.1.6 Innovation

TECHNOLOGICAL DEVELOPMENTS AND DIGITAL TRANSFORMATION

TotalEnergies could fail to anticipate appropriately the technological changes related to its main markets, the expectations of its customers and changes in its competitive environment or in certain business models, or its ambition of carbon neutrality by 2050, together with society and its commitment for sustainable development or may not respond to them in an appropriate way and at an appropriate pace

TotalEnergies' activities are carried out in a constantly changing environment with new products, new players, new business models, new technologies and new climate challenges. TotalEnergies must anticipate these changes, understand the market's challenges, identify and integrate technological developments in order to maintain its competitiveness, maintain a high level of performance and operational excellence, best meet the needs and demands of its customers and prepare for the future while integrating the climate and sustainable development challenges. TotalEnergies' innovation policy requires significant investments, notably in R&D, the expected benefits of which cannot be guaranteed.

An unsuitable pace of innovation or a technological or market development that is unforeseen or uncontrolled could have a negative effect on TotalEnergies' market shares, its profitability, its reputation, and its ability to attract the necessary human resources.

TotalEnergies could be unable to manage its digital transformation at a suitable pace, or on the right scale, which could have an impact on its business model, its organization, its competitiveness, its climate plan and the sustainable development commitments

Across the entire value chain, digital transformation acts on the interaction between TotalEnergies and its markets. TotalEnergies seeks to benefit from digital technology to improve its industrial operations, in terms of availability, costs or performance, to offer new services to customers notably in the area of managing and optimizing energy consumption, to develop in new decentralized and decarbonized energies, and to reduce its environmental impact. TotalEnergies also seeks to integrate digital including artificial intelligence into its operations to improve their efficiency and enable activities and investments to be managed with enhanced performance and agility.

An insufficient pace or capacity to tailor TotalEnergies' organization and skills to the digital transformation could have a negative effect on its financial condition, its reputation, and on its ability to attract and train the necessary human resources.

3.2 Countries under economic sanctions

Economic sanctions or other restrictive measures could target countries, such as Cuba, Iran, and Syria and/or target actors or economic sectors, such as in Russia or in Venezuela.

US and European economic sanctions applicable to the activities of TotalEnergies and information concerning TotalEnergies' activities related to certain targeted countries are set forth in points 3.2.1 and 3.2.2, respectively.

3.2.1 US and European economic sanctions

TotalEnergies closely monitors the different applicable economic sanctions regimes, including those adopted by the United States and the European Union ("EU") (collectively, the "Sanctions Regimes"), their developments and potential impacts on the Company's activities and takes the necessary steps to ensure compliance with applicable Sanctions Regimes. However, TotalEnergies cannot guarantee that current or future regulations related to Sanctions Regimes will not have a negative impact on its business, financial condition or reputation, nor that a failure to implement the Company's compliance program by its affiliates couldn't result in criminal, civil and/or material financial penalties.

A. Cuba

The United States imposes a sanctions regime against Cuba that prohibits, in general, any US person[1] from engaging, directly or indirectly, in any dealings or activities related to Cuba.

TotalEnergies held an interest in a liquefied petroleum gas (LPG) cylinder filing plant in Cuba since 1997, in compliance with the economic sanctions regime imposed by the United States. The sale of its interest was effective on January 6, 2022. As of such date, TotalEnergies no longer has any assets or operations in Cuba.

B. Iran

Several countries and international organizations, including the United States and the EU, apply Sanctions Regimes of varying degrees targeting Iran.

On July 14, 2015, the EU, China, France, Russia, the United Kingdom, the United States and Germany entered into an agreement with Iran, known as the Joint Comprehensive Plan of Action (the "JCPOA"), regarding limits on Iran's nuclear activities and relief under certain United States, EU and U.N. economic sanctions regarding Iran. Therefore, as from that date, U.N. economic sanctions, most United States secondary sanctions (i.e., those covering non-US persons for activities outside the United States jurisdiction) and most EU economic sanctions were suspended[2].

(1) "US person" means any United States citizen, dual nationality and permanent resident alien wherever located in the world, entity organized under the laws of the United States or any jurisdiction within the United States, including foreign branches, as well as foreign subsidiaries for certain sanctions regimes or any person or entity located in the United States.
(2) Certain United States and EU human rights-related and terrorism-related sanctions remain in force.

Following the withdrawal of the United States from the JCPOA in May 2018, United States secondary sanctions concerning the oil industry were re-imposed as of November 5, 2018.

In July 2017, TotalEnergies signed a contract for a period of 20 years with the National Iranian Oil Company ("NIOC") relating to the development and production of phase 11 (SP11)[1] of the giant South Pars gas field. TotalEnergies withdrew from this project and finalized its withdrawal on October 29, 2018. TotalEnergies ceased all operational activity in Iran before November 4, 2018. TotalEnergies has had no operational activity in Iran since the re-imposition of United States secondary sanctions on the oil industry as of November 5, 2018.

Refer to point 3.2.2 below for information concerning Section 13(r) of the Securities Exchange Act of 1934, as amended, pertaining to activities related to Iran carried out by TotalEnergies in 2024.

C. Russia

Since July 2014, further to the annexation by Russia of Crimea and Sevastopol, Sanctions Regimes have been adopted against Russia, including prohibitions on transacting or dealing with certain Russian individuals and entities, as well as restrictions on investments, financings, exports and the re-exportation of certain goods towards Russia.

Since the end of February 2022, Russia's invasion of Ukraine led European and American authorities to adopt several new sets of sanctions against Russia and Belarus within their Sanctions Regimes. These sanctions provide for the freezing of assets within the EU or the United States of a certain number of individuals and entities of different nationalities (including Russian and Belarusian) (sanctioned individuals and entities) and a prohibition to make funds or economic resources available to them, or in regard of the United States sanctions, a prohibition for US persons to deal with such sanctioned individuals and entities. Sanctions targeting also the financial sector including a prohibition on access to the SWIFT system for certain Russian financial institutions. Other sanctions provide for restrictions in certain sectors such as the energy sector as well as restrictions to export and import for certain types of goods and services, from or to Russia.

Among the different sets of sanctions adopted by the EU, those adopted on March 15, 2022 prohibit in particular the granting of any new loans, credits or financing to any entity operating in the energy sector in Russia without, however, prohibiting the payments made pursuant to financing arrangements entered into before these sanctions were enacted. The restrictions and sanctions imposed by the EU authorities against the Russian financial sector make it more difficult for financial flows between Russia and entities and banks established in the EU to take place. Under the countermeasures enacted by the Russian authorities since February 2022, financial flows to foreign shareholders are subject to the approval of the Ministry of Finance and the Russian Central Bank.

On June 3, 2022, the EU authorities adopted sanctions prohibiting the purchase, import or transfer of crude oil and petroleum products of Russian origin into the EU as from December 5, 2022 for crude oil and as from February 5, 2023 for petroleum products. To date, an exception has been granted for imports of Russian crude oil by pipeline into most of EU member states.

The sanctions adopted by the United States authorities since February 2022 have slightly comparable consequences with those adopted by the EU authorities. The United States sanctions prohibit the importation into the United States of crude oil, petroleum products and Liquefied Natural Gas (LNG) of Russian origin and prohibit US persons from making or financing new investments in Russian energy projects.

On September 2, 2022, the G7 members[2] announced their joint intention to implement a price cap on Russian-originated crude oil and petroleum products, and to prohibit companies from providing certain services in connection with the marine transportation of crude oil and petroleum products of Russian origin, unless such products are sold at or below the price cap. Therefore, the EU and the United States have introduced in their respective Sanctions Regimes an exception of the prohibition on trading, brokering and transporting, and providing certain services related to such activities, of Russian crude oil, as of December 5, 2022, or Russian petroleum products, as of February 5, 2023, transported by sea to third countries (outside the EU and outside the United States), when such products are purchased at a price equal to or lower than the price cap. These restrictions do not apply under EU regulation to condensate gas from LNG production from gas fields in Russia. Compliance with the price cap does not affect the prohibition of imports of Russian oil and Russian petroleum products by sea into the EU and the United States, which remains prohibited.

On June 24, 2024, the EU adopted a new sanction train prohibiting to provide reloading services in the territory of the EU for the purposes of transshipment operations of LNG originating in Russia or exported from Russia, effective March 26, 2025 for contracts concluded before June 25, 2024. By way of derogation, competent authorities may authorize Russian LNG reloading if necessary for LNG transport to an EU Member State to ensure its energy supply. It is also prohibited to sell, supply, transfer, or export, directly or indirectly, goods and technology and to provide, directly or indirectly, services including technical assistance and financing to any natural or legal person, entity or body in Russia when such goods, technology and services are for the completion of LNG projects, such as terminals and plants. As of the date of this document, and with the exception of the EU restrictive measures detailed above, the sanctions adopted by the EU authorities do not restrict the ability of Novatek and Yamal LNG, of which TotalEnergies is a minority shareholder, to produce and export gas to the EU (including LNG and condensate gas). Exports of LNG of Russian origin to the United States and the United Kingdom remain prohibited.

Moreover, the EU sanctions adopted since the end of February 2022 have included the designation of one of the minority shareholders of Novatek as sanctioned person (asset freezing). This minority shareholder was already designated under the United States sanctions from 2014. In accordance with Sanctions Regimes' rules, these designations however have no impact on Novatek, or on the Yamal LNG and Arctic LNG 2 projects. Novatek is not targeted by EU sanctions, but only by United States financial restrictions dating back to 2014, which also apply to Yamal LNG and Arctic LNG 2.

Concerning the financing of Yamal LNG and Arctic LNG 2 projects, some Russian banks involved in those projects have been targeted by European and/or American sanctions, which have had the effect, depending on the case, of either freezing their assets or blocking the opening or maintenance of accounts or the processing of transactions involving them. TotalEnergies has put in place the necessary measures to comply with the European sanctions, obtaining the required temporary authorizations from the French competent authorities. These sanctions have also led Yamal LNG and/or Arctic LNG 2 to replace certain banks targeted by sanctions by other non-sanctioned banks.

(1) TotalEnergies was an operator of the SP11 project and held 50.1% alongside with the national Chinese company China National Petroleum Corporation ("CNPC") (30%) and Petropars (19.9%), a wholly-owned subsidiary of NIOC.
(2) The G7 is comprised of the following member states: Canada, France, Germany, Italy, Japan, the UK, and the United States.

The American Office of Foreign Assets Control (OFAC) designated, on September 14, 2023 and November 2, 2023, respectively, Arctic Transshipment and Arctic LNG 2 as Specially Designated Nationals with immediate effect subject to temporary exceptions under licenses issued by the OFAC. As a consequence of these designations, US persons are prohibited to deal with those two entities. All non-US persons are exposed to the risk of United States secondary sanctions if they provide material support to or engage in a significant transaction with these entities. Since April 18, 2023, TotalEnergies EP Transshipment has not participated in any governance body and has not paid any cash calls to Arctic Transshipment. On April 26, 2024, TotalEnergies initiated and formalized the contractual suspension procedure provided for in the Arctic Transshipment Corporate Agreement.

In addition, the Company is party to an LNG purchase contract with Arctic LNG 2, for which the Company had indicated that it could not terminate it early without exposing itself financially to significant consequences in theabsence of economic sanctions, and that it would exercise the force majeure clauses provided for in the contract to interrupt it if sanctions were imposed. On November 2, 2023, Arctic LNG 2 was placed under sanctions by the United States authorities. As a result, in accordance with what it announced on November 7, 2023, TotalEnergies initiated the contractual suspension procedure provided for in the Arctic LNG 2 shareholders' agreement and the force majeure procedure for the LNG purchase contract with Arctic LNG 2. Upon notification of these procedures, TotalEnergies' rights and obligations under these contracts were suspended.

TotalEnergies has put in place the appropriate measures to comply with the Sanctions Regimes. An analysis of the impacts for TotalEnergies of the applicable Sanctions Regimes, as well as the Russian countermeasures, is carried out continuously.

TotalEnergies reaffirmed, on several occasions, its firmest condemnation of Russia's military aggression against Ukraine. In order to act in a responsible manner, on March 22, 2022, TotalEnergies publicly shared its principles of conduct for managing its Russian related businesses, and it stopped by end of 2022 purchasing Russian crude oil and Russian petroleum products.

The specific context of **Russia** and its consequences on TotalEnergies are detailed in point 1.9.3 of chapter 1.

D. Syria

The EU adopted measures in 2011 regarding trade with and investment in Syria that are applicable to European persons and to entities constituted under the laws of an EU Member State, including, notably, a prohibition on the purchase, import or transportation from Syria of crude oil and petroleum products. The United States also has adopted comprehensive measures that broadly prohibit trade and investment in and with Syria.

Since 2011, TotalEnergies ceased its activities that contributed to oil and gas production in Syria and has not purchased hydrocarbons from Syria since that time (refer to point 3.2.2).

E. Venezuela

Since 2014, different Sanctions Regimes were adopted relating to Venezuela, including measures that prohibit dealings with certain Venezuelan individuals and entities, as well as restrictions on financings.

TotalEnergies, through its subsidiary TotalEnergies EP Venezuela, held a 30.32% non-operated minority interest in Petrocedeño S.A. which was transferred in July 2021 to Corporación Venezolana del Petróleo, S.A., an affiliate of Petróleos de Venezuela S.A. (PdVSA). TotalEnergies also sold its interest of 69.50% in the Yucal Placer field, operated by the company Ypergas S.A.[1]. The sale of TotalEnergies' participation and interests in the Yucal Placer field and in the company Ypergas was effective from July 14, 2022. TotalEnergies also returned the license of Plataforma Deltana block 4 (49%) on August 12, 2022.

TotalEnergies managed the sale of its interests in Venezuela in compliance with applicable Sanctions Regimes.

Since then, TotalEnergies no longer has any assets or operations in Venezuela.

3.2.2 Information concerning certain limited activities related to certain countries under sanctions

The information concerning TotalEnergies activities related to Iran that took place in 2024 provided in this section is disclosed pursuant to Section 13(r) of the Securities Exchange Act of 1934, as amended.

In addition, information for 2024 is provided concerning the payments made by TotalEnergies' affiliates to, or additional cash flow that operations of TotalEnergies affiliates generate for, governments of any country identified by the United States as a state sponsor of terrorism (in 2024, Cuba, Iran, North Korea and Syria) or any entity controlled by those governments.

TotalEnergies is not present in North Korea. Other than fees related to the renewal of the registration of an international trademark with the World Intellectual Property Organization (WIPO) (which includes North Korea as a member state) paid in 2024, TotalEnergies is not aware of any of its activities having resulted in payments to, or additional cash flow for, the government of this country in 2024.

TotalEnergies believes that these activities are not subject to sanctions under an economic sanctions regimes, including those adopted by the United States and the European Union ("EU") (collectively, the "Sanctions Regimes").

A. Cuba

Integrated Power

In 2024, TotalEnergies Electricité et Gaz France, a wholly owned subsidiary, supplied electricity to the Cuba Embassy in France, located in Paris and Ville d'Avray. This activity generated a gross turnover of approximately €61,633 (without taxes) and a net profit of approximately €5,781 in 2024. TotalEnergies Electricité et Gaz France expects to continue this activity in 2025.

Marketing & Services

As mentioned in point 3.2.1, TotalEnergies had an interest in a liquefied petroleum gas (LPG) cylinder filing plant in Cuba since 1997, in compliance with the economic sanctions regime imposed by the United States. Such interest was sold on January 6, 2022. TotalEnergies did not receive any revenues or net income in 2024 from this interest. Since then, TotalEnergies no longer has any assets or operations in Cuba.

In 2024, TotalEnergies Marketing France, a wholly owned subsidiary, provided fuel payment cards to be used in TotalEnergies' service stations to the Cuban Embassy located in Paris (France). This activity generated a gross turnover of approximately €11,900 (without tax) and a net profit of approximately €1,700 in 2024. TotalEnergies Marketing France expects to continue this activity in 2025.

(1) Ypergas S.A. is a Venezuelan company owned by TotalEnergies Holdings Nederland B.V. (37.33%) before the sale of its interests.

Trademarks

In 2024, TotalEnergies made small payments to Cuban authorities related to the maintenance and protection of trademarks and designs in Cuba and may make similar small payments in 2025. These payments are not prohibited by applicable Sanctions Regimes.

B. Iran

TotalEnergies' operational activities related to Iran were stopped in 2018 following the withdrawal of the United States from the Joint Comprehensive Plan of Action (JCPOA) in May 2018 and prior to the re-imposition of US secondary sanctions on the oil industry as of November 5, 2018.

Statements in this section concerning companies controlled by TotalEnergies SE intending or expecting to continue activities described below are subject to such activities continuing to be permissible under applicable Sanctions Regimes.

Exploration & Production

The Tehran branch office of Total E&P South Pars S.A.S., a wholly-owned subsidiary, which opened in 2017 for the purposes of the development and production of phase 11 of the South Pars gas field, ceased all operational activities prior to November 1, 2018. In addition, the local representative office that was maintained in Tehran by Total Iran BV since November 2018 solely for non-operational functions, has been closed in June 2024. Only one employee is retained locally, exclusively for administrative purposes.

Concerning payments made to Iranian entities in 2024, Total Iran BV and Elf Petroleum Iran collectively made payments of approximately IRR 7.069 billion (€23,489[1]) to the Iranian administration for taxes and social security contributions concerning the staff of this representative office. None of these payments were executed in US dollars.

Since November 30, 2018, TotalEnergies E&P UK Limited ("TEP UK"), a wholly owned subsidiary, holds a 1% interest in a joint-venture relating to the Bruce field in the United Kingdom (the "Bruce Field Joint-Venture") with Serica Energy (UK) Limited ("Serica") (98%, operator) and BP Exploration Operating Company Limited ("BPEOC") (1%), following the completion of the sale of 42.25% of TEP UK's interest in the Bruce Field Joint-Venture pursuant to a sale and purchase agreement dated August 2, 2018 entered into between TEP UK and Serica.

The Bruce Field Joint-Venture is party to an agreement governing certain transportation, processing and operation services provided to another joint-venture at the Rhum field in the UK (the "Bruce Rhum Agreement"). The licensees of the Rhum field are Serica (50%, operator) and the Iranian Oil Company UK Ltd ("IOC UK"), a subsidiary of NIOC (50%), an Iranian government-owned corporation. Under the terms of the Bruce Rhum Agreement, the Rhum field owners pay a proportion of the operating costs of the Bruce field facilities calculated on a gas throughput basis.

In November 2018, the US Treasury Department's Office of Foreign Asset Control ("OFAC") granted a conditional license to BPEOC and Serica authorizing provision of services to the Rhum field following the re-imposition of US secondary sanctions. The principal condition of the license is that the ownership of shares in IOC UK by Naftiran Intertrade Company Limited (the trading branch of the NIOC) are transferred into and held in a Jersey-based trust, thereby ensuring that the Iranian government does not derive any economic benefit from the Rhum field so long as US sanctions against these entities remain in place. IOC UK's interest is managed by an independent management company established by the trust and referred to as the "Rhum Management Company" ("RMC"). If necessary, TEP UK liaises with RMC in relation to the Bruce Rhum Agreement and TEP UK expects to continue liaising with RMC on the same basis in 2025.

In January 2021, OFAC renewed the conditional license to Serica authorizing the provision of services to the Rhum field, until January 31, 2023, subject to early termination if the trust arrangements described above should terminate. Following an application filed with OFAC on November 9, 2022, Serica received in January 2023 the renewal of its license until January 31, 2025. In addition, OFAC confirmed that, to the extent that the license remains valid and Serica represents that the conditions set out in the license are met, activities and transactions of non-US persons involving the Rhum field or the Bruce field, including in relation to the operation of the trust, IOC UK and RMC will not be exposed to US secondary sanctions with respect to Iran. In November 2024, Serica filed a new renewal application with OFAC of its license under the same conditions. The license, previously extended by two months until 31 March 2025, has been renewed, for two years therefore ending on 28 February 2027.

IOC UK's share of costs incurred under the Bruce Rhum Agreement has been paid to TEP UK in 2024 by RMC. In 2024, based upon TEP UK's 1% interest in the Bruce Field Joint Venture and income from the net cash flow sharing arrangement with Serica, gross revenue to TEP UK from IOC UK's share of the Rhum field resulting from the Bruce Rhum Agreement was approximately £376,000. This amount was used to offset operating costs on the Bruce field and as such, generated no net profit to TEP UK. TEP UK expects to continue this activity in 2025.

TEP UK is also party to an agreement with Serica whereby TEP UK uses reasonable endeavors to evacuate Rhum NGL from the St Fergus Terminal (the "Rhum NGL Agreement"). TEP UK provides this service subject to Serica having title to all of the Rhum NGL to be evacuated and Serica having a valid license from OFAC for the activity. The service is provided on a cost basis, and TEP UK charges a monthly handling fee that generates an income of approximately £106,750 per annum relating to IOC UK's 50% interest in the Rhum field. After costs, TEP UK generates little profit from this arrangement. TEP UK expects to continue this activity in 2025.

Marketing & Services

In 2024, TotalEnergies Marketing France, a wholly owned subsidiary, provided fuel payment cards to be used in TotalEnergies' service stations to the Iranian Embassy and the Iranian delegation to UNESCO located in Paris (France). This activity generated a gross turnover of approximately €19,600 (without tax) and a net profit of approximately €2,500 in 2024. TotalEnergies Marketing France expects to continue this activity in 2025.

In 2024, TotalEnergies Marketing Burkina, a wholly owned subsidiary, provided fuel payment cards to be used in TotalEnergies' service stations to the Iranian Embassy located in Ouagadougou (Burkina Faso). This activity generated a gross turnover of approximately €10,861 (without tax) and a net profit of approximately €434 in 2024. TotalEnergies Marketing Burkina expects to continue this activity in 2025.

In 2024, TotalEnergies Marketing Sénégal, a majority owned subsidiary, provided fuel payment cards to be used in TotalEnergies' service stations to the Iranian Embassy in Dakar (Senegal). This activity generated a gross turnover of approximately €4,600 (without tax) and a net profit of €248 approximately in 2024. TotalEnergies Marketing Sénégal expects to continue this activity in 2025.

(1) Converted using the average exchange rate for fiscal year 2024, as published by the Central Bank of Iran.

Trademarks

In 2024, TotalEnergies made small payments to Iranian authorities related to the maintenance and protection of trademarks and designs in Iran and may make similar small payments in 2025. These payments are not prohibited by applicable Sanctions Regimes.

C. Syria

Since early December 2011, TotalEnergies ceased its activities that contributed to oil and gas production in Syria and maintained a local office solely for non-operational functions. In late 2014, TotalEnergies initiated a downsizing of its Damascus office and reduced its staff to a few employees. Following the termination of their employment contracts in May 2019, the Damascus office was closed.

Trademarks

In 2024, TotalEnergies made small payments to Syrian authorities related to the maintenance and protection of trademarks and designs in Syria and may make similar small payments in 2025. These payments are not prohibited by applicable Sanctions Regimes.

3.3 Internal control and risk management procedures

The following information was prepared by the Audit & Internal Control Division with the support of several functional divisions of the Corporation, in particular the Finance and Strategy & Sustainability Divisions, to which the Legal and Audit & Internal Control Divisions are attached. It was reviewed by the Audit Committee and then approved by the Board of Directors.

3.3.1 Fundamental elements of the internal control and risk management systems

TotalEnergies is structured around its various business segments, to which the operational entities report. The business segments' management is responsible, within its area of responsibility, for ensuring that operations are carried out in accordance with the strategic objectives defined by the Board of Directors and General Management. The functional divisions at the Holding level help General Management define norms and standards, oversee their application and monitor activities. They also lend their expertise to the operational divisions.

TotalEnergies' internal control and risk management systems are structured around this organization at three levels - the Holding, business segments and operational entities - with each level being directly involved and accountable in line with the level of delegation determined by General Management.

General Management constantly strives to maintain an efficient internal control system, based on the framework of the Committee of Sponsoring Organizations of the Treadway Commission (COSO). In this framework, internal control is a process intended to provide reasonable assurance that the objectives related to operations, reporting and compliance with applicable laws and regulations are achieved. As for any internal control system, it cannot provide an absolute guarantee that all risks are completely controlled or eliminated.

The COSO framework is considered equivalent to the reference framework of the French Financial Markets Authority (*Autorité des marchés financiers* - AMF). TotalEnergies has also chosen to rely on this framework in the context of its obligations under the Sarbanes-Oxley Act. TotalEnergies' internal control and risk management systems are therefore built around the five components of this framework.

TotalEnergies' risk management system draws on the main international standards (COSO Enterprise Risk Management integrated framework, ISO 31000: 2018 – Risk management) as well as on French standards (Reference framework of the French Financial Markets Authority). The internal directive on the Principles of Risk Management, Internal Control and Auditing forms the common framework on which TotalEnergies relies to implement control on its activities.

TotalEnergies' internal control and risk management systems cover the processes of the fully consolidated entities. Regarding acquisitions, TotalEnergies' control environment is implemented in the acquired entities after a critical analysis of their own systems.

The principles of control fit into the framework of the rules of corporate governance. In particular, these rules task the Board of Directors' Audit Committee with monitoring the effectiveness of the internal control and risk management systems and of the internal audit, particularly as regards the procedures for preparing and dealing with accounting, financial and extra-financial reporting.

Approximately 400 employees monitor the internal control systems within TotalEnergies. The assessment of the internal control and risk management system is mainly overseen by the Audit & Internal Control Division, which belongs to the Strategy & Sustainability Division.

3.3.2 Control environment

BUSINESS INTEGRITY AND ETHICS

TotalEnergies' control environment is based primarily on its Code of Conduct, which spells out the Company's five values, including Respect for Each Other, which is reflected in the areas of integrity (fraud and corruption), respect for human rights, as well as the environment and health. The principles of the Code of Conduct are set forth in a number of guides, such as the Business Integrity Guide and the Human Rights Guide. These documents are distributed to employees and are available on the intranet. They also set out the rules of individual behavior expected of all employees in the countries where TotalEnergies is present. Similarly, a Financial Code of Ethics sets forth the obligations applicable to the Chairman and Chief Executive Officer, the Chief Financial Officer, the Vice President of the Corporate Accounting Division and the financial and accounting officers of the principal activities of TotalEnergies.

As a priority of General Management, compliance programs are deployed at TotalEnergies level, in particular for the prevention of corruption, fraud and infringement of competition law, as well as for compliance with applicable economic sanctions. The programs covering anti-corruption, anti-fraud and compliance with economic sanctions include reporting and control actions (compliance reviews and audits). The Compliance network, coordinated by the Branch Compliance Officers, comprises around 380 Compliance Officers, whose role is to ensure the deployment and coordination of the program within the subsidiaries. Ethical assessments are also conducted. In the areas of business integrity and ethics, TotalEnergies relies on the Compliance network, the Ethics Officers' network and the Ethics Committee, which plays a key role in listening and providing assistance.

GOVERNANCE, AUTHORITIES AND RESPONSIBILITIES

The Board of Directors, with the support of its Committees, ensures that the internal control functions are operating properly. The Audit Committee monitors the effectiveness of the internal control and risk management systems implemented by General Management, based on the risks identified and with a view to achieving TotalEnergies' objectives.

General Management ensures that the organizational structure and reporting lines plan, execute, control and periodically assess the Company's activities. It regularly reviews the relevance of the organizational structures so as to be able to adapt them quickly to changes in the activities and in the environment in which they are carried out.

The business segments' and operational entities' general management bodies are responsible for the internal control and risk management system within the scope of their responsibility.

TotalEnergies has also defined central responsibilities that cover the three lines of internal control: (1) operational management, which is responsible for implementing the internal control system, (2) support functions (such as Finance, Legal, Human Resources, etc.) which prescribe the internal control systems, verify their implementation and effectiveness and assist operational employees, and (3) the internal auditors who, through their risk management and internal control assessments, provide formal audit reports that include recommendations for improving the effectiveness of the system.

An accountability system is defined and formalized at all levels of the organization, through organization notes, organization charts, appointment notes, job descriptions and delegations of powers.

TotalEnergies has a framework that is supplemented by a series of practical recommendations and via lessons learned. The structure of this framework reflects that of TotalEnergies' organization: a Company level framework, frameworks by business segment, and a specific framework for each significant operational entity.

TotalEnergies' Audit & Internal Control Division pursues a continual process aimed at strengthening the assessment of the role and involvement of all employees in terms of internal control. Training initiatives tailored to the various stakeholders involved in the internal control process are regularly launched within TotalEnergies.

CONTROL ACTIVITIES AND ASSESSMENT

Any activity, process or management system may be the subject of an internal audit in accordance with the international framework of the internal audit and its Code of Ethics. The Company's Audit & Internal Control Division also conducts joint audits with third party auditors and assistance missions (advice, analysis, methodological guidance). The audit plan, which is based on an analysis of the risks and risk management systems, is submitted annually to the Executive Committee and the Audit Committee. The Audit & Internal Control Division conducted around 135 internal audit assignments in 2024, with around 70 employees. The Company's internal audit practices undergo a certification process every 3 years by the IFACI (French Institute of Internal Audit and Control). TotalEnergies obtained the renewal of its certification in 2023.

The design and effectiveness of the key operational, financial and information technology controls related to internal control over financial reporting, are regularly examined and assessed in compliance with the Sarbanes-Oxley Act.

In 2024, this assessment was performed with the assistance of the Company's main entities and the Audit & Internal Control Division.

The system in place covers:

- the most significant entities, which assess the key operational controls on their main processes and complete a questionnaire which allows their internal control framework to be assessed more globally;
- other less significant entities, which respond only to the questionnaire for assessing the internal control framework.

These two categories of entities, which include the central functions of the business segments and the Holding, account for respectively approximately 80% and 10% of the financial aggregates in TotalEnergies' consolidated financial statements.

The statutory auditors also review the internal control as part of their certification of the financial statements. In accordance with the US Sarbanes-Oxley Act, during the fiscal year 2024, they reviewed the implementation of TotalEnergies' internal control framework and the design and effectiveness of the controls selected as key by TotalEnergies in its main entities for the preparation and processing of accounting and financial information. On the basis of the work they have carried out, they have not indicated any material weakness in their report on internal control as of December 31, 2024. The reports on the work performed by the Audit and Internal Control division and the statutory auditors are periodically summarized and presented to the Audit Committee and, thereby, to the Board of Directors. The Senior Vice President Audit & Internal Control attended all Audit Committee meetings held in 2024. The Audit Committee also meets with the statutory auditors at least once a year without the presence of any representatives of the Corporation.

If areas of improvement are identified, this work, whether it be internal audits or operational controls, is part of corrective action plans shared with operational management; the implementation of which is closely monitored by them and the Audit & Internal Control Division.

Based on the internal reviews, General Management has reasonable assurance of the effectiveness of TotalEnergies' internal control.

3.3.3 Risk assessment and management

3.3.3.1 General principles

To implement its strategy, General Management ensures that clear and precise objectives are defined at the various levels of the organization with regard to operations, reporting and compliance.

Operational, financial and extra-financial objectives focus on the definition and efficient use of human, financial and technical resources. They are documented, notably during the budgetary process and in the long-term plan. They are regularly monitored which allows for decision-making and monitoring the performance of activities at each level of the organization.

TotalEnergies implements a comprehensive risk management system that is an essential factor in the deployment of its strategy. This system relies on an organization at Company level and in the business segments, on a continuous process of identifying and analyzing risks in order to determine those that could prevent the achievement of the objectives as well as the management systems.

The Executive Committee, with the assistance of the TotalEnergies Risk Management Committee (TRMC), is responsible for identifying and analyzing internal and external risks that could affect the achievement of TotalEnergies' objectives. The main responsibilities of the TRMC are to ensure that the Company has mapped the risks to which it is exposed and that efficient risk management systems are in place. The TRMC's work focuses on continuously improving risk awareness and the risk management systems.

Risk mapping is a structured dynamic process. The Company's risk map feeds into the audit plan, which is based on an analysis of the risks and the risk management systems, and the work of the TRMC.

The TRMC relies in particular on the work carried out by the business segments and functional divisions. The business segments are responsible for defining and implementing a risk management policy suited to their specific activities. However, the handling of certain transverse risks is more closely coordinated by the respective functional divisions.

Regarding commitments, General Management exercises operational control through the Executive Committee's validation of proposed investment commitments and expenditures in excess of defined thresholds. The Risk Committee (Corisk) is tasked with reviewing these projects in advance, and in particular with verifying the analysis of the various associated risks.

3.3.3.2 Implementation of the organizational framework

THE TotalEnergies RISK MANAGEMENT COMMITTEE

The main assignment of the TotalEnergies Risk Management Committee (TRMC) is to ensure that the Company has an up-to-date map of the risks to which it is exposed and that the risk management systems in place are appropriate. It is chaired by the Chief Financial Officer, member of the Executive Committee who steers its work, and includes the President of Strategy & Sustainability, who is also a member of the Executive Committee, the managers of the corporate functions, the Senior Vice President of R&D for OneTech, together with the chief administrative officers or chief financial officers of the business segments.

Under the leadership of its Chairman and based on the work of the business segments and functional departments, the TRMC is responsible for ensuring the existence and effectiveness of risk management systems tailored to the Company's challenges. As such, its objectives are as follows:

- define a common language and tools for risk identification and prioritization;
- define risk reporting standards and risk treatment mechanisms;
- identify transversal or emerging risks, evaluate residual risks in light of existing systems and, if necessary, make proposals for additional systems to bring them to acceptable levels; and
- ensure that risks and their corresponding treatment mechanisms are handled by designated managers within the organization.

The work of the TRMC is led by the Audit & Internal Control Division, which assists contributors in preparing presentations and acts as the Committee's Secretary. In this capacity, the Audit & Internal Control Division submit an annual report on the work of the TRMC to the Executive Committee and to the Audit Committee in the presence of TotalEnergies' Chief Financial Officer. The latter attends all meetings of the Audit Committee and the TRMC, thus providing a link between these two committees. The TRMC met eight times in 2024 and its works were examined by the Audit Committee at its meeting held on March 17, 2025.

THE RISK COMMITTEE (Corisk)

Corisk is chaired by a member of the Executive Committee: the President of Strategy & Sustainability or, in his absence, the Chief Financial Officer.

It is made up of representatives from the corporate Legal, Strategy & Climate and HSE divisions, all three attached to the Strategy & Sustainability division, as well as the representatives of the Finance (including Insurance) division.

Corisk meets at the same pace as Executive Committee meetings. Any project submitted to the Executive Committee (and therefore giving rise to a financial commitment that exceeds certain thresholds) is first examined by Corisk.

Following the review by Corisk of the risks associated with the project submitted, a memorandum from the Strategy & Sustainability division reflecting Corisk's comments is sent to the Executive Committee.

THE AUDIT & INTERNAL CONTROL DIVISION

The Risk team of the Audit & Internal Control Division is responsible for producing and continuously updating TotalEnergies' risk mapping. To this end, it uses all of the risk-mapping work carried out within the Company, in the business segments and in the functional divisions, the results of all kinds of audits and internal control activities, the action plans resulting from this work and the monitoring of their implementation, formalization of structured feedback, benchmarks and other external information sources, discussions with TotalEnergies' executive officers, and all information gathered during TRMC meetings and the preparation for these meetings.

3.3.3.3 Risk management systems in place

Risk management systems are implemented in the operational, financial and extra-financial fields. The main risk management systems covering social challenges, occupational safety and health, industrial safety, environment, climate change-related challenges and the prevention of corruption are presented in Chapter 5 (Sustainability reporting under the CSRD).

REGARDING FINANCIAL RISKS

The management and conditions of use of financial instruments are governed by strict rules, defined by TotalEnergies General Management, which provide for centralization by the Treasury Division of liquidity, interest and exchange rate positions, management of financial instruments and access to capital markets. Depending on the overall needs of TotalEnergies, the financing policy aims to favor long-term debt, at floating or fixed rate, depending on the level of interest rates, mainly in dollars or euros.

TotalEnergies' cash balances, which mainly consist of dollars and euros, are managed to maintain liquidity based on daily interest rates in the given currency. Ceilings are set for transactions exceeding one month, with placements not to exceed 12 months. TotalEnergies SE also benefits from credit facilities granted by international banks. These credit facilities, along with the Company's net cash position, aim to allow it to continually maintain a high level of liquidity in accordance with objectives set by General Management in order to meet short-term needs.

In terms of counterparty risk linked to financial transactions, TotalEnergies applies a cautious policy, and only enters into commitments with institutions featuring a high degree of financial soundness, as assessed based on a multi-criteria analysis. Credit limits are determined globally for each authorized financial counterparty and is allocated among the affiliates and TotalEnergies' central treasury entities according to its financial needs. In addition, to reduce market valuation risk on its commitments, the Treasury Division has entered into margin call agreements with its counterparties in compliance with applicable regulations. Lastly, since December 21, 2018, pursuant to Regulation (EU) No 648/2012 on OTC derivatives, central counterparties and trade repositories (EMIR), any new interest rate swap (excluding cross currency swaps) entered into by a TotalEnergies entity must be centrally cleared.

TotalEnergies seeks to minimize its currency exposure, on the one hand, by financing its long-term assets in the functional currency of the entity to which they belong and, on the other hand, by systematically hedging the currency exposure generated by commercial activity. These risks are managed centrally by the Treasury Division, which operates within a set of limits defined by General Management.

The policy for managing risks related to financing and cash management activities, as well as TotalEnergies' exchange and interest rate risks are also described in detail in Note 15 to the Consolidated Financial Statements (point 8.7 of Chapter 8).

TotalEnergies finances its activities either by using its own resources, by issuing bonds on international markets, or by obtaining financing for specific projects from financial institutions and banks. The medium- and long-term debt policy implemented by TotalEnergies are aimed at ensuring that cash is available, notably to cover any major new project or significant acquisition.

A tightening of the selection criteria set by certain financial institutions and banks on financing for projects related to the exploration, production and sale of oil and gas could lead TotalEnergies to increase the diversification of its financing methods and sources. TotalEnergies will nonetheless continue to rely on the long-term relationships already formed with numerous banks and financial institutions.

REGARDING RISKS RELATING TO SECURITY

With regard to security, TotalEnergies has put in place means to analyze threats and assess risks in order to take preventive measures to limit its exposure to security risks in the countries where it is present. In the face of various types of threat, TotalEnergies ensures that people and assets are protected effectively and responsibly by conducting expert appraisal, consulting and control activities. In particular, it defines Security measures for TotalEnergies' operational divisions, various entities and projects, ensures that these measures are implemented; and provides expertise in the event of a crisis. It relies on a network of Country Chairs assisted by Country Security Officers and on a continuously updated Security framework. The production, updating and distribution of this framework are part of the risk management system.

REGARDING RISKS RELATING TO THE SECURITY OF INFORMATION SYSTEMS

Cybersecurity issues are the subject of a strong commitment by the General Management, which is reflected in structured governance to address the risks related to external threats monitored by the TRMC, the Executive Committee and the Audit Committee.

The President, Finance, who is an Executive Committee member, and reports to the Company's Chairman and Chief Executive Officer, supervises the information systems Division, including cybersecurity, which is under the authority of the Company's Global Chief Information Security Officer.

Every year, the Cybersecurity & Risk Management Division submits the cybersecurity strategy for the Company's corporate and industrial information systems to the Executive Committee for approval, that is then presented annually to the Audit Committee and regularly to the Board of Directors. In particular, it defines changes to the Company's cybersecurity reference framework. The TotalEnergies Information Systems Division develops and disseminates the governance and security rules describing the infrastructures, organizations and operating methods expected or recommended. These rules are implemented across the entities of the Company under the responsibility of the various business segments. With the aim of preventing cyber risks, awareness-raising and training actions are also regularly carried out among TotalEnergies employees.

In addition, TotalEnergies has an Operational Security Center to detect and analyze information system security events, as well as a FIRST and TF-CSIRT certified Computer Emergency Response Team (CERT). In the event of a cyber attack on information systems, a cyber crisis management process is structured within TotalEnergies.

Lastly, TotalEnergies conducts specific risk analyses permitting the definition and implementation of appropriate security controls concerning information systems. These controls are organized into three lines of defense, the third being under the responsibility of the Security Division, which conducts several simulations of attacks in real conditions (known as "red teams") each year, carried out by third parties specialized in offensive cybersecurity. In addition, cyber crisis management exercises based on specific risk scenarios are organized each year and used by the various TotalEnergies entities for training purposes.

REGARDING RISK PREVENTION RELATING TO CHANGES IN THE REGULATORY ENVIRONMENT AND BUSINESS ETHICS

Reporting to Strategy & Sustainability Division, whose President is member of the Executive Committee, the Legal Division is responsible for establishing and implementing the legal policy. It coordinates legal activities in close cooperation with the business segments' legal departments and supports the various TotalEnergies entities in order to meet their legal needs. TotalEnergies' lawyers monitor developments in their specific areas of expertise. A Compliance and Legal Risk Management Division is responsible, at Company level, for formulating policies on preventing and fighting against corruption and fraud, as well as compliance with applicable regulations on economic sanctions. This division is also in charge of devising and overseeing the implementation of the corresponding training programs, as well as coordinating the network of anti-corruption and anti-fraud compliance officers, and the points of contact for economic sanctions.

TotalEnergies has put in place since 2015 a structured program to prevent and combat fraud and has established a range of procedures and control systems that help prevent and detect different types of fraud. This mechanism is supported by the business principles and values of individual behavior described in its Code of Conduct and other standards applied by TotalEnergies' business segments.

TotalEnergies has widely distributed to employees a directive providing guidelines to be followed in case of fraud incidents, recalling in particular the whistleblowing system that any employee can use to report acts that may constitute fraud. In addition, a rule was adopted in late 2020 to formalize the procedure for collecting integrity alerts (corruption, fraud and influence peddling) and to remind the various existing alert channels.

TotalEnergies' anti-fraud compliance program includes notably: an e-learning module for all employees of TotalEnergies, a guide called *Prevention and Fighting Fraud*, fraud risk mapping, a typological guide of fraud risks which includes descriptions of the main risks, and video campaigns to raise awareness of the major risks of fraud. This program is deployed by the network of anti-fraud coordinators in the business segments and operational entities, this role of coordinator being generally performed by the Compliance Officer. Fraud risk mapping is also performed in the subsidiaries.

For information on corruption prevention, refer to point 5.4.2 of Chapter 5.

With regard to international economic sanctions and export controls, TotalEnergies carries out its activities in compliance with applicable laws and regulations, in particular those of the European Union (EU) and United States (US). TotalEnergies has a formalized compliance program in place to prevent the risk of non-compliance with these laws and regulations. It is kept regularly updated. This program is deployed by a dedicated Economic Sanctions and Export Control department within the Legal Division and by the points of contact within the business segments to ensure that regulations are monitored on a daily basis, to analyze all TotalEnergies' transactions and projects in relation to a country under sanctions and to ensure compliance with applicable regulations. An e-learning module on this topic has been available since 2020.

A policy aimed at ensuring compliance with, and preventing infringement of, competition law is in place and is a follow-up to the various measures previously implemented by the business segments. Its deployment is based, in particular, on management and staff involvement, training courses that include an e-learning module, and an appropriate organization.

Regarding the prevention of conflicts of interest, each of the senior executives of TotalEnergies completes an annual declaration of the absence of conflicts of interest (or, if applicable, declares any conflicts of interest to which they may be subject). By completing this declaration, each senior executive also agrees to report to his or her manager any conflict of interest that he or she has had, or would have, knowledge of in the course of his or her duties. The "Conflicts of Interest" internal rule also reminds all employees of their obligation to report to their manager any situation that might give rise to a conflict of interest so that measures can be taken to deal with it when necessary.

In order to prevent market abuse linked to trading on the financial markets, TotalEnergies applies a policy based in particular on internal ethics rules that are regularly updated and distributed. In addition, TotalEnergies' senior executives and certain categories of employees, depending on the positions they hold, are required to refrain from carrying out any transactions, including hedging, on TotalEnergies shares or ADRs and units in FCPEs (employee mutual funds) invested primarily in TotalEnergies shares (as well as on any derivatives linked to these shares) on the day on which the Company announces its quarterly, half-yearly or annual results and during the preceding 30 calendar days. An annual campaign specifies the blackout periods and rules applicable to those affected.

To mitigate the risks of third parties infringing its intellectual property rights and the leak of know-how, TotalEnergies ensures that its rights are protected contractually under partnership agreements the terms and conditions of which are negotiated by its intellectual property specialists and are consistent with its industrial and commercial strategy. TotalEnergies has a policy of filing and maintaining patents, monitors technological developments in terms of freedom of use, and takes, when necessary, all appropriate measures to ensure the protection of its rights.

In addition, since some of its employees have access to confidential documents while performing their duties, TotalEnergies has adopted internal rules concerning the management of confidential information. TotalEnergies' intellectual property specialists also carry out awareness-raising activities with employees, so that they are better informed about restrictions that may apply to the use of information and data. In terms of the security of information assets, TotalEnergies also implements document retention and personal data protection policies to deal with increasingly significant legal and security risks.

REGARDING RISKS RELATING TO THE SUPPLY CHAIN

The Company pays particular attention to working with responsible suppliers who respect both human rights and the environment throughout its value chain. The Company expects its suppliers to adhere to the Fundamental principles of purchasing which derive from its Code of Conduct. To that end, the Company has chosen to have the management of its supplier relations coordinated by TotalEnergies Global Procurement, which is specifically tasked with providing Purchasing services and assisting the Company's entities and sites[1].

Agreements signed with third party suppliers are managed under TotalEnergies' dedicated procurement system (structure, rules and tools). This system includes a supplier evaluation and qualification process, the monitoring of contracts and their performance (refer to point 5.4.3 of chapter 5) and the monitoring of the financial robustness of the main suppliers. Finally, the audits provided for in the agreements with the suppliers complete the system.

REGARDING RISKS RELATING TO EXPOSURE TO PARTNERSHIPS

The procedures for selecting TotalEnergies' partners and managing the different stages in the life cycle of each partnership are governed by structured internal reference frameworks, applied by all Company entities.

In order to ensure that the process of selecting future partners for the creation of a joint company and/or the completion of a joint project is robust, TotalEnergies' framework includes performing due diligence relating to the partner's HSE, technical, legal and financial activities and operating methods. A corruption risk analysis is also carried out.

The agreements signed with these third parties are mainly drawn up by multi-disciplinary negotiation teams. Training programs, at the Company and business segment levels, ensure that the necessary knowledge and skills are transferred to ensure that contracts are correctly prepared, activities monitored, and TotalEnergies' interests properly represented in the partnership. The relevant operational entity puts in place the structure required to monitor and manage the partnership. Finally, the audits provided for in the partnership agreements complete the system.

(1) With the exception of certain entities that retain management of their supplier relationships, such as Hutchinson, Saft Groupe and TOTSA TotalEnergies Trading SA.

3.3.4 Main characteristics of the internal control and risk management procedures relating to the preparation and processing of accounting and financial information

Accounting and financial internal control covers the processes that produce accounting and financial data, and mainly the financial statements processes and the processes to produce and publish accounting and financial information. The internal control system aims to:

- conserve TotalEnergies' assets;
- comply with accounting regulations, and properly apply standards and methods to the production of financial information; and
- ensure the reliability of accounting and financial information by controlling the production of this information and its consistency with the information used to produce the dashboards at every appropriate level of the organization.

At the Company level, the Finance Division, which includes the Accounting Division, the Budget & Financial Control Division and the Tax Division, is responsible for the production and processing of accounting and financial information. The scope of the internal control procedures relating to the production and processing of financial and accounting information includes the parent company (TotalEnergies SE) and all fully consolidated entities or entities whose assets are under joint control.

Refer to point 4.1.2.3 of chapter 4 for a description of the role and the missions of the Audit Committee. These missions are defined by Directive 2014/56/EU and regulation (EU) No. 537/2014 regarding statutory audits.

3.3.4.1 Production of accounting and financial information

ORGANIZATION OF THE FINANCIAL FUNCTION

Dedicated teams implement the accounting and financial processes in the areas of consolidation, tax, budget and management control, financing, cash positions and information systems. The entities, business segments and General Management are respectively responsible for accounting activities.

The Accounting Division, which is part of the Finance Division, is responsible for drawing up the Consolidated Financial Statements and manages TotalEnergies' network of accounting teams.

The tax function, made up of a network of tax experts at the corporate level, in the business segments and the entities, monitors changes in local and international rules. It is responsible for implementing the tax policy approved by the Board of Directors, for all business sectors. The Head of Tax, under the authority of the Chief Financial Officer, submits a regular report on TotalEnergies' tax situation to the Audit Committee, which reports on its work to the Board of Directors.

Management control contributes to the reinforcement of the internal control system at every level of the organization. The network of management controllers in the entities and the business segments is supervised by the Budget & Financial Control Division. This department also produces the monthly dashboard, the budget and the long-term plan.

The Treasury Division implements the financial policy, which frames in particular the processing and centralization of cash flows, the debt and liquidity investment policy and the hedging of exchange and interest rate risks.

The Information Systems Division makes decisions on the choice of software suited to the accounting and financial requirements of TotalEnergies. These information systems are subject to developments to reinforce the task separation system and to improve the control of access rights. Tools are available to make sure that access rights comply with the Company's rules in this area.

CONSOLIDATED FINANCIAL STATEMENTS PROCESS

The Accounting Department which reports to the Finance Division, prepares TotalEnergies' quarterly Consolidated Financial Statements according to IFRS standards, on the basis of the consolidated reporting packages prepared by the entities concerned. The Consolidated Financial Statements are examined by the Audit Committee and then approved by the Board of Directors.

The main factors in the preparation of the Consolidated Financial Statements are as follows:

- the processes feeding the individual accounts used to prepare the reporting packages for consolidation purposes are subject to validation, authorization and booking rules;
- the consistency and reliability of the accounting and control data are validated for each consolidated entity and at each relevant level of the organization;
- a consolidation tool, supervised by the Accounting Department is used by each consolidated entity and centrally to ensure the consistency and reliability of data at each relevant level of the organization;
- a consolidation reporting package from each entity concerned and that is sent directly to the Accounting Department allows the transmission and completeness of the information to be optimized;
- a corpus of accounting rules and methods is formalized in the Financial Reporting Manual. Its application is compulsory for all the consolidated entities in order to provide uniform and reliable financial information. This framework is built according to IFRS accounting standards. The Accounting Department centrally distributes the Financial Reporting Manual through regular and formalized communication with the heads of the business segments. This manual, which is regularly updated, specifies in particular the procedures for identifying, valuing and recognizing off-balance sheet commitments;
- new accounting standards under preparation and changes to the existing framework are monitored in order to assess and anticipate their impacts on the Consolidated Financial Statements;
- an accounts plan used by all the consolidated entities is formally set forth in the Financial Reporting Manual, specifying the content of each account and the procedures for the preparation of the reporting packages for consolidation purposes;
- the account closing process is supervised and is based mainly on the formalization of economic assumptions, judgments and estimates, treatment of complex accounting transactions and compliance with established timetables announced through Company instructions disclosed to each entity;
- in particular, the processes applicable to the preparation of the accounts of the acquired entities are reviewed and, where appropriate, amended to integrate them into those applicable to the preparation of the Consolidated Financial Statements. Furthermore, the booking in the accounts of the purchase price allocation of each of these entities is based on assumptions, estimates and judgments in line with the TotalEnergies business model; and
- off-balance sheet commitments, which are valued according to the Financial Reporting Manual.

PROCESSING OF ACCOUNTING AND FINANCIAL INFORMATION

Internal control of accounting and financial information is primarily organized around the following areas:

- monthly financial reporting is formalized by Company and business segment dashboards using the same reference framework and standards as those used for the consolidated financial statements; in addition, the quarterly closing schedule is the same for preparing the Consolidated Financial Statements and financial reporting;
- a detailed analysis of differences as part of the quarterly reconciliation between the Consolidated Financial Statements and financial reporting is supervised by the Accounting and Budget & Financial Control Divisions, which are part of the Finance Division;
- a detailed analysis of differences between actual amounts and the yearly budget established on a monthly basis is conducted at each level of the organization. The various monthly indicators are used to continually and uniformly monitor the performance of each of the entities, the business segments and the Company, and to make sure that they are in keeping with the objectives;
- an annual reconciliation between the statutory financial statements and the financial statements based on IFRS standards is performed by entity;
- regular controls are designed to ensure the reliability of accounting information. They relate in particular to the processes for drawing up financial aggregates;
- a regular process for the signature of representation letters is deployed at each level of the organization;
- an annual control system of the accounts of equity accounted affiliates based on a questionnaire completed by each entity concerned, the system being integrated within the TotalEnergies internal control framework; and
- the Disclosure Committee ensures the respect of the procedures in place.

Other significant financial information is produced according to strict internal control procedures.

Proved oil and gas reserves are evaluated annually by the relevant entities. They are reviewed by the Reserves Committees, approved by Exploration & Production's general management and then validated by TotalEnergies' General Management. They are also presented to the Audit Committee each year.

The internal control process related to estimating reserves is formalized in a special procedure described in detail in point 2.1.1 of chapter 2. The reserves evaluation and the related internal control processes are audited periodically.

TotalEnergies' published strategic and outlook presentations are prepared, notably based on the long-term plans drawn up at the business segment and Company levels, and the works carried out at each relevant level of the organization. The Board of Directors reviews the strategic and outlook presentations each year.

3.3.4.2 Publication of accounting and financial information

Significant information about TotalEnergies is published externally according to formal internal procedures. These procedures aim to guarantee the quality and fair presentation of the information intended for the financial markets, and its timely publication.

The Disclosure Committee, chaired by the Chief Financial Officer, ensures, in particular, that these procedures are respected. Accordingly, it meets before the press releases on TotalEnergies' results and annual reports are submitted to the Audit Committee and the Board of Directors.

A calendar of the publication of financial information is published and made available to investors on TotalEnergies' website. With the help of the Legal Division, Investor Relations Division ensures that all publications are made on time and in accordance with the principle of equal access to information between shareholders.

ASSESSMENT OF THE SYSTEM FOR THE INTERNAL CONTROL OF ACCOUNTING AND FINANCIAL INFORMATION

TotalEnergies' General Management is responsible for implementing and assessing the internal control system for financial and accounting disclosure. In this context, the implementation of TotalEnergies' internal control framework, based on the various components of the COSO, is assessed internally at regular intervals within the TotalEnergies' main entities.

Pursuant to the requirements introduced by Section 302 of the Sarbanes-Oxley Act, the Chairman and Chief Executive Officer and the Chief Financial Officer have conducted, with the assistance of members of certain divisions of TotalEnergies (in particular Legal and Audit & Internal Control), an evaluation of the effectiveness of the internal disclosure Controls and Procedures (Disclosure Controls and Procedures) over the period covered by the annual report Form 20-F. For fiscal year 2024, the Chairman and Chief Executive Officer and the Chief Financial Officer have concluded that these internal controls and procedures were effective.

In addition, a specific process is in place for reporting any information related to TotalEnergies' accounting procedures, internal control and auditing. This process is available to any shareholder, employee or third party.

Finally, the Consolidated Financial Statements undergo a limited examination during quarterly closing, and an audit during annual closing. Almost all the audit missions performed in the countries where TotalEnergies operates are fulfilled by the members of the networks of the two statutory auditors, who, after performing their audit, proceed with the annual certification of TotalEnergies' Consolidated Financial Statements. They are informed in advance of the process for the preparation of the accounts and present a summary of their work to the Company's accounting and financial managers and to the Audit Committee during the quarterly reviews and annual closing. The statutory auditors also review the internal control as part of their certification of the financial statements.

3.4 Insurance and risk management

3.4.1 Organization

TotalEnergies deploys its worldwide insurance program taking into account the specific requirements of local regulations applicable in the countries where the Company is present. TotalEnergies has its own reinsurance company, Omnium Reinsurance Company (ORC) which constitutes the operational tool for harmonizing and centralizing the coverage of the subsidiaries' insurable risks.

Some countries may, however, require the purchase of insurance from a local insurance company. If the local insurer agrees to cover the subsidiary in accordance with the Company's worldwide insurance program, then, after negotiations, nearly all the risks that the local insurer had covered are transferred to ORC.

In parallel, ORC negotiates reinsurance programs at the Company level with commercial or mutualist reinsurance markets. Thus, ORC allows the Company to better manage price variations in the insurance market by retaining the level of risk in accordance with the defined risk retention policy.

Apart from insurance contracts covering industrial risks, other insurance contracts covering property damages and third-party liability are subscribed (car fleet, credit insurance, life and health insurance...). These risks are essentially covered by third-party insurance companies.

3.4.2 Risk and insurance management policy

The risk and insurance management policy consists, in close cooperation with the relevant internal departments of each subsidiary to:

- define risk scenarios of major disasters (estimated maximum loss);
- assess the potential financial impact on the Company, should major disasters occur;
- participate in the implementation of measures aiming to limit the probability that major disasters occur and their financial consequences if such events were to occur; and
- arbitrate between retaining within the Company the potential financial consequences that would result from those disasters or transferring them to the insurance market.

3.4.3 Policy on insurance

TotalEnergies has worldwide property insurance and third-party liability coverage for all its consolidated subsidiaries and most of its non-consolidated subsidiaries. These insurance contracts are entered into with first-class insurers (and reinsurers).

The amounts insured depend on the financial risks defined in the risk scenarios of major disasters, the coverage terms offered by the insurance market, and the risk retention policy defined by the Company.

The Company's policy is to transfer only the most significant risks to the insurance market, in line with industry practice; other risks are retained within the Company's reinsurance captive, in compliance with prudential insurance regulations.

The Company's policy on insurance is presented annually to the Audit Committee.

More specifically:

- for third-party liability: as the maximum financial risk cannot be evaluated by a systematic approach, the amounts insured are based on market conditions and the Company's retention policy, in line with industry practice. Moreover, the Company adopts, whenever appropriate, the necessary material and human resources to manage the compensation of victims in the event of a technological accident for which it would be liable;
- for property damage and business interruption: the amounts insured vary depending on the sector and on the site. They are based on the cost estimates and reconstruction scenarios of the units that would result from the materialization of the estimated maximum loss, as well as on insurance market conditions and the Company's retention policy, in line with industry practice. The business interruption risk is retained by the Company.

The policy on insurance described above reflects a particular situation as of a given date and cannot be considered as representative of a permanent situation. The Company's policy on insurance may be changed at any time depending on market conditions, specific circumstances and General Management's assessment of the risks incurred and the adequacy of their coverage.

TotalEnergies considers that its insurance coverage is in line with industry practices and sufficient to cover usual risks in its operations. However, the Company is not insured against all potential risks. In the event of a major environmental disaster, for example, TotalEnergies' liability could exceed the maximum coverage provided by its third-party liability insurance. TotalEnergies cannot guarantee that the Company will not suffer any uninsured loss, and there can be no guarantee, particularly in the event of a major environmental disaster or a major industrial accident, that such loss would not have a material adverse effect on the Company.

3.5 Legal and arbitration proceedings

There are no governmental, legal or arbitration proceedings, including any proceeding of which the Corporation is aware that are pending or threatened against the Corporation, that could have, or could have had during the last 12 months, a material impact on TotalEnergies' financial situation or profitability.

Described below are the main administrative, legal and arbitration proceedings in which the Corporation and the other entities of TotalEnergies are involved.

FERC

The Office of Enforcement of the US Federal Energy Regulatory Commission (FERC) began in 2015 an investigation in connection with the natural gas trading activities in the United States of TotalEnergies Gas & Power North America, Inc. (TGPNA), a US subsidiary of TotalEnergies. The investigation covered transactions made by TGPNA between June 2009 and June 2012 on the natural gas market. TGPNA received a Notice of Alleged Violations from FERC on September 21, 2015. On April 28, 2016, FERC issued an order to show cause to TGPNA and two of its former employees, and to the Corporation and TotalEnergies Gas & Power Ltd., regarding the same facts. The case was remanded on July 15, 2021 to the FERC Administrative Judge for hearing and consideration on the merits. TGPNA brought a claim to the U.S. District Court for the District of Texas in December 2022 disputing the constitutionality of FERC's administrative procedure; the U.S. District Court for the District of Texas ordered a stay of the case in the course of 2023, pending decisions by the U.S. Supreme Court other cases involving similar constitutional issues. On June 27, 2024, the U.S. Supreme Court confirmed that the constitution guarantees respondents with the right to a jury trial in this type of administrative procedure and the competence of the U.S. District Court. FERC terminated in September 2024 its administrative procedure (*Hearing Order*) started in 2021 and mentioned that no penalties would be imposed on the Company's entities on the basis of the 2016 question (*Order to show cause)* although it is not terminating the whole case. TGPNA has always contested the claims brought against it and FERC approved on January 8, 2025, a settlement agreement with TGPNA for an amount of USD 5 million finally resolving this claim amongst all parties with prejudice and without admission of liability.

DISPUTES RELATING TO CLIMATE

In France, the Corporation was summoned in January 2020 before Nanterre's Civil Court of Justice by certain associations and local communities in order to oblige the Company to complete its Vigilance Plan, by identifying in detail risks relating to a global warming above 1.5 °C, as well as indicating the expected amount of future greenhouse gas emissions related to the Company's activities and its product utilization by third parties and in order to obtain an injunction ordering the Corporation to cease exploration and exploitation of new oil or gas fields, to reduce its oil and gas production by 2030 and 2050, and to reduce its net direct and indirect CO_2 emissions by 40% in 2040 compared with 2019. This action was declared inadmissible on July 6, 2023, by the Paris Civil Court of Justice to which the case was transferred following a new procedural law. Following the appeal filed by the claimants, the Paris Court of Appeal, in a judgment of June 18, 2024, considered the action initiated admissible in particular on the basis of the law on the duty of vigilance transferring the case for trial on the merits before the Paris Civil Court of Justice, while strucking out 17 of the 22 applicants as well as declining to awards any provisional measures. TotalEnergies SE considers that it has fulfilled its obligations under the French law on the vigilance duty. A new action against the Corporation, with similar requests for injunction, has started in March 2024 before the commercial court of Tournai in Belgium.

Some associations in France brought civil and criminal actions against TotalEnergies SE, with the purpose of proving that since May 2021 – after the change of name of TotalEnergies – the Corporation's corporate communication and its publicity campaign contain environmental claims that are either false or misleading for the consumer. TotalEnergies considers that these accusations are unfounded.

In France, on July 4, 2023, nine shareholders (two companies and 7 individuals holding a small number of the Corporation's shares) brought an action against the Corporation before the Nanterre Commercial Court, seeking the annulment of resolution no. 3 passed by the Corporation's Annual Shareholders' Meeting on May 26, 2023, recording the results for fiscal year 2022 and setting the amount of the dividend to be distributed for fiscal year 2022. The plaintiffs essentially allege an insufficient provision for impairment of TotalEnergies' assets in the financial statements for the fiscal year 2022, due to the insufficient consideration of future risks and costs related to the consequences of greenhouse gas emissions emitted by its customers (scope 3) and carbon cost assumptions presented as too low. The Corporation considers this action to be unfounded.

In the United States, several US subsidiaries of TotalEnergies were summoned, amongst many companies and professional associations, in several "climate litigation" cases, seeking to establish legal liability for past greenhouse gas emissions, and to compensate plaintiff public authorities, in particular for resulting adaptation costs. The Corporation was summoned, in some of these claims along with these subsidiaries considers that the courts lack jurisdiction, that it has many arguments to put forward, and considers also that the past and present behavior of the Company does not constitute a fault susceptible to give rise to liability.

RUSSIA

In France, two associations filed a simple complaint against the Company in October 2022 with the National Anti-Terrorist Prosecutor's Office, due to the continuation of some of the Company's activities in Russia since the Russian invasion of Ukraine in 2022. The complaint, which the Corporation has not been given access to, would accuse the Corporation – due to its 49%[1] holding in Russian company Terneftegas, at that time 51%-owned by Novatek and operated by said company – of complicity in war crimes committed by the Russian Air Force in Ukraine, by aiding or assisting, through the supply of kerosene to the Russian Air Force. The Corporation – which has no direct or indirect activity vis-à-vis the sale of kerosene in Russia – has strongly rejected these accusations, as unfounded in both law and fact[2].

The complaint was dismissed by the National Anti-Terrorist Prosecutor's Office in early January 2023.

The plaintiffs later lodged a new identical complaint in March 2023 with the application to join the proceedings as a civil party. In June 2023, the National Anti-Terrorist Prosecutor's Office recommended a dismissal to the Elder Magistrate in charge of criminal matters who decided on October 19, 2023 that the complaint was not admissible, and informed the Company of such on April 10, 2024.

(1) The sale by the Company of the 49% interest in Terneftegaz announced by the Company on July 18, 2022 was finalized on September 15, 2022.
(2) Refer to the press release published by the Company on August 24, 2022 contesting the accusations made by French newspaper Le Monde.

MOZAMBIQUE

In France, victims and heirs of deceased persons filed a complaint against the Company in October 2023 with the Nanterre Prosecutor, following the events perpetrated by terrorists in the city of Palma in March 2021. This complaint would allege that the Corporation is liable for "unvoluntary manslaughter" and, "failure to assist people in danger". The Corporation considers these accusations as unfounded in both law and fact[1].

KAZAKHSTAN

On April 1st, 2024, the Republic of Kazakhstan filed a Statement of Claims in the context of an arbitration involving TotalEnergies EP Kazakhstan and its partners under the production sharing contract related to the North Caspian Sea. TotalEnergies EP Kazakhstan and its partners consider this action to be unfounded. Therefore, it is not possible at this date to reliably assess the potential consequences of this claim, particularly financial ones, nor the date of their implementation.

3.6 Vigilance Plan

3.6.1 Introduction

3.6.1.1 Regulatory framework

In accordance with Article L. 225-102-1 of the French Commercial Code (formerly Article L. 225-102-4), the vigilance plan (hereinafter referred to as the "Vigilance Plan") aims to set out the reasonable measures of vigilance put in place within the Company to identify risks of and prevent severe impacts on human rights, fundamental freedoms, human health and safety and the environment resulting from the activities of the Corporation and those of the companies it controls as defined in point II of Article L. 233-16 of the French Commercial Code, directly or indirectly, as well as the activities of subcontractors or suppliers with which it has an established commercial relationship, where such activities are linked to this relationship.

The Vigilance Plan covers the activities (hereinafter referred to as the "Activities" in this section) of TotalEnergies SE and its consolidated subsidiaries as defined in II of Article L. 233-16 of the French Commercial Code (hereinafter referred to as the "Subsidiaries" in this section)[2]. It also covers the activities of suppliers of goods and services with which TotalEnergies SE and its Subsidiaries have an established commercial relationship, where such activities are associated with that relationship (hereinafter referred to as the "Suppliers")[3].

TotalEnergies operates in about 120 countries in a variety of complex economic and socio-cultural contexts and in business areas that are likely to present risks that fall within the scope of the Vigilance Plan.

The reasonable measures of vigilance set out in this Vigilance Plan take into account the diversity and the geographic reach of the Company's Activities. As part of its reporting of the implementation of the Vigilance Plan, TotalEnergies has chosen to illustrate its actions by referring to situations upon which it was specifically questioned.

3.6.1.2 Methodology and preparation of the Vigilance Plan

TotalEnergies has integrated consideration of the impact of its Activities and those of its Suppliers on people's health and safety, the environment and respect for human rights into its corporate culture.

Thus in formulating its Vigilance Plan, TotalEnergies relies on a solid foundation of procedures, management and reporting tools, including with respect to HSE and human rights. Experiences acquired have contributed to develop further the Vigilance Plan.

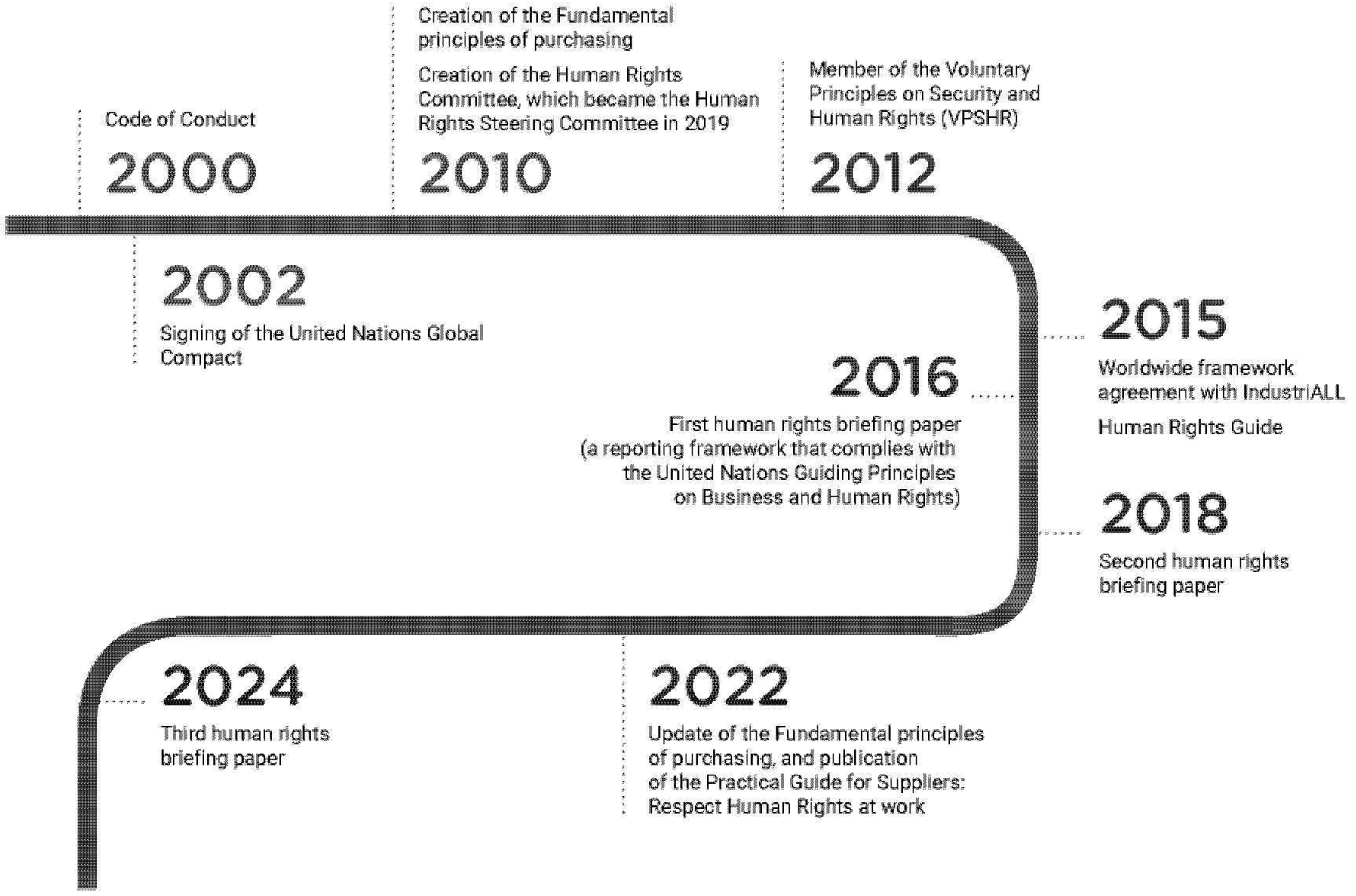
Health, safety and the environment (HSE) have long been the object of specific attention at Company level. Given their nature, the Activities give rise to health and safety risks for employees, the personnel of external contractors, and residents in the vicinity of industrial sites and for the environment.

Since 2016, TotalEnergies has had an HSE Committee, which includes the members of the Executive Committee and is chaired by the Chairman and Chief Executive Officer. The Committee's role is to generate momentum at top management level to ensure that safety is a value shared by all. All HSE functions at headquarters and in the Company's business segments are centralized within a single HSE division. The objective of this unified organization is to combine the strengths and expertise and to harmonize existing good practices, based on a One MAESTRO *(Management and Expectations Standards Toward Robust Operations)* reference framework common to all business segments. In practice, TotalEnergies takes a continuous improvement approach to HSE, involving every level of the organization. HSE objectives are presented to the Executive Committee every year. One MAESTRO standards, defined at Company level, are implemented by the Subsidiaries through their own HSE management systems.

Human rights are at the heart of the Company's operations. Since 2000, TotalEnergies has adopted a Company Code of Conduct.

In 2002, TotalEnergies joined the United Nations Global Compact. Since 2010, the Company has been supported by a Human Rights Steering Committee. The human rights road map is presented and reviewed regularly at Executive Committee meetings. In 2013, the Executive Committee examined and validated the Company's first human rights road map, and in 2016, its first human rights briefing paper, updated in 2018 and recently in January 2024.

(1) Refer to the press release published by the Company on October 11, 2023 contesting the accusations.
(2) Certain companies, such as Hutchinson and Saft Groupe, have set up risk management and impact prevention measures specific to their organizations. In addition, for newly acquired companies, reasonable vigilance measures are intended to be implemented progressively during the integration phase of these companies into the Company systems.
(3) In accordance with the regulatory provisions, suppliers with which the Company does not have an established commercial relationship do not fall within the scope of this Plan. This Plan reflects the sustainable procurement principles applicable to relationships with Suppliers, but is not aimed at replacing the measures in place at those Suppliers.



The elaboration of the Vigilance Plan is part of a broader set of work to identify and analyse risks within TotalEnergies, including the Company's risk mapping. This process is based on an integrated approach that calls on the skills of the various functions involved (HSE, human rights, procurement, human resources, societal, security and legal).

In 2018, in the meetings of the Operational Committee of the European Works Council[1], Committee members were provided with information on the law on the duty of vigilance and the methods used to prepare the Vigilance Plan, and were given an opportunity to comment.

The Board of Directors reviews the Vigilance Plan and its annual implementation report.

3.6.1.3 Dialogue with stakeholders

TotalEnergies engages in dialogue with stakeholders at every level of the organization. In accordance with the Company's framework documents on societal matters, stakeholders are identified, mapped out and organized by level of priority according to their expectations and degree of involvement. This includes the following steps: list the main stakeholders for each Subsidiary and site (depots, refineries, etc.), categorize them and schedule consultation meetings to better understand expectations, concerns and opinions. The outcome of this process is the definition of action plans to manage the impacts of activities and consider local development needs, in order to build a long-term relationship based on trust. This process allows the Company to explain its activities to communities and other stakeholders, and to single out potentially vulnerable local populations. Its deployment continues in the Subsidiaries.

In order to facilitate this dialogue, certain Subsidiaries have established a network of dedicated contacts. For example, in some Subsidiaries within the Exploration & Production segment, a network of local community mediators is in place to maintain a constructive dialogue with local communities. These mediators act as Community Liaison Officers (CLO) and are tasked with establishing an ongoing dialogue with stakeholders on the ground (Stakeholder Engagement), including local authorities and communities and, more broadly, local players in civil society. Employed by TotalEnergies, sometimes coming from the local communities, they speak the local languages and understand local customs. They play a decisive role which is crucial in establishing good relations between TotalEnergies and its stakeholders and pay close attention to the most vulnerable populations.

A structured dialogue with stakeholders is established and maintained, primarily at local level. Subsidiaries manage local relations with civil society and are encouraged to enter into dialogue with non-governmental organizations (NGOs). The Company also cooperates with external experts specialized in preventing and managing conflict between businesses and local communities.

Additionally, relevant divisions of the Holding ensure a continuous dialogue with stakeholders of TotalEnergies. The Sustainability & Climate Division manages relations between the Company and civil society, represented notably by NGOs, as well as large institutions and multilateral agencies (e.g., Global Compact).

TotalEnergies maintains ongoing exchanges with its employees and their representatives – whose role and position allows for privileged interactions, particularly with management. Social dialogue is a key component of the Company. It includes all types of negotiations, consultations or exchanges of information among the management of the TotalEnergies entities, employees and their representatives about economic and workplace issues and concerns relating to company life. The topics addressed in this social dialogue may vary according to each Subsidiary, but some are shared concerns across the Company such as health and safety, work hours, compensation, training and equal opportunity. The Company is careful to conduct this dialogue at both the local level and at headquarters or centrally, through its participation in company bodies and its negotiation of agreements.

In countries where employee representation is not required by law, the Subsidiaries strive to establish such representation. As a result, majority elected employee representatives are present in most TotalEnergies companies.

(1) This committee was replaced by the TotalEnergies European Works Council following the transformation of the Corporation into a European company.

At the European level, the TotalEnergies European Works Council serves as a forum for providing information and regular exchanging views about the Company's strategy, its workplace, economic and financial situation, as well as on matters relating to sustainable development, environmental and social responsibility and safety. It is consulted for significant proposed organizational changes concerning at least two companies in two European countries, to express its opinion, in addition to the procedures initiated before the national representative bodies. The members of the TotalEnergies European Committee also participate to visits on sites in Europe.

At the global level, TotalEnergies signed in 2015 a four-year agreement with IndustriALL Global Union[1] on the promotion of human rights at work, diversity, health and safety at work and the dialogue with employees and their representatives. TotalEnergies continues to apply the commitments of this global agreement. Through this global agreement and the Fundamental Principles of Purchasing, TotalEnergies also asks its suppliers to respect freedom of expression, association and collective bargaining and, in countries where this right is restricted, to ensure that employees have the right to participate in a dialogue concerning their collective work situation.

In December 2017, TotalEnergies also joined the Global Deal initiative, a multi-stakeholder worldwide partnership whose goal is to encourage governments, companies, unions and other organizations to make concrete commitments to improve dialogue with employees on all levels and to propose concrete solutions to reconcile economic performance and social progress. The Global Deal promotes the idea that effective dialogue with employees can contribute to decent work and quality jobs and, as a result, to more equality and inclusive growth, from which workers, companies and civil society benefit. In 2024, TotalEnergies continued to share its good practices with Global Deal member companies.

3.6.2 Severe impact risk mapping

The mapping work presented below, which includes risks for people and the environment, was carried out using TotalEnergies' risk management tools. Each risk map identifies, analyzes, and prioritizes risks, enabling to determine the risks of severe impact. These risk of a severe impact maps are the basis for the priority risk management actions implemented by the Company.

3.6.2.1 Safety, health and the environment

TotalEnergies defines the risk of a severe impact on safety, health or the environment as the probability of Activities having a direct and significant impact on the health or safety of **employees of TotalEnergies companies, employees of external contractors[2] and third parties, or on the environment** following a large scale pollution or a pollution impacting a sensitive natural environment[3].

TotalEnergies has developed regular safety, health and environment risk assessment procedures and tools applicable to operate its Activities at various levels (Company, activities and/or industrial sites):

- prior to investment decisions in industrial projects of the Company, acquisition and divestment decisions;
- during operations; and
- prior to releasing new substances on the market.

With respect to potential major industrial accidents, analyses are based notably on incident scenarios at the site level, for each of which the probability of occurrence and potential consequences (in terms of severity) are assessed. Based on these parameters, a prioritization matrix is used to determine whether further measures are needed. These mainly include preventive measures but can also include mitigation measures that may be technical and organizational in nature. Each business segment produces, on a yearly basis, an inventory of its identified major industrial accident risks, which is submitted to management/committees in each segment and to the HSE Committee (refer to 3.6.1.2), providing a global overview of identified risks and of progress on action plans launched by the Subsidiaries operating the sites.

This work allowed to identify, analyze and prioritize the risks of severe impacts. These analyses have highlighted the following risks of severe impacts:

- risks to the safety of people and to the environment resulting from a major industrial accident on an offshore or onshore site. This accident could be an explosion, a fire or a leak resulting in fatalities or bodily harm, and/or accidental pollution on a large scale or on a sensitive natural environment, for example a well blowout;
- risks to the safety of people and to the environment related to the overall life cycle of the products manufactured, and to the substances and raw materials used; and
- risks associated with transportation, for which the likelihood of an operational accident depends on the hazardous nature of the products handled, as well as on volumes, length of the journey and sensitivity of the regions through which products are transported (quality of infrastructure, population density, environment). These risks are likely to arise from accidents or incidents in the transportation of the Company's raw materials and finished products, notably by ship, pipeline or road, as well as from accidents or incidents in the air transport of personnel.

Climate change is a global risk for the planet and results from various human actions such as energy consumption. As an energy producer, TotalEnergies seeks to reduce direct greenhouse gas emissions resulting from its operated Activities. In 2024, worldwide greenhouse gas (GHG) emissions from the facilities operated by TotalEnergies amounted to 34 Mt CO_2e, less than 0.1% of total worldwide emissions, which amounted to 57,1 Gt CO_2e for the year of 2023[4]. In addition, TotalEnergies implements a strategy to tackle climate change challenges and reports on this in detail, notably in its Sustainability Report (refer to point 5.2.1 of chapter 5), in accordance with Articles L. 232-6-3 and L. 233-28-4 of the French Commercial

(1) International federation of trade unions representing more than 50 million employees in the energy, mining, manufacturing and industrial sectors in 140 countries.
(2) Personnel of companies working on a site operated by a Subsidiary.
(3) Sensitive natural environments include, in particular, remarkable or highly vulnerable natural areas, such as sea ice in the Arctic, as well as areas covered by significant regulatory protection such as Protected Area Categories I to IV as defined by the International Union for Conservation of Nature (IUCN), Ramsar areas, or natural sites listed on the UNESCO World Heritage List at December 31, 2024.
(4) U.N. Environment Programme, "Emissions Gap Report 2024".

3.6.2.2 Human rights and fundamental freedoms

The risks of impacts on human rights for **TotalEnergies personnel and third parties** were identified according to the criteria defined in a well-established reference document for the mapping of human rights risks, the United Nations Guiding Principles Reporting Framework:

- severity: the scale of the impact on the human right(s); and/or
- scope: the number of persons affected or who could be affected; and/or
- the remediable nature of the impact: the ease with which the corresponding rights of the impacted persons can be restored.

TotalEnergies applied the United Nations Guiding Principles Reporting Framework, which defines the following process:

- identify all human rights at risk of being negatively impacted by a company's activities or business relations, by taking into account all relevant business activities and entities in the company and the point of view of the people exposed to a negative impact;
- prioritize potential negative impacts based on their potential gravity (severity and potential extent of the impact and the required remediation efforts) and their probability (while paying particular attention to very severe but unlikely impacts);
- explain the conclusions to internal and external stakeholders and check that factors have not been omitted.

This risk mapping work was carried out by TotalEnergies in 2016 in consultation with internal and external stakeholders. The process included workshops with representatives of key business activities of the Company (human resources, procurement, security, HSE, Ethics Committee, Human Rights Steering Committee) and of Subsidiaries operating in difficult environments or particularly exposed to risks to human rights and fundamental freedoms. A series of interviews was held with independent third parties (GoodCorporation, International Alert, Collaborative Learning Project). The participants were able to share return on experience on the ground (difficulties faced, proposals for improvements on issues related to human rights and HSE resulting from Subsidiary assessments). The questions raised at the Business Ethics Day were also taken into consideration. The results of the in-house survey of employees regarding their professional situation and perception of the company conducted at local or Company level, were also taken into account.

This work enabled TotalEnergies to identify and analyze the human rights risks that affect the Activities and to prioritize them according to their salience.

The salient risks are thus identified by comparing indicators and information provided by external stakeholders and internal return on experience. The dialogue with local stakeholders and feedback from the field, described above (refer to point 3.6.1.3) also contribute to this.

The mapping of salient risks, periodically updated, is supplemented by dedicated mappings such as the CSR risk mapping linked to TotalEnergies' purchasing by categories of goods and services (refer to point 3.6.2.3). Risk mapping by the Security division also takes into account human rights and the VPSHR (Voluntary Principles on Security and Human Rights)

In 2019, TotalEnergies updated its procedures to analyze risks of impacts on human rights (taking into account the country, types of activity and types of raw materials or purchased products and services). This work was done with a specialized consultant, and included workshops with internal and external stakeholders. It took into account international country risk indicators established by a specialized third party. This process notably offers a support to Subsidiaries located in geographic areas at higher risk of impacts on human rights.

As a result, the following six salient risks were identified, divided among three key themes for the Company:

- **human rights in the workplace** of TotalEnergies' employees and those of its Suppliers and other business partners:
  - forced labor and child labor; this risk of forced labor and child labor corresponds to any work or service exacted from any person under the threat of a penalty or punishment and for which that person has not offered himself or herself voluntarily, as well as child labor, which is forbidden for anyone under the age of 15, or 18 for any type of so-called hazardous work in accordance with the standards of the International Labor Organization;
  - discrimination; this risk of discrimination is characterized by the unfair and unfavorable treatment of people, in particular because of their origin, nationality, sex, age, disability, sexual orientation, or membership of a political, religious, trade union or minority group;
  - just and favorable conditions of work and safety; this risk of not respecting just and favorable conditions of work and safety is materialized, for example, by the absence of an employment contract, an excessive number of working hours or a non-decent remuneration.
- **human rights and local communities**:
  - access to land; this risk of infringement of the right of access to land is linked to the relocation of local communities and concerns certain projects requiring temporary or permanent access to land, likely to involve the economic and physical displacement and resettlement of populations and/or restricted access to their means of subsistence;
  - the right to health and an adequate standard of living; this risk of infringement of the right to health and an adequate standard of living concerns, for example, activities that could have an impact on the health of local communities or on their access to fresh water.
- **respect for human rights in security-related activities**:
  - the risk of misuse of force; this risk of misuse of force may materialize when the intervention of government security forces or private security companies may be necessary to protect the Company's personnel and facilities.



3.6.2.3 Suppliers

The identification, analysis and prioritization of the risks of impacts on human rights, people's health and safety and the environment as a result of Suppliers' activities rely on a CSR mapping of the risks linked to TotalEnergies' procurement, as well as on country risk indicators. The CSR mapping of the risks linked to TotalEnergies' procurement, by category of goods and services purchased allows the identification and evaluation according to a severity scale of the risks relating to human rights and social working conditions and those relating to the environment that are associated with each procurement category. This mapping is regularly updated by TotalEnergies Global Procurement, based on research conducted by AFNOR experts on the human rights and environmental risks associated with each procurement category and workshops with buyers of these categories whose practical experience and knowledge greatly enhance the results of initial research. The Company's human rights and environmental experts are also involved throughout the entire process of identification, analysis and prioritization of risks. This mapping includes particular risks relating to child labor, forced labor, working conditions, discrimination, workers' health and safety, as well as risks relating to pollution and adverse impacts to biodiversity. It is available to buyers.

Country risk indicators that supplement the CSR mapping of the risks linked to TotalEnergies' procurement are related to human rights and environmental country-related risks.

Cross-referencing the results of the CRS mapping of the risks linked to TotalEnergies' procurement with human rights and environmental country-related risk indicators aims to identify Suppliers the most at risk regarding human rights, health, safety and the environment, to prioritize actions towards these Suppliers.

3.6.3 Action principles and organization

TotalEnergies has defined in its referential framework principles which reflect the Company's values and aim at preventing impacts on human rights and health, safety and to the environment (the "Action Principles"). When the legal provisions applicable to Activities provide less protection than the Action Principles, TotalEnergies strives under all circumstances to give precedence to the latter, within the constraints of applicable regulations.

Action principles which are presented in points 3.6.3.3 *"Human rights"*, 3.6.3.4 *"Safety, health and environment"* and 3.6.3.5 *"Fundamental principles of purchasing"* participate in actions to mitigate and prevent the risks of severe impact presented in point 3.6.2 *"Severe impact risk mapping"*.

3.6.3.1 Organization

TotalEnergies has a three-tier organization: Corporate, business segments and operational entities. Each tier is involved in and accountable for identifying and implementing measures in the Vigilance Plan deemed appropriate within the scope of the entity in question.

The Action Principles are driven by the **Executive Committee**.

The **Ethics Committee** is the guarantor of the implementation of the Code of Conduct. Its chairman, who reports to the Chairman and Chief Executive Officer of TotalEnergies SE, presents an annual ethics report to the Governance and Ethics Committee of the Board of Directors.

The **Strategy & Sustainability division,** created in September 2021, illustrates the importance of the sustainable development issues that are at the heart of TotalEnergies' strategy. This general division includes in particular:

- The **HSE division,** which brings together the Company's industrial health, safety, environmental and operational societal functions. Within this division, the HSE entities dedicated to the Exploration & Production, Integrated LNG, Integrated Power, Refining & Chemicals and Marketing & Services segments are notably responsible for supporting the implementation of the Company's HSE policy. Furthermore, specific entities deal with the following areas: environmental and societal issues, major risks, safety at health, transportation, crisis management and pollution prevention, legislation and reporting, audits. TotalEnergies has set up an HSE Committee chaired by the Chairman and Chief Executive Officer and made up notably of the members of the Executive Committee and HSE managers (refer to point 3.6.2.1). Its mission is to ensure that safety is a shared value.
- The **Sustainability & Climate division,** whose mission includes to help implement TotalEnergies' climate and sustainable development (including human rights) road maps and environmental, extra-financial policies, with transparency as a guiding principle. In this division, the Human Rights department, which reports to the Vice-President of the Sustainability division, supports the Company's operational personnel with its expertise in implementing the Action Principles relating to human rights. This division also forms the link between the Company and civil society and is in charge of relations with non-governmental organizations (NGOs), major institutions or multi-lateral agencies at Company level. Also within this division, the Climate division is responsible for contributing to the implementation of TotalEnergies' Climate Road map, in line with its ambition of carbon neutrality by 2050, together with society.

Within the **People & Social Engagement division, the Strategy and Human Resources Policies division** is responsible in particular for defining TotalEnergies' human resources strategy and policies in line with the business challenges and the corporate project. In line with the multiple situations encountered in the field, it coordinates the diffusion and roll-out of new policies to support the various human resources departments in TotalEnergies' business segments. The Social Relations division is tasked with coordinating the Company's social relations policy, chairing the TotalEnergies European Works Council and negotiating within this scope.

The **Security division** is responsible for the protection of people, facilities and information, and pays particularly close attention to the protection of people and property, by conducting analyses and offering advice.

TotalEnergies Global Procurement coordinates management of supplier relationships and provides in particular purchasing services for the Company's goods and services, whether for categories of products or services specific to one business activity or categories shared among several business activities[(1)].

This corporate organization acts in support of the business segments and Subsidiaries in the operational implementation of the Action Principles.

Within the business segments services and advice are offered to Subsidiaries to assist them in the operational implementation of TotalEnergies' requirements.

(1) Present in about 120 countries, the Company currently works with a network of more than 100,000 suppliers.

Depending on their size, type of activities and the risks to which they may be exposed, the Subsidiaries may have dedicated personnel for HSE, societal, human resources, ethical, security and procurement issues.

3.6.3.2 Code of Conduct

TotalEnergies' Vigilance Plan is based primarily on the Code of Conduct which defines the Company's values, including safety and respect for others, and their application to human rights, the environment, and people's health and safety.

The Code particularly sets forth TotalEnergies' compliance with the following international standards:

- the principles of the Universal Declaration of Human Rights;
- the United Nations Guiding Principles on Business & Human Rights;
- the principles set out in the International Labor Organization's fundamental conventions;
- the principles of the United Nations Global Compact;
- the OECD Guidelines for Multinational Enterprises; and
- the Voluntary Principles on Security and Human Rights, or VPSHR.

The Code of Conduct, which can be accessed on TotalEnergies' website, is aimed at all employees and external stakeholders (host countries, local communities, customers, suppliers, industrial and commercial partners and shareholders).

3.6.3.3 Human rights

In addition to the Code of Conduct, matters relating to respect for human rights are included in a number of internal rules, such as those relating to ethics, human resources, societal, security and procurement. In addition to these, there are a number of practical tools dedicated specifically to societal issues.

For example, a rule concerning stakeholder and local impact management describes TotalEnergies' requirements for a unified approach to managing the societal risks and impacts of its operations. This is based on an assessment of the sensitivity of the societal context and the impacts relating to operations. Furthermore, the Charter of Principles and Guidelines regarding indigenous and tribal peoples states how TotalEnergies endeavors to know and understand the legitimate requirements of the communities living in its Subsidiaries' sphere of activities.

TotalEnergies' charters and rules are supplemented by guides and manuals at Company level or at the level of the business segment, which serve as reference documents for Subsidiaries on meeting requirements. Thus, there are guides relating to carrying out societal impact assessments and impact assessments on human rights, managing the local societal approach, and developing local content in projects and to land acquisition and resettlement where displacement of people, their assets and livelihoods are involved.

General specifications define more technical requirements, such as the implementation of the social baseline study and analysis of the societal impact.

As regards community grievance management, a guide describes the methodology and procedures for managing individual and collective grievances resulting from Activities, based on the United Nations Guiding Principles on Business and Human Rights eight effectiveness criteria.

Additionally, requirements relating to the implementation of VPSHR in conducting security operations are detailed in an internal rule concerning risk assessment, preliminary verifications, formalization of the relationship with security providers, training and management of possible incidents.

3.6.3.4 Safety, health and the environment

TotalEnergies conducts its operations on the basis of its **Safety Health Environment & Quality Charter** (available on its website). It forms the common foundation for the Company's management frameworks, and sets out the basic principles applicable to safety, security, health, the environment, quality and societal commitment. The Company's directives and rules define the minimum requirements expected. General specifications, guides and manuals are available to implement these directives and rules. The Subsidiaries incorporate these requirements into their own management systems, whilst taking into account local specificities and regulatory requirements. The Company's framework is available to all employees.

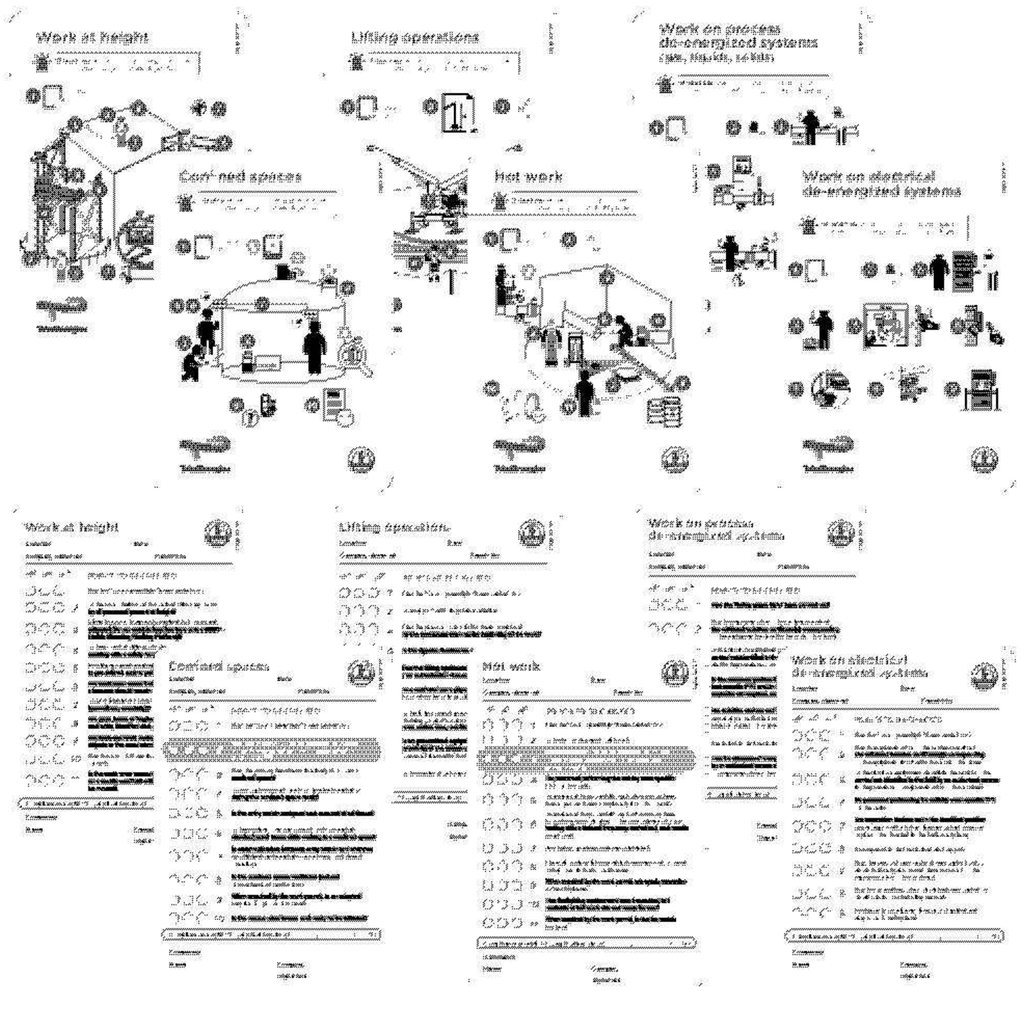
The HSE reference framework common to all the business segments has been rolled out in order to give greater overall consistency to TotalEnergies' operations, while taking into account the specificities of each business segment. This reference framework, called One MAESTRO (Management and Expectations Standards Toward Robust Operations), applies to the Subsidiaries as well as their operated sites possibly through versions adapted to the specific industries, notably for Hutchinson.

One MAESTRO is structured around ten fundamental principles: (1) leadership and management commitment, (2) compliance with laws, regulations and Company requirements, (3) risk management, (4) operational accountability, (5) contractors and suppliers, (6) expertise and training, (7) emergency preparedness, (8) learning from events, (9) monitoring, audit and inspection, and (10) performance improvement.

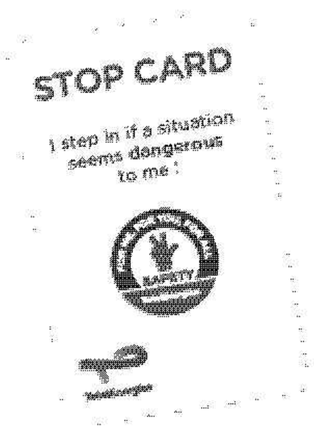
In addition, with regard to safety at work, the Company has ***12 Golden Rules*** since 2010, reviewed in 2022 for them to be more directly understandable by players on site and to facilitate their appropriation. These Golden Rules are simple, memorizable by everyone and representative of a significant number of accidents at the workplace and must be strictly obeyed by all personnel, both employees and external companies, in all the countries and in all the Company's activities. Widely circulated, the aim of the Golden Rules is to ensure day-to-day safety during the conduct of operations and on sites with a common objective: "Zero fatal accidents". These rules cover the following subjects:



TotalEnergies has also rolled out the ***Our lives first*** program, which introduced joint safety tours with external companies, the establishment, in the work permit process, of a ritual prior to work on all the TotalEnergies' operated sites concerned (Safety green light), and a tool (Life Saving Checks) to intensify checks in the field and measure compliance with safety rules at least for the five high-risk activities: work at height, lifting operations, work on energy-powered systems, work in confined spaces and hot work.



In addition, anyone, irrespective of their level in the organization, is authorized to interrupt work in progress, if they notice a high-risk situation, by using their ***Stop Card***.



The *Stop Card* is a plastic-coated card. It grants its holder the authority to intervene and stop work in progress, if he/she notices high-risk actions or situations, or situations that may lead to an accident, with an assurance that no disciplinary action will be taken as a result, even if the intervention turns out to have been unnecessary.

If an action or situation seems hazardous for one or more people, a facility or the environment, the *Stop Card* provides a means of intervening. Uses of the Stop Card can range from a simple question to check that no risks are present, to interrupting the work in progress.

This interruption offers an opportunity to exchange with the colleagues involved (members of staff and their supervisor) with a view of finding a solution to the perceived problem. If necessary, changes are made to the way of working before resuming the work in progress.

If the problem cannot be solved immediately, the work is suspended, pending the implementation of suitable measures.

PREVENTING THE OCCURRENCE OF MAJOR INDUSTRIAL ACCIDENTS

To **prevent the occurrence of a major industrial accident** such as an explosion, fire, leakage of hazardous products or mass leakage that might cause death, physical injury, large-scale pollution or pollution at an environmentally sensitive site, or important damage to property, TotalEnergies implements suitable risk management policies and measures that apply to the Company's operated activities. The Major Risks division of the HSE division provides support in the application of this policy.

The Company's policy for the management of major industrial accident risks applies from the facilities design stage as well as during their lifecycle in order to minimize the potential impacts associated with its activities. The policy is described in the One MAESTRO reference framework. It provides for analysis of the risks related to the Company's industrial operations at each operated site subject to these risks, based on incident scenarios for which the probability of occurrence and the severity of the consequences are assessed. Based on these parameters, a prioritization matrix is used to determine whether further measures are needed. These mainly include preventive measures against accidents, but also include measures to reduce the consequences (protection and mitigation). They are technical and organizational. These analyses are updated periodically, at least every five years, or when facilities are modified.

With regard to the design and construction of facilities, technical standards include applicable regulatory requirements and refer to industry best practices. The construction of the Company's facilities is entrusted to qualified contractors who undergo a demanding internal selection process and are monitored. In the event of a modification to a facility, the Company's rules define the management process to be adopted.

With regard to the management of operations and integrity of facilities operated by the Company, formal rules have been set out to prevent specific risks that have been identified either by means of risk analyses or from internal and industry feedback. For specific works, the preliminary risk analysis may lead to the establishment of a work permit, the process of which, from preparation through to closure, is defined. The Company's reference framework also provides a process to manage the integrity of facilities, which includes, for example, preventive maintenance, facility inspections, identification of safety critical equipment for special monitoring, management of anomalies and downgraded situations, and regular audits. These rules are part of the One MAESTRO reference framework. Operations teams receive regular training in the management of operations in the form of companionship or in-person trainings. For example, in order to control the **integrity of pipelines** operated by the Company, they are subject to periodic surveys such as cathodic protection checks, ground or aerial surveillance or in line inspections. These actions are planned as part of the pipeline monitoring and maintenance programs. In areas with high human or environmental risks identified by the risk analysis, these controls and their frequency are reinforced.

PREVENTING OCCUPATIONAL ACCIDENTS

The Company has a **policy for preventing occupational accidents** that applies to all employees of Subsidiaries and employees of contractors working on a site operated by one of these Subsidiaries. The safety results are monitored with the same attention for all. This policy is described in the One MAESTRO reference framework.

As part of the policy for preventing workplace accidents, TotalEnergies has defined rules and guidelines for HSE training, personal protective equipment and high-risk operations for employees of the Company and of the contractors working on sites operated by the Company. In order to continually move its practices forward, TotalEnergies also implements a process for analyzing accidents, irrespective of their nature, with the method used and the level of detail involved depending on the actual or potential level of severity of the event.

The HSE division includes a division of specialists in high-risk operations (work at height, lifting, electricity, confined spaces, etc.) that consolidates in-house knowledge and relations with contractors, and issues the relevant One MAESTRO rules. The HSE division also includes a division aimed at providing support for Subsidiaries in their own voluntary approach to strengthen their safety culture. This division also develops and disseminates tools to improve human performance by identifying the Organizational and Human Factors of a work situation and defining appropriate measures.

PREVENTING OCCUPATIONAL HEALTH RISKS

With regard to the **prevention of occupational health risks**, the One MAESTRO framework provides that Subsidiaries of the Company identify and assess risks at the workplace in the short, medium and long terms. To do this, the framework provides application guides for implementation. The analysis of these health risks relates to chemical, physical, biological, ergonomic and mental risks. This results in the roll-out of an action plan. An Industrial Health correspondent in Subsidiaries is identified and tasked with implementing the policy for identifying and assessing work-related health risks. The actions are integrated into the entities' HSE action plans and can be audited as part of the One MAESTRO audits.

In general, **potential exposure to chemical or hazardous products** at a site operated by a Company entity or nearby is one of the most closely monitored risks in view of the potential consequences. New facility construction projects comply with international technical standards from the design stage in order to limit exposure. For production sites operated by a Company entity and subject to this risk, the One MAESTRO reference framework sets out the prevention process in several stages. First, hazardous products such as carcinogenic, mutagenic or toxic to reproduction (CMR) chemicals are listed and their risks identified. Second, potential exposure to levels that may present a risk to the health of personnel, contractors or local residents at the site or nearby are identified and assessed, and prevention or mitigation measures are implemented in order to control the risk. Last, the approach is checked (atmospheric checks, specific medical monitoring, audits etc.) in order to verify its effectiveness and implement improvement measures if necessary. This is also set out formally in a risk assessment file, which is revised regularly by the Subsidiary.

In addition to the One MAESTRO reference framework, the Company has a **health reference framework**, which was comprehensively reviewed and approved by the People & Social Engagement division in 2022.

The health policy is part of the Company's approach to sustainable development and includes occupational health requirements that apply to the Company's employees as part of their professional activity, as well as to the employees of external companies working on its sites.

The aim of occupational health protection is to protect the mental and physical health of the Company's employees by implementing an appropriate risk analysis and prevention policy. It also aims to guarantee their fitness for work and to avoid accidents at work and occupational diseases.

LIMITING THE ENVIRONMENTAL FOOTPRINT OF TotalEnergies ACTIVITIES

TotalEnergies implements a policy of avoiding, reducing and, where necessary, offsetting the environmental footprint and effects on nature in general of its operations.

Water and air protection

The Company's operations generate discharges such as smokes from combustion plants, emissions into the air from the various conversion processes and discharges of wastewater. In addition to complying with applicable legislation, TotalEnergies has drawn up rules and guidelines that the Subsidiaries can use to limit the quantities discharged. TotalEnergies has set itself targets for reducing sulfur dioxide (SO_2) emissions and is committed to limiting its hydrocarbon discharges into water. After analysis, the exposed sites are equipped with reduction systems that include organizational measures (such as managing the content of sulfur dioxide (SO_2) of fuels and the improvement of combustion process management, etc.) and specific technical measures depending on the sites (wastewater treatment plants, using low NO_X burners and electrostatic scrubbers, etc.) All refineries controlled by the Company currently have this type of system.

For new facilities developed by the Company, the internal rules require impact assessments to be carried out and, if necessary, actions must be taken to limit the impact of these emissions.

Soil protection

The risks of soil pollution related to TotalEnergies' operations come mainly from accidental spills and waste storage. TotalEnergies has drawn up a guide that the Subsidiaries can use to prevent and contain this pollution. The recommended approach is based on four pillars:

- preventing leaks, by implementing, in the majority of sites, industry best practices in engineering, operations and transport;
- carrying out maintenance at appropriate frequency to minimize the risk of leaks;
- overall monitoring of the environment to identify any soil and groundwater pollution; and
- managing any pollution from previous activities by means of containment and reduction or elimination operations.

In addition, a Company rule defines the following minimum requirements:

- systematic identification of each site's environmental and health impacts related to possible soil and groundwater contamination;

- assessment of soil and groundwater contamination based on various factors (extent of pollution inside or outside the site's boundaries, nature and concentrations of pollutants, presence of a vector that could allow the pollution to migrate, use of the land and groundwater in and around the site); and
- management of health or environmental impacts identified based on the use of the site.

Last, decommissioned facilities operated by the Company (i.e., chemical plants, service stations, mud pits or lagoons resulting from hydrocarbon extraction operations, wasteland on the site of decommissioned refinery units, etc.) impact the landscape and may, despite all the precautions taken, be sources of chronic or accidental pollution. In addition to the appropriate management of the waste associated with the dismantling and securing of sites, TotalEnergies has created a soil and groundwater depollution policy based on the assessment and management of the risks that such pollution may incur. For the sites at the end of their activity, the management of pollution is determined in accordance with regulatory obligations with an objective of continuing to control the use of the sites while favoring the possibility of redeveloping Company activities (solar, reforestation, etc.) and favoring biodiversity. Specialized entities of the Company are supervising the sites' remediation operations.

MANAGING IMPACTS OF PROJECTS AND OPERATIONS ON BIODIVERSITY AND NATURE

In 2016, the Company pledged to contribute to the achievement of the UN Sustainable Development Goals (SDGs), including those relating to biodiversity namely SDG 14 "Life Below Water" and SDG 15 "Life on Land". In 2018, TotalEnergies signed up to the act4nature initiative promoted by the French Association of Enterprises for the Environment, now act4nature international.

This **biodiversity ambition** constitutes a contribution to the Global Biodiversity Framework (GBF) adopted at COP 15 in 2022, whose mission is "to halt and reverse biodiversity loss and put nature on the path to recovery for the benefit of people and the planet." The Company thus intends to contribute to this ambitious framework and its national versions, such as the French National Strategy for Biodiversity (SNB) adopted in 2023, in a concrete manner through conservation and restoration measures for nature on its sites and in the regions where it is established.

This ambition is based on **four core principles**: (1) voluntary exclusion zones, (2) biodiversity management in projects, (3) biodiversity management at existing and abandoned sites and (4) promoting biodiversity. This ambition has been incorporated into the Company's One MAESTRO framework. The core principles of this ambition are described in point 5.2.4.3 of chapter 5, which includes the following principles of action:

- the Company has made a commitment not to conduct any exploration activities in oil fields under the Arctic sea ice;
- the Company recognizes the universal value of UNESCO's world natural heritage areas and honors its commitment not to carry out any oil or gas exploration or extraction activities in these areas (based on UNESCO sites listed at the end of 2024);
- the Company has made a commitment to develop a biodiversity action plan (BAP) for any new site located in an area of interest for biodiversity, that is IUCN (International Union for Conservation of Nature) Protected areas I to IV or Ramsar areas. In addition, for each new project located in an IUCN Protected area I or II or a Ramsar area, the Company commits to implementing measures to produce a net positive impact (gain) in biodiversity;
- it is the Company's intention that a biodiversity action plan be defined by 2025 at the latest and deployed by 2030 at the latest on every existing environmentally significant ISO14001 certified operated site (E&P production sites, refineries, petrochemicals sites, gas-fired power stations). TotalEnergies will report on implementation to the various stakeholders;
- finally, as part of the promotion of biodiversity, TotalEnergies wishes to support awareness-raising and educational actions for young persons on biodiversity and research actions.

LIMITING RISKS FOR THE HEALTH AND SAFETY OF CONSUMERS

Unless certain precautions are taken, some of the petroleum or chemical products marketed by TotalEnergies pose potential consumer health and safety risks. Respecting regulatory requirements is the main measure to limit risk throughout the life cycle of these products. TotalEnergies has also defined the minimum requirements to be observed in order to market its petroleum or chemical products worldwide with the goal of reducing potential risks to consumer health and the environment. These include the identification and assessment of the risks inherent to these products and their use, as well as providing information to consumers. The material safety datasheets that accompany the petroleum and chemical products, including those not classified dangerous, marketed by the Company (available in at least one of the languages used in the relevant country), as well as product labels, are two key sources of information.

The implementation of these requirements is monitored by teams of regulatory experts, toxicologists and ecotoxicologists within the Refining & Chemicals and Marketing & Services segments of the Company. These teams' assignment is to ensure the preparation of safety documentation for the marketed petroleum and chemical products so that they correspond to the applications for which they are intended and to the applicable regulations. These teams therefore draw up the material safety datasheets and compliance certificates (contact with food, toys, pharmaceutical packaging, etc.) and carry out REACH[1] registration (or equivalent in other geographical regions), if necessary. Thanks to their scientific and regulatory monitoring, they support the development of future commercial products and monitor updates of safety data sheets, certificates and registrations so that they remain compliant with regulations in force.

Governance of the process is rounded off within the Company's business units or Subsidiaries of the Refining & Chemicals and Marketing & Services segments with the designation of a Products Safety Manager who ensures compliance during the market release of his or her entity's petroleum and chemical products. The networks of product managers are coordinated by the Company's specialist teams either directly or via an intermediate regional level in the case of the Marketing & Services segment.

The safety data sheets for oil and gas produced by Subsidiaries of the Exploration & Production segment are produced by the Marketing & Services expertise center. The compliance of the go-to-market process of these products is under the Subsidiary's responsibility.

(1) Registration, Evaluation, Authorization and restriction of CHemicals (REACH) EU Regulation.

PREVENTING TRANSPORT ACCIDENTS

In the field of **road transportation**, the Company has for many years adopted a policy intended to reduce the number of accidents by applying standards that are, in some cases, more stringent than certain local regulations. This policy, defined in the One MAESTRO reference framework, applies to all the Company's personnel and personnel of contractors working for Company entities. For example, it includes a ban on telephoning while driving, even with a hands-free set, a ban on using motorized two-wheeled vehicles for business travel, mandatory training for drivers, and the definition of strict technical specifications for Company vehicles (in particular, light vehicles must pass NCAP 5* tests). Additional requirements are defined depending on the level of road traffic risks in the country in question and the nature of the activity.

In the field of **maritime and inland waterways transportation**, the process and criteria for selecting ships and barges are defined by the team in charge of vetting. These criteria take into account not only the ship or barge but also the crew, ensuring that the crew has the qualifications and training required under the STCW (Standards of Training, Certification and Watchkeeping for Seafarers) convention. These same teams also verify the application of the safety management system defined for ships by the ISM (International Safety Management) Code of the IMO (International Maritime Organization) as well as industry recommendations such as OCIMF (Oil Companies International Marine Forum) and SIGTTO (Society of International Gas Tanker and Terminal Operators), including those which take into account the human and organizational factors especially for the prevention of accidents to people on board ships or barges. In addition, TotalEnergies' chartering contracts require that the crew belong to a recognized trade union affiliated to the ITF (International Transport Workers' Federation). The ITF represents the interests of transportation workers' unions in bodies that make decisions about jobs, conditions of employment or safety in the transportation sector, such as the ILO (International Labour Organization) or the IMO.

With regard to **air transportation**, a carrier selection process exists to limit the risks relating to travel by Company and contractors' employees, if their journey is organized by TotalEnergies. This process is based on data from recognized international organizations: ICAO (International Civil Aviation Organization), IOSA (IATA Operational Safety Audit), IOGP (International Association of Oil and Gas Producers), and civil aviation authorities' recommendations. Airlines that do not have a rating from an international body are assessed by an independent body commissioned by the Company.

3.6.3.5 Fundamental principles of purchasing

For procurement, requirements relating to respect by the Suppliers of human rights, health, safety and the environment are specified in an internal rule defining the procurement principles for goods and services, including the Fundamental Principles of Purchasing, which reflect the principles of the Code of Conduct with regard to Suppliers. The relationship between the Company and its Suppliers is based on adhesion to these Fundamental Principles of Purchasing.

The Fundamental Principles of Purchasing lay out the commitments that TotalEnergies expects from its suppliers in the following areas: respect for human rights at work, protection of health, safety and security, action in favor of climate, preservation of the environment, prevention of corruption, conflicts of interest and fraud, respect for competition law, as well as the promotion of economic and social development.

Subsidiaries ensure that the requirements of the Fundamental Principles of Purchasing are communicated to Suppliers and endeavor to include them in contracts or replace them with equivalent principles at the end of negotiation. These principles are also accessible to all suppliers in French and English on TotalEnergies' website.

3.6.3.6 Internal control framework

TotalEnergies consistently ensures that an internal control framework, based on the referential of the Committee of Sponsoring Organizations of the Treadway Commission (COSO) is in place.

TotalEnergies has a reference framework that is supplemented by a series of practical recommendations and return on experience. The structure of this reference framework reflects that of TotalEnergies' organization: a Company level framework, frameworks by business segment, and a specific framework for each significant operational entity.

3.6.4 Assessment procedures

TotalEnergies has defined procedures to assess its Subsidiaries and Suppliers, including in collaboration with independent bodies, which help identify and prevent risks of impacts on human rights, health, safety and the environment. **Staff training, particularly of managers**, is the **necessary** complement to assist the Subsidiaries in the implementation of the TotalEnergies Action Principles (refer to point 3.6.5).

3.6.4.1 Procedures for assessing subsidiaries

HSE ASSESSMENTS

Assessment of the implementation of the HSE framework involves self-assessment by the Subsidiary and HSE audits by experts from TotalEnergies' HSE division.

Subsidiaries must undertake a **self-assessment** at least every two years.

The Audit and return on experience unit of the HSE division conducts an **HSE audit** at least every five years, according to an audit protocol. These audits deal with a set of activities and facilities governed by a single HSE management system. They address notably: management involvement, compliance with applicable rules, risk management, individual involvement at every level, relationships with suppliers present on the Subsidiary's site, skills, preparations for emergency situations, return on experience, self-assessment by the Subsidiary and the continual improvement process. The Company's HSE audit protocol is based on the One MAESTRO framework and includes the requirements of the international standards ISO 14001:2015 (environmental management) and ISO 45001:2018 (occupational health and safety management). The audit protocol is applied in full during self-assessments and according to a risk-based approach during audits. The goal is to identify potential gaps in the implementation of the rules by the Subsidiaries and to enable them to define and implement improvement actions. The progress of improvement actions is reported to management at the appropriate level in the management chain. The status of actions taken following audit observations beyond a defined severity level is reported to the business segment and HSE divisions every semester.

Other targeted evaluation systems are applied, such as the annual Industrial Hygiene survey which is sent to the Company's Subsidiaries in order to evaluate the rate of implementation of risk analyses in the workplace, to verify that potential exposures have been identified, and that action plans are in place.

The HSE division defines the rule and reporting guide and notably ensures the implementation of the standards for the consolidation of data, provided by the Subsidiaries, related to the Company's greenhouse gas (GHG) emissions.

ASSESSMENTS REGARDING HUMAN RIGHTS

The Company appoints a service provider specialized in **ethics and human rights assessments** to check the proper application in the Subsidiaries of the principles included in the Code of Conduct. These assessments include criteria relating to human rights. As part of the process, a panel of employees and external stakeholders of the Subsidiary is questioned in order to understand how its Activities are perceived locally. The content of the assessment is adapted to each Subsidiary and may address issues such as the involvement of Subsidiary management, employee awareness of the Code of Conduct, employee working conditions, supplier selection procedures, security measures taken or proactive collaboration with local stakeholders. Following the assessment, the Subsidiary defines and implements an action plan, and a monitoring procedure is put in place.

At project level, impact assessments are conducted to analyze the societal stakes and context and may be completed where appropriate by specific **human rights impact assessments** of the Company's Activities in sensitive situations (mainly based on criteria linked to the risks to human rights in each particular country) with independent organizations specialized in human rights, or in the prevention and management of conflicts between corporations and local communities. These assessments take account of the salient issues identified by the Company (refer to point 3.6.2.2 in this chapter).

Security, which is identified as a potential salient risk in the map of the risks of impacts on human rights, is subject to **risk assessment processes** at an entity and project level. The Security division is notably tasked with ensuring the implementation of TotalEnergies' commitments to enforce the Voluntary Principles on Security and Human Rights (VPSHR), a multi-stakeholder initiative that TotalEnergies joined in 2012, involving governments, companies and associations, that addresses relations with government security forces or private security companies. As part of this process, the Subsidiary undertakes an assessment of risks in relation to both security and human rights. In addition, a VPSHR self-diagnostic tool has been developed to enable Subsidiaries to assess their own implementation of the VPSHR and to identify areas of improvement. This tool measures the Subsidiary's commitment to VPSHR, personnel training and relations with government security forces and private security companies.

Finally, an **annual self-assessment questionnaire** enables the Subsidiaries in the One MAESTRO scope to evaluate the degree of deployment of the **societal initiative** on the ground. Actions involving dialogue, impact management and the contribution to socioeconomic and cultural development are recorded and analyzed.

3.6.4.2 Procedures for assessing Suppliers

During the pre-contractual phase, the **qualification procedure for Suppliers** of goods and services, concerning six criteria (administrative, anti-corruption, technical, HSE, financial, and sustainability) allows the evaluation of Suppliers as for the respect of human rights at work, safety, health and the environment. This process has been harmonized at Company level[1]. A risk analysis is carried out for each Supplier, followed where deemed necessary by a detailed assessment. The detailed assessment includes questionnaires on each of the aforementioned issues and, if needed, results in an action plan, a technical inspection of the site by employees or an audit of working conditions carried out by a consultant.

For the selection of Suppliers, TotalEnergies also integrates sustainable development criteria, including respect for human rights at work, safety, health and the environment in the **evaluation of offers**.

During the contractual relationship, TotalEnergies has put in place a **Supplier assessment** procedure, by independent third parties, to identify and prevent the risks of serious violations of human rights and fundamental freedoms and people's health and safety and the environment. Within the framework of this system, Suppliers for whom points of attention have been identified are subject to documentary and/or on-site audits to verify compliance with the Fundamental Principles of Purchasing and to assess their performance in terms of sustainable development. An audit plan is established each year and targets priority Suppliers, including Suppliers selected based on the risks they present in terms of human rights and/or the environment with regards to the sector of activity and the country in which they operate.

At the Subsidiary level, the qualification process may be complemented by **specific verifications of compliance with the VPSHR** by a Supplier. When private security companies are used to protect a Subsidiary, preliminary checks are made. They include a review of the recruitment process, technical and professional training (notably on the local context, the use of force and the respect for the rights of individuals), working conditions and the company's reputation. In addition, the proposed Supplier's employees are screened for previous conviction or implication in human rights violations.

Where deemed necessary in certain contexts such as for some raw materials or vetting, dedicated teams may be set up to conduct the qualification process.

The unit put in place in the Company for the selection of **Suppliers of raw materials for biofuels** seeks to ensure that such raw materials are certified sustainable in accordance with the criteria required by the European Union (ISCC EU and ISCC PLUS certifications). These types of certifications include a review of carbon footprint, the preservation of forests, good use of land and respect for human rights. In addition to this mandatory certification, and as recalled above (refer to point 3.6.3.5), the entities concerned endeavor to include the Fundamental Principles of Purchasing in these contracts. In accordance with its commitment, TotalEnergies has ceased its palm oil supplies.

(1) With the exception of certain entities that retain the management of their supplier relations such as Hutchinson, Saft Groupe, or TOTSA TotalEnergies Trading SA.

The **Vetting department of Trading & Shipping** defines and applies the selection criteria for the tankers and barges used to transport the Company's liquid petroleum or chemical and gas products. This review aims notably at ascertaining the proposed Supplier's technical qualities relative to internationally recognized industry practices, the crews' experience, and the quality of the shipowners' technical management. A green light from the Vetting department, granted strictly on the basis of technical data and independently of business considerations, is required for all ships and barges chartered by a Subsidiary, third parties transporting cargo belonging to TotalEnergies, or ships and barges that stop over at a terminal operated by a Subsidiary. Audits of shipowners also allows the Company to assess the quality of the technical management systems implemented by operators, crew selection and training, as well as the support provided to vessels.

TotalEnergies is actively involved in the Ship Inspection Report (SIRE), which was set up by the Oil Companies International Marine Forum (OCIMF) to allow the sharing of inspection reports amongst international oil and gas companies, thus contributing to the continuous improvement of safety in oil, gas and chemical shipping.

Last, since 2012, a large-scale inspection program of transportation contractors has also been rolled out by Marketing & Services, the segment with the most transportation within the Company, with the delivery of products to service stations and consumers. This program has been extended to the product transportation activities of the Polymers division of the Refining-Chemicals segment, to the liquid sulfur transportation activities of the Integrated LNG segment, and is being progressively extended to the Exploration & Production segment. It calls on independent transportation experts who inspect the practices and processes adopted by transportation contractors with regard to the recruitment and training of drivers, vehicle inspections and maintenance, route management, and the HSE management system. After inspection, an action plan is adopted. If there is a serious shortcoming or repeated poor results, the freight company may be excluded from the list of approved transportation contractors.

3.6.5 Actions to mitigate risks and prevent severe impacts

Specific actions are taken to mitigate risks and prevent severe impacts, drawing mainly on the Action Principles and assessments described above.

They are also based on return on experience from HSE incidents and include training of TotalEnergies employees, programs to raise the awareness of Suppliers, as well as measures to manage emergency and crisis situations.

With respect to climate, which is a global risk for the planet resulting from all human activities, the Company has structured its approach in order to integrate climate challenges into its strategy and has defined specific objectives within different timeframes, in order to control and reduce the GHG emissions resulting from its Activities (Scope 1+2). These are reported in point 3.6.8.4.

3.6.5.1 Return on experience

The Company implements a process for the analysis of accidents, irrespective of their nature, with the method used and the level of detail involved depending on the actual or potential level of severity of the event.

A return on experience may include an analysis of the incident including of its severity and result in communication to the relevant stakeholders or a wider population within the Company. The purpose of sharing return on experience is to ensure that Subsidiaries are informed and share lessons learned from the incident.

By way of example, a near-miss with a high severity potential undergoes an analysis similar to that of a severe accident. This analysis is considered an essential factor of progress. Depending on its relevance to the other TotalEnergies entities, it may trigger a safety alert and the communication of a formal return on experience. More generally, the corporate culture encourages formal and informal return on experience on all matters relevant to the Vigilance Plan.

3.6.5.2 Awareness-raising and training of TotalEnergies' employees

The Company has a variety of communication and information channels in place, enabling all employees of TotalEnergies SE and its Subsidiaries to have access to the Action Principles defined by the Company in relation to human rights, health, safety and the environment.

Each employee receives a copy of the **Code of Conduct** to raise awareness of the Company's values, including safety and respect for others, which includes respect for human rights. The Code of Conduct is also available to them on the TotalEnergies intranet website in more than fifteen languages. Every new employee is required to read the Code of Conduct (and must certify to having done so). The TotalEnergies induction day includes an initiation to ethics and human rights and an online training on the challenges of business ethics is also available.

HSE training courses, incorporating on-line educational programs as well as technical training tailored to the various Activities, are offered to all Company employees. Programs dedicated to health, safety and the environment are deployed. They may be general or specific to a type of activity or subject area. By way of illustration, the general training depends on the participant's level of responsibility and experience in the Company: *Safety Leadership for Executives*, *HSE training for managers*, and training for new recruits.

These training courses include since 2020 training actions related to climate challenges dedicated to all Company employees. A specific module is dedicated to Company senior executives and managers.

In the Subsidiaries as well as head office, teams regularly engage in crisis management exercises, the scenarios of which are based on potential incidents identified in the risk analysis. Dedicated training (initial and refresher training) also contributes to preparing employees for potential crises including in relation to the various roles played by members of the crisis team (for example crisis team leader, liaison with operations, experts and communicators etc.).

Training programs dedicated to human rights have been set up for senior executives, site directors and employees most exposed to these issues. Awareness-raising sessions are organized regularly for employees, for example as part of ethical assessments of Subsidiaries.

The Human Rights department is developing a training plan for Company employees to encourage understanding of issues relating to human rights and thereby better manage the associated risks. This training plan is rolled out as a priority among employees who are most exposed to risks linked to human rights.

Concerning procurements, specific training modules explaining TotalEnergies' ethical commitments and the Fundamental Principles of Purchasing have also been developed for the Company's procurement teams. A training on responsible procurement is also mandatory for the buyers of TotalEnergies Global Procurement.

The Security division developed an online **training including a module on the VPSHR** for security managers in the Subsidiaries and provides training materials for the Company's personnel. Local visits are also organized to deliver in-person training in the training in the Subsidiaries.

In the field of **societal,** an awareness module is available to all employees through the internal training platform. Targeted trainings are also provided.

Internal channels of communication, such as websites accessible to most employees, are also used to **raise employee awareness** of matters pertaining to human rights. Dedicated web pages on ethics and the respect for human rights present the priority areas identified by TotalEnergies. These web pages have several goals: to explain the Action Principles, present how TotalEnergies implements these principles and to help employees adopt the ethical conduct expected of them in their everyday work.

Events such as the annual ***Business Ethics Day*** are used to raise awareness among employees of TotalEnergies SE and its Subsidiaries.

A **Guide to Human Rights** is also made available to employees and stakeholders. Its goal is to raise TotalEnergies employees' awareness on issues relating to human rights in its industry (at work, with local communities and in relation to security) and it provides guidance as to the appropriate behavior to adopt in their activities and relationships with stakeholders. It includes case studies. This guide serves as a reminder of the Company's commitments in relation to human rights. It offers proposed answers to common questions and concerns about human rights, notably child labor, forced labor, discriminatory practices and collective negotiations.

The **Practical guide to dealing with religious questions**, published in 2017, aims to provide practical solutions to issues raised by Company employees and managers worldwide. It draws on the experiences of the business segments in various countries and encourages dialogue, respect and listening as a way to find solutions suited to the local context. Many internal and external experts contributed to this document, including representatives of various religious communities. This guide has been translated into ten languages. It is available on the website dedicated to human rights and is also distributed at training courses.

The HSE Division organizes the Company's **World Safety Day** and **Sustainab'ALL Day** in order to bring teams on board and raise their awareness of ways of implementing the Action Principles. Various **HSE guides** exist within the One MAESTRO reference framework to share HSE best practices with the Company's Subsidiaries. In addition, periodic HSE communications are published throughout the year (seminars, webinars, symposia). Safety culture is reinforced on a day-to-day basis by the Company's employees through "safety moments" at the beginning of meetings or before hazardous operations, consisting of a short discussion to reiterate the key safety messages and align participants with mutual commitments. A similar approach is implemented to reinforce the culture of sustainable development through various initiatives including sustainability moments (Sustainab'ALL moments).

3.6.5.3 Awareness-raising and training of Suppliers

The **Fundamental principles of purchasing** constitute a contractual commitment by Suppliers and are also a means to raise awareness among Suppliers, notably on HSE and human rights issues. A brochure explaining these principles in detail is also handed out to Suppliers at annual meetings or events such as *Suppliers Day*. The Fundamental Principles of Purchasing are also available on the TotalEnergies website. A **practical guide on respect of human rights at work**, intended for Suppliers, is shared with them and is also available on TotalEnergies' website.

Training actions are also carried out for Suppliers, for example **training on responsible security and the VPSHR** delivered to employees of security service providers. Contracts with these service providers mention compliance with the VPSHR and the need to train their personnel about the VPSHR. Additionally, the Security division may deliver this training directly to security service providers.

Suppliers working on Subsidiary sites are made aware of the risks to health, safety and the environment of the activities of the site. They receive support in the management of risks related to their activities, those of the site and any potential interactions, such as in the work permit process or during site safety inspections.

3.6.5.4 Responses to emergency or crisis situations

Crisis management is organized to ensure sufficient preparedness and an efficient response to a crisis or emergency event.

In order to manage any major industrial accident efficiently, TotalEnergies has implemented a global crisis management system, based notably on a 24/7 on-call system, a set of unified procedures deployed in the Subsidiaries and on a dedicated crisis management center that makes it possible to manage two simultaneous crises from head office. The framework requires Subsidiaries to have in place plans and procedures for interventions in the event of leaks, fires or explosions and to test them at regular intervals.

3.6.6 Whistle-blowing mechanisms

TotalEnergies has several whistle-blowing mechanisms that are open to **employees, Suppliers and third parties**.

To support employees on a day-to-day basis, the Company encourages a climate of dialogue and trust enabling individuals to express their opinions and concerns. Employees can turn to their line manager, an HR or other manager, their Compliance Officer or their Ethics Officer.

The Company's employees, Suppliers, as well as any other stakeholder can contact the **Ethics Committee** to ask questions or report any incident involving a risk of non-compliance with the Code of Conduct by using a generic email address (ethics@totalenergies.com).

This system for collecting and processing of ethical complaints was set up in 2008, in cooperation with TotalEnergies trade unions organizations on a European level, then detailed in a dedicated internal rule. This complaint mechanism provides that the report transmitted to the Ethics Committee may in particular concern: "a serious abuse or a risk of serious abuse of human rights and fundamental freedoms" and "a serious damage or a risk of serious damage to the health or safety of persons, or to the environment".

The procedure for collecting and processing of ethical complaints, available on TotalEnergies' website since December 2020, describes this mechanism which provides measures to protect whistleblowers including the non-disclosure of their identity, the confidentiality of the procedure for collecting, processing, and closing of the complaints, the prohibition of any retaliation measures against whistleblowers, subject to sanctions, and the respect for the laws and regulations applicable to the protection of personal data. The Ethics Committee is a central structure, in which all business segments of TotalEnergies are represented. All its members are TotalEnergies employees with a good knowledge of its Activities and have demonstrated the independence and impartiality necessary for the performance of their duties. The Ethics Committee assures compliance with the Code of Conduct and ensures its proper implementation. It is assisted in its work by the relevant departments, as well as by a network of local Ethics Officers. The Chairperson of the Ethics Committee, who reports to the Chairman and Chief Executive Officer of TotalEnergies SE, submits an annual Ethics report to the Governance and Ethics Committee of the Board of Directors. The members of the Ethics Committee are subject to a confidentiality obligation. The Committee ensures the confidentiality of the complaints, which can only be lifted with the agreement of the complainant.

The system is supplemented by specific whistle-blowing mechanisms implemented at certain Subsidiaries.

Based on the United Nations Guiding Principles on Business & Human Rights, the One MAESTRO framework requires TotalEnergies' operational entities to deploy procedures to **manage stakeholder grievances** related to the Subsidiary's activities (excluding business claims). This provides residents and local communities with a preferential channel to voice their concerns and grievances. Handling these grievances locally makes it possible to offer a response to anyone who feels that they have been negatively affected by the Activities and to improve internal processes in order to reduce impacts that may be caused by the Activities. Managing grievances consists of: informing the stakeholders of this free process; receiving and registering grievances; acknowledging receipt of the grievances and informing the stakeholders about the follow-up actions; if necessary, proposing a means of settling the grievances in collaboration with the stakeholders and monitoring the handling of the grievance. This process is regularly analyzed to see where improvements can be made. An internal guide was published in 2020, detailing the methodology for designing and implementing the grievance management process. This guide contains practical tools inspired by international recommendations (IPIECA – International Petroleum Industry Environmental Conservation Association, ICMM – International Council on Mining and Metals, IFC – International Finance Corporation).

These grievances mechanisms can also be used to implement the **VPSHR**. In addition, **in the event of an incident, a reporting process** requires the Security division to be informed and an internal analysis to be performed to establish the facts, resulting in a final report. This allows the Subsidiary to re-assess its VPSHR process and to take measures to reduce the risk of incidents.

Suppliers can also contact the **internal supplier mediator** using a generic email address (mediation.fournisseurs@totalenergies.com). Available to Suppliers and procurement teams, the mediator's role is to restore dialogue and help find solutions.

3.6.7 Monitoring procedures

Multi-disciplinary committees review the implementation of measures within their purview. Indicators are used to measure the effectiveness of the measures, progress made and to identify ways of improvement.

COMMITTEES

The **Ethics Committee** is particularly involved in monitoring compliance with the Code of Conduct and can be called upon for advice on its implementation.

The **Human Rights Steering Committee** is made up of representatives from different divisions (including security, procurement and societal) and business segments. It is chaired by the head of TotalEnergies' Sustainability & Climate division. It meets several times a year and coordinate the actions on human rights taken by the business segments and the Subsidiaries, as part of the implementation of the human rights road map submitted to the Executive Committee. All Country Chairs contribute to this monitoring process, notably by acting as the local point of contact for the Security division with respect to compliance with the VPSHR.

Representatives of the Management Committee of TotalEnergies Global Procurement and of the Sustainability & Climate, HSE and Legal divisions as well as of the Ethics Committee meet regularly to monitor the effective implementation of the Responsible Procurement program.

The **HSE division** has set up cross-functional teams of experts, including in the fields of safety, the environment and crisis management, and monitors the ongoing coordination of HSE issues.

REPORTING

The system of internal reporting and indicators for monitoring implementation of the actions undertaken in TotalEnergies in these areas is based on:

- for social indicators (including health in particular), a guide entitled the Corporate Social Reporting Protocol and Methodology;
- for safety indicators, a Company rule regarding HSE event and statistical reporting; a return on experience analysis process identifies, notably, events for which a formalized analysis report is required in order to draw lessons in terms of design and operation; and
- for environmental indicators, a Company reporting procedure, together with activity-specific instructions.

Consolidated objectives are defined for each key indicator and reviewed annually. The business segments apply these indicators as appropriate to their area of responsibility, analyze the results and set out a plan of action.

3.6.8 Implementation report[1]

3.6.8.1 Human rights

This section is primarily intended to present implementation of measures with respect to Subsidiaries, while the implementation of measures specific to Suppliers is described in point 3.6.8.5.

SUBSIDIARY ASSESSMENTS

TotalEnergies conducts assessments and impact assessments of various kinds:

- ethics and human rights assessments of Subsidiaries, in particular regarding the working conditions of TotalEnergies employees;
- impact assessments to analyze the challenges and the societal context of industrial projects, supplemented, if necessary, by specific impact assessments on human rights;
- subsidiary self-assessments.

Ethics and human rights assessments

In addition to the audits and assistance missions carried out by the Audit and Internal Control Division, which cover certain human rights-related issues, the ethics and human rights-related practices of TotalEnergies' entities are regularly assessed by independent third parties and qualified experts.

Assessed entities are identified according to several criteria, including the level of risk of human rights violation in each country, the number of alerts received the previous year and the date of the Subsidiary's last assessment. These assessments help identify Subsidiaries' best practices, share them within the Company and identify areas for improvement. Knowledge and appropriation of the Code of Conduct are tested and reinforced by ethics and human rights awareness-raising sessions. Employees are encouraged to voice their ethical concerns in a confidential manner and report behaviors potentially contrary to the Code of Conduct.

In 2024, seven ethics and human rights assessments were conducted. They concerned seven Subsidiaries (in United-States, Angola, Equatorial Guinea, Nigeria, Philippines, Brazil and Serbia). These assessments confirmed that the Code of Conduct has been duly incorporated by the Subsidiaries.

The follow-up of the action plans put in place further to the 2024 assessments in the Vietnamese, Moroccan, South African and Republic of the Congo Subsidiaries was also carried out in 2024.

Impact assessments of industrial projects

When the decision is taken to develop an industrial project, a detailed **baseline study** is conducted to identify in advance the stakeholders potentially affected, describe the local context and assess the main socio-economic and cultural stakes (risks and opportunities) in the affected area. A **societal impact assessment** is then conducted to assess and analyze the opportunities and the direct, indirect or cumulative risks of the project in the short, medium and long term. In 2024, 156 of these studies were initiated or carried out.

In addition to these impact assessments, **specific human rights impact assessments** may also be conducted in high-risk areas or conflict zones with the support of independent experts.

Example: Tilenga and EACOP projects, Uganda and Tanzania

In February 2022 the Final Investment Decision for the Lake Albert Resources Development Project was taken, including both the Tilenga upstream oil project (operated by TotalEnergies EP Uganda - "TEPU") and the construction of the East African Crude Oil Pipeline (EACOP) in Uganda and Tanzania (in which TotalEnergies Holdings EACOP is a major shareholder).

All partners committed to implementing these projects taking into consideration the environmental and biodiversity stakes, as well as the rights of the concerned communities, in accordance with the stringent performance standards of the International Finance Corporation (IFC).

Transparency

In accordance with its guiding principle of transparency in engaging with civil society, since March 2021 TotalEnergies publishes relevant studies, independent third-party reviews and social and environmental action plans related to both the Tilenga and EACOP projects. Such independent reviews help ensure that the projects are carried out in compliance with good international industry practices. Alongside the ongoing dialogue with the local communities, these reviews also allow potential improvements to be identified.

In 2024, TEPU and EACOP demonstrated their commitment to transparency by providing clear, accessible and up-to-date information to their stakeholders on various aspects of their projects. The Tilenga project organized 107 field visits in 2024 totaling 164 visitors, for NGOs and other stakeholders to monitor and review its social and environmental performance. In 2024, TEPU also answered to more than 18 petitions in various areas covering allegations on human rights and environmental aspects. EACOP has made available on its website in 2024, regular construction updates including disclosing its Human Rights Due Diligence Reports, Diversity and Social Inclusion Policy, Free Prior and Informed Consent agreements made with indigenous communities, local content updates. Quarterly engagement with civil society organizations in both countries also provides detailed updates on construction, social performance, land acquisition, environment, and biodiversity programs.

In 2024, TEPU published its Social Report providing the social actions implemented by the Tilenga project, particularly in relation to land acquisition, resettlement, and stakeholder engagement.

(1) In accordance with Article L.225-102-1 of the French Commercial Code, the report on the effective implementation of the Vigilance Plan is presented below. Since the identification of risks and the prevention of severe impacts on human rights, human health and safety and the environment overlap partially with certain risks covered in the Sustainability reporting under the CSRD (Chapter 5), TotalEnergies has chosen to report below on the implementation of its Vigilance Plan by incorporating certain aspects of the Sustainability reporting under the CSRD, although the latter includes risks of varying degrees.

Human Rights Due Diligence and policies

For Tilenga as well as for EACOP, human rights impact assessments (HRIA) have been carried out as part of the social and environmental impact assessments. In addition, stand-alone human rights impact assessments were published in September 2018 for EACOP and in July 2022 for Tilenga. EACOP updated the HRIA in 2022 in a section of the Human Rights Due Diligence report issued in December 2022, available on EACOP's website. This HRIA report was presented to NGOs in Uganda and in Tanzania in dedicated meetings in 2023.

Dedicated human rights teams in both projects have put in place action plans on the basis of these impact assessments and monitor their implementation. Human Rights Steering Committees have been set up for both projects to provide governance and monitoring. Processes are in place for investigation and fact-finding with respect to human rights allegations.

Both the Tilenga and EACOP projects published policies in 2022 setting out their commitment to human rights through all their activities.

In addition, EACOP published a Diversity & Social Inclusion policy in November 2023. This policy, based on the UN Global Compact Women's empowerment Principles, is available on the EACOP website in English, Swahili and 3 other local languages. An action plan has been also developed and its implementation by the relevant departments inside EACOP started in January 2024.

Stakeholder Engagement

Regular stakeholder engagement occurs with the full spectrum of project stakeholders including Ugandan and Tanzanian local, national and regional governmental authorities; Project-affected Communities (PACs) and Project Affected People (PAP)(1); traditional and religious authorities; local businesses and tourism operators; developers of associated facilities; civil society organizations (CSOs) and NGOs; academic and research organizations; and Intergovernmental organizations.

A variety of methods and tools are used: village meetings, small group meetings, focus group discussions, one to one meetings, site visits and tours, alternative medium such as community drives etc. Engagement is supported by disclosure materials adapted to the audience including a range of written and visual material, traditional media including community radio, telecommunications and websites. As an example, as part of the Tilenga Project, an innovative series of webinars, bulletins and roundtable discussions known as "Let's Talk!" provides a deep dive into topics of interest for civil society. In 2024 subjects covered by bulletins and roundtables included land acquisition process and Tilenga procurement process.

A field-based stakeholder engagement team including community relations supervisors (CRS), and community liaison officers (CLO) in Uganda, composed of both male and female officers, are present on the sites and are in dialogue with local communities and have developed strong relations with local government, civil society and community representatives. The field-based community relations supervisors in Tanzania and CLO in Uganda observe and guide construction contractor stakeholder engagement with PACs acting as a "bridge" between the project and communities and to ensuring stakeholder engagement for the project is consistent with EACOP principles of participation, respect for human rights, non-discrimination, empowerment, transparency and accountability.

In Uganda, TEPU has maintained for several years relations with the Civil Society Coalition on Oil and Gas (CSCO), a network of over 60 Ugandan NGOs whose objective is to work towards the sustainable governance of oil and gas resources to maximize benefits to the people of Uganda. In 2024, three field trips to the Tilenga project facilities were organized for members of CSCO and other national and grassroots NGOs.

EACOP also conducted quarterly meetings in 2024, in Uganda with CSCO and in Tanzania with NGOs and CSCO.

To further improve the engagements with CSOs and NGOs, the 2024 Tilenga NGO Coordination workplan has continued to focus on having direct engagements with the grassroots NGOs based in the project area. In 2024, 54 bilateral engagements were held with different grassroots NGOs.

TEPU and EACOP in Uganda and in Tanzania have continued in 2024 their road safety sensitization. This included 451 road safety awareness sessions in the communities, schools and with motorcycle riders in the 5 project districts by TEPU in Uganda and 2 different awareness campaigns by EACOP covering eight regions of Tanzania. Additionally, TEPU has continued roll-out of the *VIA Road Safety Programme* in Buliisa District launched in July 2023, aimed at raising road safety awareness among young people. The NGO Safe Way Right Way was contracted to enforce and promote the initiative on behalf of TEPU.

In 2024, EACOP has continued to engage and dialogue frequently with the four vulnerable ethnic groups self-identifying as "Indigenous Peoples" impacted by the project - the Akie, Taturu, Barabaig and Maasai.EACOP's approach with these groups included in particular:

- the implementation of the EACOP Plan for Vulnerable Ethnic Groups self-identifying as "Indigenous Peoples" signed in September 2022. This Plan sets out EACOP's commitments to reinforced engagement, impact mitigation measures adapted to the specific lifestyle of these communities, access to project benefits and capacity building of these communities;
- signing of the Free Prior and Informed Consent (FPIC) Agreements between EACOP and the Akie Community in July 2022, with the Taturu community in March 2023 and with the Barabaig community in January 2024;
- collaboration with 2 indigenous NGOs to reinforce engagement using more traditional methods and build the capacity of the four communities on different topics;
- support for a specific community social investment program for these groups through collaboration with district governments, in order to facilitate access to administrative services, including the issues of national identity cards and birth certificates.

(1) A PAP (Project Affected Person) corresponds to a group of individuals forming a household or an entity (institution, company) which has been identified, within the framework of the studies carried out for the program of acquisition of the land necessary for the execution of the project, as having at least one asset impacted by the implementation of the project. An asset can be a dwelling, a construction, a plot of bare or cultivated land, plants, trees, crops.

Land Acquisition

The land acquisition processes for both projects are carried out in compliance with the IFC Performance Standards and national regulatory framework.

The land acquisition program for both projects is well advanced.

In Tilenga, the compensation process for the first tranche of land acquisition, known as "Resettlement Action Plan 1 (RAP1)" concerning 622 PAPs was completed in 2021. Only 7 PAPs did not accept the compensation offered after valuation of their assets. Pursuant to a judgment of the Court of Masindi on April 30th, 2021 which ruled that the compensation amounts offered were fair, TEPU deposited the corresponding funds in a court account for the benefit of these seven PAPs.

The Deployment of the program for RAPs 2 to 5, concerning 4,954 PAPs is near conclusion. By the end of 2024, 99,96% PAPs had signed compensation agreements for impacted assets and 99,88% had already received compensation. All the PAPs who had not yet signed compensation agreements were subject to a Court Application which concerned 42 PAPs owning/claiming ownership rights in 32 land parcels. Several meetings were organized to reach an agreement. Faced with the impasse resulting from the PAPs refusals, the matter was taken to court by the Ugandan government represented by the Attorney General. At a hearing held on December 8, 2023 in the Ugandan town of Hoima (where part of the land affected by the Tilenga project is located), the High Court ruled in favor of the Ugandan government. It also decided to grant the owners concerned the right to file individual claims against the Ugandan government if they contest the value of the compensation awarded by the Chief Government Valuer. TEPU deposited the compensations in a court account as directed by the Court Order on December 22, 2023. Notices to vacate have since been issued to the individuals by the Government.

On the total number of PAPs, a minority of them require relocation to replacement houses as their primary residence is affected by land acquisition. For RAPs 2 to 5, 100% of replacement houses have been handed over by end of December 2024, as part of the progressive deployment of the program. Until the replacement houses are delivered, the affected PAPs could continue to live in their original house.

Improvements in implementation of the land acquisition process following RAP 1 were integrated into procedures for RAPs 2 to 5 including reinforced information to communities to ensure that PAPs understand that they may continue to cultivate their land until they have received their notice to vacate following compensation.

The major part of EACOP land acquisition program is close to completion. As end of December 2024, 99% of PAPs in Tanzania and 99,4% of PAPs in Uganda had received compensation. For the PAPs requiring relocation to replacement houses as their primary residence is affected by land acquisition, 100% of the replacement houses have been delivered.

To support PAPs whose farming may be disrupted by the land acquisition process, transitional food assistance – a mix of food baskets and cash transfers – has been initiated and will continue until livelihoods have been reestablished.

For concerned PAPs, livelihood restoration programs are implemented for at least 3 years after land acquisition or until livelihoods are fully restored. These programs include financial literacy, agricultural programs to improve crops and livestock, tree nurseries, beekeeping, financial management and business capacity, as well as vocational training to support jobseekers.

Respect for Human Rights by suppliers

Both the Tilenga and EACOP projects have established processes to ensure suppliers respect worker rights with regard to qualification, contracting, and verifications, inspections and audits of suppliers.

In TEPU, two training sessions focused on human rights were conducted in April and May 2024 for suppliers and vendors. Topics covered human rights at work and integration in business operations. A presentation was given to contractor senior management at the annual HSE Contractor Forum and sensitization sessions are regularly given to key suppliers. On EACOP side, human rights training sessions were also given to the suppliers and communication materials were developed for workers.

Human Rights in the workplace matters are considered during HSE audits and inspections. In addition to including some Human Rights aspects in HSE audits, targeted Human Rights audits are carried out for TEPU contractors and suppliers. These audits are known as "Sustainability Audits", focusing on sustainable development practices put in place by suppliers and contractors. In May and July 2024, 9 TEPU contractors and suppliers were audited by an independent third-party auditor. The results of the audits are shared with the concerned contractors, and where necessary, corrective action plans are shared with them for areas that require improvement.

In 2023 EACOP developed and started the implementation of the Industrial Relations (IR) Management System (IRMS) to ensure the project's labor management and working conditions for the contractor workforce are well respected. The IR team in Tanzania was recruited and onboarded in mid-2023 and all construction contractors were trained on the IRMS requirements. The IR team in Uganda was recruited in late 2023 and monitoring of the IR performance started in early 2024. The site-based Industrial Relations Supervisors (IRS, Tanzania) and Industrial Relations Officers (IRO, Uganda) are responsible for developing and implementing key systems and processes, such as site workers forums and committees, monthly reporting to the project, workers grievance mechanisms, and IR training, inductions, and awareness raising at the worksite to communicate on workers' rights.

Further, since 2023 an additional tool called "Worker's Voice Tool" was rolled out on a pilot basis to selected contractors to monitor their respect for workers' rights for Tilenga and EACOP projects. This initiative has been maintained and it allows the Project to collect feedback on working conditions on site directly from contractors' workers through surveys sent to their mobile phones or via paper surveys. The surveys have been translated into six local languages used in the projects area to improve participation by diverse workers in both projects and feedback is provided to the contractors to develop corrective actions where applicable.

VPSHR and Human Rights Defenders

The Company adheres to the Voluntary Principles on Security and Human Rights (VPSHR) and ensures that the deployment of security personnel is accompanied by VPSHR training. A constant dialogue occurs through regular meetings and Human Rights awareness sessions. In 2024, TEPU conducted VPHSR trainings and refresher trainings for 1,708 Government and Private Security personnel.

For EACOP, the Host Government Agreements with Tanzania and Uganda included VPSHR. Risk Assessments have been undertaken in Tanzania and Uganda, and action plans for ongoing implementation of the VPSHR have been developed. A Security Committee has been formed for the project that comprises the EACOP Security Manager and representatives of public security forces from Tanzania and Uganda. This is a key forum for EACOP to promote the VPSHR. In 2024, 280 security guards have been trained on VPSHR.

TEPU are committed to respecting the rights of Human Rights Defenders (HRDs) in relation to the projects. They regularly engage with the government, petroleum authorities, police, and civil society to discuss the importance of freedom of expression, peaceful protest, and an open civic space. They have published their positions and policies on HRDs on their websites, and they have provided various channels for stakeholders to make complaints or raise alerts, such as an office in the project area, a toll-free number, Community Liaison Officers (CLOs), an email service and contact through traditional leaders and district authorities. TEPU and EACOP strongly oppose any threats or attacks against HRDs and seek to exercise their influence with relevant persons or authorities where, in the framework of their activities, it is alerted of allegations of threats, intimidation, harassment or violence against stakeholders.

Community grievance mechanisms

Community grievance mechanisms in line with the United Nations guiding principles on business and human rights criteria have been put in place to receive and respond to community grievances including those of PAPs.

For Tilenga, there are a variety of access points to present grievances which include a local office manned daily in Uganda, a toll-free number, an email address, Community Liaison Officers and local authorities who relay such information to the project teams.

Grievances are recorded in a register and an online data management tool within 24 hours. Where possible, they are resolved within 24 hours, but for more complex cases, the process has four levels of escalation. If the proposed solution is accepted, the case is closed. A document confirming the proposed solution and its acceptance is issued (close out form). If the proposed solution is not accepted, discussions with the person who filed the complaint will continue, if necessary, with the support of external stakeholders and independent third parties. If no agreement is reached, the person remains free to take the matter to the appropriate authorities.

In 2024, efforts has continued to communicate broadly on the grievance mechanism. For example, for Tilenga, all contractors and CLOs were trained on the mechanism and its implementation, community village sensitizations were conducted reaching 798 people in 58 communities, and materials such as grievance books and brochures were printed and disseminated to communities.

During year 2024, TEPU registered a total of 44 grievances. 18 out of the 44 registered grievances (40.9%) were resolved and closed. By the end of 2024, 26 grievances remained opened.

EACOP's Community Grievance Management Procedure, launched in both countries in 2017, was updated in 2022 in particular to integrate local dispute resolution processes. Internal Grievance Management Committees have been established for the governance of Grievance Management in each country. Communication on Grievance Procedures has been reinforced through stakeholders' meetings, distribution of leaflets in communities as well as information and a video available on EACOP website. In 2024, communication was supplemented by radio campaigns. A subsequent satisfaction survey was conducted to measure the effectiveness of the Grievance Management process.

During year 2024, EACOP registered a total of 121 grievances (in Uganda and Tanzania). By the end of 2024, 32 grievances (registered in 2024 or earlier) remained open.

Example: Mozambique LNG Project

TotalEnergies EP Mozambique Area 1 (TEPMA1) has held since 2019 a participation of 26.5%[1] of Mozambique LNG Area 1 Project. It is the first onshore development of a liquefied natural gas (LNG) plant in the country located on the Afungi Peninsula, District of Palma, in the Cabo Delgado province.

The Project faces significant social challenges with the displacement of households and cultivating lands within the area of construction of the LNG facilities (7,000 ha), which was underway when Project activities were suspended in April 2021, as well as impact on fishers' economy due to the establishment of a Marine Exclusion Zone.

Local security situation

The Cabo Delgado province has experienced the surge of a "terrorist" movement leading to attacks against villages and large towns and causing the displacement of hundreds of thousands of people.

After taking the town of Mocimboa da Praia, in the summer of 2020, located about 80 kilometers from the Project site, the terrorist movement conducted attacks in the northeast Cabo Delgado Province by attacking populations. This situation reached a peak with the attack of the town of Palma located 6 km away from the Afungi site on March 24th, 2021. The intensity and duration of the attacks prompted the evacuation of personnel from the site. This situation led Mozambique LNG to declare force majeure on April 26, 2021. Since July 2021, the Mozambican government took military assistance from external partners (Southern African Development Community and Rwandese forces) to retake security control of Cabo Delgado.

(1) TEPMA1, operator, holds a share of 26.5% in the Mozambique LNG Area 1 Project, and partners with ENH Rovuma Area Um. S.A. (15%), Mitsui E&P Mozambique Area1 Ltd. (20%), ONGC Videsh Ltd. (10%), Beas Rovuma Energy Mozambique Limited (10%), BPRL Ventures Mozambique B.V. (10%), and PTTEP Mozambique Area 1 Limited (8.5%).

In 2024, the activities of insurgent groups continued, with less intensity than in previous years. During the first half of 2024, the insurgents (under the banner of the Islamic State in Mozambique) temporarily gained territories. In the second half of 2024, Rwandan forces strengthened their presence and response capabilities to the insurgency, and the insurgents' operational area was gradually reduced.

In September and November 2024, press articles were published regarding alleged severe abuses that would have been carried out by Mozambican soldiers close to Afungi, on the Mozambique LNG site, in northern Mozambique from June to November 2021. TotalEnergies stated in a press release that it had never received any information regarding the alleged events described. In a published letter, Mozambique LNG also stated that it had no knowledge of those alleged events and that before the publication of these allegations, it had never received any information indicating that such events took place, despite maintaining a close communication with the local communities. Based on a review of documents and information available at the time of the alleged facts, the results of which were published on its website, Mozambique LNG has not identified any information nor evidence that would corroborate the allegations of severe abuses.

In March 2025, the Attorney General of Mozambique has publicly confirmed the opening of a criminal investigation into these allegations of abuses.

In addition, TotalEnergies has also requested the intervention of the Mozambican Commission on Human rights (CNDH) to conduct its own investigation into these allegations. The CNDH confirmed on 25 March 2025 that it will carry out its own assessment of all relevant information to ensure that the facts are duly ascertained and that the rights of the parties involved are fully respected. In particular, the CNDH has stated that it will follow the investigation launched by the Mozambican judicial authorities to ensure that it is conducted in a transparent, fair and impartial manner.

Human rights due diligence and Human rights policy

Respect for human rights is a commitment and continuous focal area for Mozambique LNG throughout the Project.

To this end, a Human Rights Impact Assessment (HRIA) had been conducted in 2015 for the Project which was then operated by Anadarko.

To update that assessment and complete it with assessments on the Voluntary Principles on Security and Human Rights (VPSHR) and social performance, a Human Rights Due Diligence (HRDD) was conducted by LKL International Consulting and published in 2020. The due diligence resulted in an action plan addressing the following salient issues: Security (Community security and Interaction with public security providers), Resettlement, Men/Women Equality, Workers' rights (Freedom of association), Information and consultation, Community health and safety, Project-induced in-migration (PIIM), Access to remedy.

Mozambique LNG formalized the learnings from these assessments and its approach regarding human rights by adopting its Human Rights Policy in March 2021.

Mozambique LNG updated the HRDD in 2023 and again in 2024, incorporating stakeholder feedback.

Given the rapidly changing situation in the province, TotalEnergies on behalf of the partners of the Mozambique LNG, entrusted Jean-Christophe Rufin, a recognized expert in the field of humanitarian action and human rights, with an independent mission to assess the humanitarian situation in the province of Cabo Delgado. Published in May 2023, his report highlighted the execution quality of the actions undertaken by Mozambique LNG and their positive impact on the living conditions of local population and made recommendations for improvements to Mozambique LNG's actions on the ground.

Mozambique LNG is continuing to pursue transparency, engagement, and communications with internal and external stakeholders about the Project's salient human rights issues.

VPSHR implementation

The Security Memorandum of Understanding (Security MoU) signed in March 2019 (amended in July 2020) between Mozambique Security Providers (Ministry of National Defense and Ministry of the Interior) and oil and gas companies (Area 1 and Area 4) remained in place until October 2023. In 2023, this Security MoU has been replaced by a new framework with the Authorities of Mozambique. The new framework, which remained in place in 2024, has wider scope, aiming at the restoration and stabilization of public services in the Cabo Delgado province and promoting a suitable environment for proper performance of the Project. It also takes onboard the observations on the Security MoU made by Mr. Jean-Christophe Rufin in his May 2023 report and maintains the undertakings by the protection forces in terms of respect of human rights and VPSHR training.

Police and army members together (formerly designated as the Joint Task Force or JTF, now as Protection Forces or PF) deployed to ensure security of Project operations and workforce and the communities residing in the broader Project area of operations, received VPSHR training to ensure adherence to key human rights standards.

In 2024, 56 training sessions on the VPSHR were delivered to both personnel working for private security companies providing services to the project and members of the government security forces.

Mozambique LNG participated in the United Nations Forum on Business and Human Rights in 2024. This participation allowed for the collection of information on the integration of human rights into business activities.

Finally, Mozambique LNG remains involved in the promotion of VPSHR at national level. Mozambique LNG contributed to the initiative that led to the establishment of an In-Country Working Group on the VPSHR and a Cabo Delgado Technical Working Group launched in April 2022. In 2024, the Project staff attended meetings of the Working Group on the VPSHR in Maputo and Pemba, as well as other meetings with human rights groups and United Nations agencies striving to promote human rights.

Local grievance mechanism and incident resolution

Mozambique LNG has implemented a community grievance mechanism, managed remotely, supported notably by a 24h-toll-free telephone line to address any concerns or incidents.

When PF-related incidents are reported, they are addressed by the Project staff, and referred to the PF command for additional investigation. Mozambique LNG takes measures to preserve the anonymity of complainants.

Ministerial authorities are regularly engaged and discuss about the implementation of the VPSHR with Mozambique LNG.

In addition, the Project monitors VPSHR incidents on a case-by-case basis by alerting and communicating directly with the authorities and taking the appropriate measures.

Resettlement

The construction and operation of the Mozambique LNG Project and the Area 4 Rovuma LNG project involve the physical displacement of the Quitupo community and economic displacement of households cultivating lands, intertidal collectors and fishing activities within the Project area.

To manage involuntary displacement and ensure the re-establishment and development of livelihoods within the Project area, Mozambique LNG and Area 4 Rovuma LNG projects have developed a Resettlement Plan that was approved by the Government of Mozambique.

The Resettlement Plan implementation was affected by the suspension of activities in Afungi in March 2021. Project teams continued engaging remotely with the resettlement-affected community stakeholders. The implementation of the Resettlement Plan has resumed since June 2022.

Following stakeholders' consultations and National Resettlement Committee recommendations, 100% of families whose residences were impacted were relocated.

Along with the Resettlement Plan, compensation activities resumed in June 2022. At year-end 2024, the Resettlement Plan's land-based compensation activities were fully completed, while compensation for fishers and intertidal collectors reached 74%. Compensation related grievances are being handled as part of the grievance management system.

Livelihood & Socioeconomic Development Initiatives

The Mozambique LNG Project employs investments into different socioeconomic development projects within its neighboring communities and society. Following the recommendations of Mr. Jean-Christophe Rufin, the Project created a Foundation in 2023 for the implementation a socio-economic development program covering the whole territory of the Cabo Degaldo province, as part of a consistent and sustainable development strategy. The operational activities of the Foundation were launched in 2024.

In 2024, Mozambique LNG continued to engage with the communities in Palma and on the border of Cabo Delgado, and support their recovery and development. Various socioeconomic development initiatives related to income generation, economic diversification, agriculture, fishery, education, WASH (water, sanitation and hygiene) sectors were implemented, reaching thousands of beneficiaries.

The Project is committed to ensuring the sustainable and inclusive development and retained the Vulnerable People Program to facilitate a broader humanitarian response. The actions include distribution of food and basic goods, a vulnerable people's nutrition program in Quitunda and Maganja, actions to facilitate the return of government health care workers and the coordination of support efforts with government, local NGOs and other entities in Afungi.

Subsidiary self-assessment

In addition to Subsidiary and industrial project assessments, two types of **Subsidiary self-assessment** should be noted.

With regard to the implementation of **VPSHR**, the self-assessment and risk analysis tools were revised in 2022 to make them more adaptable to the local context. In 2024, the strategy for implementing these tools mainly targeted the Subsidiaries of countries that had not participated in the 2023 campaign, or whose rate of compliance with VPSHR was low. They have thus been deployed to Subsidiaries in 31 countries with a response rate of 100%.

With regard to the implementation of the **societal approach**, the Subsidiaries must carry out an annual self-assessment in this area and internal *reporting* to identify the societal actions carried out locally. These self-assessments are analyzed by the HSE division in order to adapt the support it provides to Subsidiaries (offers of training, assistance). In 2024, 100% of the Subsidiaries in the One MAESTRO roll-out scope, with an operational activity, carried out their self-assessment.

ACTIONS TO MITIGATE RISKS AND PREVENT IMPACTS

TotalEnergies has numerous tools for **raising employee awareness** of issues related to human rights. The Company held **training courses tailored to the challenges faced in the field** by employees who are particularly exposed to these issues.

In 2024, several training sessions were held as part of the implementation of the Human Rights training plan:

For target groups

More than 4,923 employees belonging to the priority categories were trained in face-to-face training sessions in 2024.

- Within the Marketing & Services segment, 610 employees were trained. These employees include members of the Management Committees as well as other priority categories of employees (network directors, segment managers and service station managers) within the Subsidiaries, particularly in Angola, Equatorial Guinea, Senegal, Puerto Rico and Mauritius.
- Within the Exploration & Production segment, nearly 3,560 employees were trained in respect for human rights, including members of the Management Committees of the Subsidiaries in Angola, Nigeria, Azerbaijan, Iraq and Brazil.
- In the Integrated Power and Integrated LNG segments, more than 350 employees were trained in respect for human rights in Brazil (Casa dos Ventos).
- In the Refining & Chemicals segment, more than 420 employees were trained in respect for human rights, including members of the segment's Management Committee, particularly in South Korea, and certain priority groups at Hutchinson sites in Morocco, Brazil and Serbia.

Training on ethics and human rights was followed by around 25 newly appointed executives in 2024.

The online module on human rights in the workplace with a focus on respecting the ILO's core conventions, which has been accessible to all employees since 2019 in all countries and mandatory for all management employees, continued to be deployed in the countries where TotalEnergies is present. It is available in five languages. In 2024, nearly 9,900 employees completed this online module, bringing the total number of employees who have followed it to approximately 70,000 since its launch in 2019 until the end of 2024.

In addition, representatives of the Human Rights department regularly participate in external events with other companies and institutional players to share experiences and best practices in this area.

For the societal, several activities intended to raise awareness among the various entities on societal issues and tools were deployed in 2024:

- at the level of the Company:
  - a societal module of the HSE for Managers training program, 10 sessions of which were delivered in 2024 with a total of more than 248 participants;
  - a specific session adapted to the Nature Based Solutions division on the subject of free, prior, informed consent (FPIC) with indigenous populations;
  - 8 webinars, attended by more than 483 participants, were organized in July and October 2024 for the launch of the societal reporting campaign;
- in Marketing & Services, a societal module was included in the MS HSE Fundamentals training for new HSE managers. Close to 98 employees were trained in 2024;
- in the Integrated Power segment, 5 awareness webinar sessions on managing societal impacts reached more than 125 participants;
- in Exploration & Production, 8 training sessions in 2024 were attended by 177 participants from Subsidiaries, supplemented by specific training missions on the fundamentals of societal performance, dialogue, and complaint management conducted in Mozambique and Surinam;
- a social awareness module, created in 2022, is available to all employees through the internal training platform (e-learning). It reached close to 935 participants in 2024.

WHISTLE-BLOWING MECHANISMS

TotalEnergies has set up several levels of whistle-blowing mechanisms that cover the entire Company or are specific to certain projects.

In 2024 the **Ethics Committee** received about 210 reports (internal, external, anonymous) regarding compliance with the Code of Conduct, more than 60% of them concerning matters relating to Human Resources. All reports received are addressed and, when necessary, recommendations are made in order to lead to the implementation of corrective actions. Irrespective of whether the referral is well founded, mediation may be necessary. When the Ethics Committee observes a breach of the Code of Conduct, management draws the necessary conclusions and sanctions may be imposed in keeping with the applicable law and the procedures negotiated locally with staff representatives (examples include verbal reminders, written warnings, suspension or dismissal). During the same period, the Company recorded approximately 220 integrity incidents (covering fraud - excluding attempts, corruption, or influence peddling) which led, one or more Company employees were involved, to approximatively 140 sanctions, up to and including dismissal.

The *Collection and processing of ethical complaints* procedure published internally and on the TotalEnergies website since December 2020, then updated, formally sets out the existing approach for collecting and processing complaints sent to the Ethics Committee by internal or external stakeholders concerning behaviors or situations contrary to the Code of Conduct. It ensures that the identity of the person making the report is protected, rules out any reprisals against them or against those taking part in the processing of the complaint, and respects applicable laws and regulations in terms of protecting personal data.

The Subsidiaries have also put in place **mechanisms for managing grievances made by external stakeholders**. Deployment is gradual throughout the Company.

At the end of 2024, 100% of the Subsidiaries within the One MAESTRO scope with an operational activity, had a grievance management mechanism.

Complaints received by the Subsidiaries in connection with the societal impact of their activities may concern: access to land, economic losses/ loss of livelihood, nuisances to the environment and health, local employment, road safety, logistics and transportation, adverse impact on culture heritage, security and social conduct. The number of complaints received in 2024 is 1,414, with a percentage of solved complaints of 87%.

In case of **incidents related to the implementation of the VPSHR**, a reporting is quickly made to the Security division, and a report is compiled after internal analysis to assess the facts and to determine the measures to be taken to reduce the risk of future incidents.

MONITORING PROCEDURES

The Company **human rights roadmap**, built with the different business segments and the departments concerned, is presented at regular intervals to members of the Company's management team to support the ongoing efforts to enforce the Code of Conduct and respect for human rights. The Human Rights Steering Committee monitors the implementation of this roadmap.

For each specialty or business segment, the roadmap addresses questions of governance (for example, an internal procedure to be updated), new trainings to be developed, the prioritization of salient issues in a given specialty or segment, dialogue with stakeholders (for example, by appointing and training CLOs), risk assessment (for example, in the impact assessments of new projects), preventive and remediation actions, monitoring and communication. The Human Rights Department and the Ethics Committee rely on a network of more than 100 Ethics officers across the countries in which TotalEnergies operates. They are in charge of promoting the values set out in the Code of Conduct among employees working at Subsidiaries and ensuring that the Company's commitments are correctly implemented at a local level.

In 2024, the digital platform named Social Performance Academy, which makes the necessary educational resources accessible to Subsidiaries, such as rules, guides, training materials, feedback and best practices, was improved by the addition of new content.

In certain situations, intervention by government security forces or private security companies is necessary to protect the Company Subsidiaries' staff and assets. TotalEnergies regularly organizes training sessions and awareness-raising activities for its employees on the risk of disproportionate use of force and, more specifically, on the VPSHR.

In 2024, this awareness-raising work led the VPSHR liaisons to continue the revision the content of the training courses in order to make them more accessible and better adapted to changes and issues related to human rights and security and to offer these new modules as part of VPSHR training missions in Subsidiaries, for more than 300 participants. This improvement was made mainly by developing a new online training module for the Country Security Officers, who support Country Chairs in their role of being responsible for the Company's security at country level and who are the representatives of the Company Security division in charge, among other things, of implementing the VPSHR. In 2024, 49 Country Security Officers and security managers completed this online training.

In addition, specific awareness-raising work on compliance with the VPSHR and their deployment in the entities considered most at risk is carried out annually. The contribution of the Subsidiaries to the annual "ADRA Campaign" *(Auto-Diagnostic and Risk-Assessment)* enables the VPSHR teams of the Security division to assist them with improvement actions throughout the year.

Each business segment, as well as TotalEnergies Global Procurement in charge of the Responsible Purchasing program, have designated a human rights representative who coordinates this subject for its scope and cooperates with the Human Rights department with which it meets regularly in order to address the subjects in progress.

Regarding the **VPSHR**, TotalEnergies takes part in **follow-up meetings** with the other members of the initiative as part of the process of continuous improvement. In March 2024, TotalEnergies published its 2023 VPSHR report, which contains information on the implementation of VPSHR in Subsidiaries worldwide, and reviews progress made. This report is available on the TotalEnergies website. The information set out in the report is based on annual reporting organized by the Security division that brings together the results of a VPSHR questionnaire, and of the risk and compliance analyses for each Subsidiary operating in a sensitive context. It contains examples of action taken to raise awareness and process incidents. The 2024 VPSHR report will be published in 2025.

3.6.8.2 Health and safety

This section is primarily intended to present implementation of measures with respect to Subsidiaries, while the implementation of measures specific to Suppliers is described in point 3.6.8.5.

SUBSIDIARY ASSESSMENTS

In addition to the HSE self-assessments of the Subsidiaries at least every two years, the Subsidiaries operating the sites are audited every three to five years. The periodicity of HSE audits is defined according to a risk-based approach, which takes into account, among other things, the results of previous HSE audits and the status of the corresponding action plans.

In 2024, 34 HSE audits were conducted.

ACTIONS TO MITIGATE RISKS AND PREVENT IMPACTS

In terms of HSE, **training intended for various target groups** (new arrivals, managers, senior executives and directors) is provided in order to establish a broad-based, consistent body of knowledge that is shared by all:

- *Safety Pass:* these safety induction courses were started on January 1, 2018 for new arrivals. Various courses exist depending on the position and cover the Company's main HSE risks, the risks linked to the site activities as well as those linked to the workplace. The theoretical content is supplemented by practical life-saving actions training sessions;
- *HSE for Managers* is aimed at current or future operational or functional managers within one of the Company's entities. This training was delivered in virtual classroom mode as well as face-to-face in 10 sessions in 2024, in which about 250 managers took part;
- *Safety Leadership for Executives* is intended for the Company's senior executives. Its objective is to give senior executives the tools allowing them to communicate and develop a safety culture within their organization. Three sessions were held in 2024 to train approximately 44 Company's senior executives;
- HSE training are also provided for new subsidiary managers.

In order to ensure and reinforce knowledge of the reference framework, a knowledge evaluation tool containing over 3,000 multiple-choice questions was developed in 2018 for use by the HSE managers of Subsidiaries, operated sites and their teams. This tool can also be used to determine a suitable training plan, if necessary. Approximately 150 evaluations were carried out in 2024.

World Safety Day is held each year by the HSE division. In 2024, it focused on technological risks with "Accidents and Feedback: Let's learn from our experiences". In addition, TotalEnergies encourages and promotes its Subsidiaries' safety initiatives. Each year, the Company recognizes and awards the best HSE initiative carried out in a Subsidiary.

As regards crisis management, the intervention teams at Subsidiaries and head office practice their crisis management activities regularly on the basis of scenarios identified by the risk analyses. These personnel may follow dedicated training depending on their specific functions. In 2024, 989 individuals were thus trained in crisis management in Subsidiaries and at head office.

TotalEnergies also continued to roll out its *Incident Management System* (IMS) at Subsidiaries operating liquid hydrocarbon or natural gas exploration and production sites in the Exploration & Production, Integrated LNG and Integrated Power segments. The IMS is a harmonized system for the management of emergency situations. It is described in an IPIECA (*International Petroleum Industry Environmental Conservation Association)* good practices guide and is being progressively adopted by the majors. In 2024, 256 employees were trained in the IMS and six Exploration & Production Subsidiaries carried out a large-scale application exercise, bringing the total number of trained employees to 1,301 and the number of Subsidiaries where the IMS is deployed to 26.

Return on experience (feedback) on HSE incidents is regularly collected. A return on experience document describes the HSE incident or the corresponding accident, includes an analysis and recommendations applicable to similar situations. 66 documents (feedback, best practices, alerts) were disseminated within the Company in 2024.

MONITORING PROCEDURES

In the field of prevention of major industrial accidents, the Company monitors the number of Tier 1 and Tier 2 losses of containment as defined by the American Petroleum Institute (API) and the International Association of Oil & Gas Producers (IOGP). After reaching its target in 2023, the Company has strengthened its demands and has set itself a new target of a number of Tier 1 and Tier 2 events below 45 in 2024. This objective was achieved in 2024. The Company did not experience Tier 1 or Tier 2 events due to acts of sabotage or theft in 2024.

Losses of primary containment[a]	2024	2023	2022
Losses of primary containment (Tier 1)	14	19	11
Losses of primary containment (Tier 2)	25	29	37
Losses of primary containment (Tier 1 and Tier 2)	39	48	48

(a) Tier 1 and Tier 2: indicator of the number of losses of primary containment with more or less significant consequences (fires, explosions, injuries, etc.), as defined by API 754 (for downstream) and IOGP 456 (for upstream). Excluding acts of sabotage and theft.

Tier 1 and 2 events had moderate consequences in terms of safety (lost time injuries, minor fires or pollutions). The Company did not have any major industrial accidents in 2024.

In the field of road transportation, to measure the results of its policy, TotalEnergies has, for many years, been monitoring the number of severe road accidents involving its employees and those of contractors. Over the past 5 years (2019 - 2021), the 63% reduction in the number of serious accidents demonstrates the efforts made, particularly thanks to the prevention campaigns targeting the drivers of heavy goods vehicles.

Based on the use of new technologies to prevent road accidents, TotalEnergies internal rules ask for all new heavy vehicles in the Marketing & Services segment to be equipped with certain driver assistance systems[1] wherever these technologies are offered by manufacturers. The decision was also made to generalize, at Company's perimeter, the use of fatigue and distraction detection systems, after conclusive tests carried out over several months on heavy vehicles in the Africa Marketing & Services zone. Deployment is underway globally with the aim of having these devices, as well as lane departure warning and frontal collision warning systems, on all heavy vehicles by the end of 2024. The Company's Rules require all the Company's light vehicles, as well as the contractors' dedicated light vehicles, to be also equipped with the same devices during fleet renewals.

Furthermore, for 2023-2024 the third part of the SafeDriver video campaign with the theme "All SafeDrivers" took place in November 2024. with the theme "I'm attentive to others when driving". Other topics covered during the campaign included: "I'm always in control of my vehicle", and "I don't drive if I'm tired and I avoid distractions while driving".

Number of severe road accidents[a]	2024	2023	2022
Light vehicles and public transportation[b]	4	4	3
Heavy goods vehicles (trucks)[b]	9	7	12

(a) Overturned vehicle or other accident resulting in the injury of a crew member or a passenger (recordable accident).
(b) TotalEnergies vehicles or vehicles under long-term contract (over 6 months) with TotalEnergies.

In the field of safety, in particular in the workplace, the indicators monitored by TotalEnergies include work-related accidents whether they occur at workplace, during transportation within the framework of long-term contracts, or during an industrial accident. In addition to its aim of zero fatalities in the exercise of its activities, TotalEnergies has set itself the target of continuously reducing the TRIR indicator and, for 2024, of reducing it below 0.62 for all personnel of the Company and its contractors. This target was achieved for 2024.

Safety indicators	2024	2023	2022
Millions of hours worked – All Personnel	**400**	**400**	**392**
Company Personnel	216	212	217
Contractors' employees	184	188	175
Number of occupational fatalities[a] – All Personnel	**1**	**2**	**3**
Company Personnel	0	0	0
Contractors' employees	1	2	3
Number of occupational fatalities per hundred million hours worked – All Personnel	**0.25**	**0.50**	**0.77**
TRIR[b]: number of recorded incidents per million hours worked – All Personnel	**0.55**	**0.63**	**0.67**
Company Personnel	0.44	0.51	0.60
Contractors' employees	0.67	0.77	0.76
LTIR[c]: number of lost time accidents per million hours worked – All Personnel	**0.35**	**0.40**	**0.45**
Safety indicators	**2024**	**2023**	**2022**
Company Personnel	0.33	0.42	0.51
Contractors' employees[a]	0.39	0.38	0.39
LTIS[d]: number of days lost due to accidents at work per million hours worked - All Personnel	**15**	**12**	**15**

(a) Excluding occupational illnesses, for which the link with a possible fatality is a matter of medical confidentiality.
(b) TRIR: Total Recordable Incident Rate.
(c) Lost Time Injury Rate.
(d) LTIS: Lost Time Injury Severity. Severity rate.

In 2024, out of the 219 occupational accidents reported, 210 related to accidents at the workplace. 75% of these occurred walking, when handling loads or objects, using portable tools or working with powered systems.

The Company's efforts on safety have allowed it to reduce the TRIR by more than 58% between 2014 and 2024. This improvement is due to constant efforts in the field of safety and, in particular:

- the prevention of the risks of serious and fatal accidents by campaigns aimed at road transport and high-risk work;
- the implementation of the HSE rules and guides, which are regularly updated and audited;
- training and general awareness raising with safety issues for all levels of management (World Safety Day, special training for managers);
- HSE communication efforts targeting all Company personnel;
- the maintaining of HSE objectives into the remuneration policy for TotalEnergies employees (refer to point 5.3.1.3.C of chapter 5).

Despite the measures implemented and detailed below, there were regrettably one fatal accident among contractors' personnel in 2024. In July in Nigeria, a worker lost his life during inspection work requiring rope access at height.

In response to this accident, specific preventive measures were taken at Company level, over and above the global programs already in place, in particular the reinforcement of supervision of this type of work and the development of new technologies (drones, robots) to reduce the use of rope access.

In the field of occupational health, the annual Industrial Hygiene survey sent to the Company's Subsidiaries in order to evaluate the rate of implementation of risk analyses in the workplace, to verify that potential exposures have been identified, and that action plans are in place.

	2024	2023	2022
Entities having carried out workplace Health risk analysis[a]	97%	92%	91%

(a) Data provided by the Industrial Hygiene survey before 2024. Data for 2024 provided by the WHRS.

In this field, TotalEnergies uses the following indicators:

Health indicators (WHRS scope)	2024	2022	2022
Percentage of employees with specific occupational risks benefiting from regular medical monitoring	99%	100%	99%
Number of occupational illnesses recorded in the year (in accordance with local regulations)	170	107	129

(1) Such as AEB (advanced emergency braking). LDW (lane departure warning) and EBS (electronic braking system) for motor vehicles and RSS (roll stability support) for semi-trailers.

3.6.8.3 Environment

This section is primarily intended to present implementation of measures with respect to Subsidiaries, while the implementation of measures specific to Suppliers is described in point 3.6.8.5.

SUBSIDIARY ASSESSMENTS

HSE audits, which include a section on the environment, are described in point 3.6.8.2.

The One MAESTRO reference framework states that the environmental management systems of the sites operated by the Company that are environmentally material[1] must be ISO14001 certified within two years of start-up of operations or acquisition: 100% of these 82 sites were compliant in 2024. In addition to this requirement, at year-end 2024, a total of 297 sites operated by the Company were ISO14001 certified.

ACTIONS TO MITIGATE RISKS AND PREVENT IMPACTS AND MONITORING PROCEDURES

In terms of **preventing the risk of accidental pollution**, TotalEnergies monitors indicators that allow it to assess the preparedness of Company operated sites for oil spills.

Oil spill preparedness	2024	2023	2022
Number of sites whose risk analysis identified at least one risk of major accidental pollution to surface water	115	122	113
Proportion of those sites with an operational oil spill contingency plan	100%	100%	100%
Proportion of those sites that have performed an oil spill response exercise or whose exercise was prevented following a decision by the authorities	97%	99%	92%

In accordance with industry best practices, TotalEnergies monitors accidental liquid hydrocarbon spills of more than one barrel. Spills that exceed a predetermined severity threshold are reviewed on a monthly basis and annual statistics are sent to the Performance Management Committee of the Company. All spills are followed by corrective actions aimed at returning the environment to an acceptable state as quickly as possible.

Accidental liquid hydrocarbon spills of a volume of more than one barrel that affected the environment, excluding sabotage	2024	2023	2022
Number of spills	24	27	49
Total volume of spills *(thousands of m³)*	0.6	1.7	0.1
Total volume recovered *(thousands of m³)*	~0.0[b]	~0.0[a]	0.1

(a) Precisely 40 m³.
(b) Precisely 28 m³.

As part of TotalEnergies' policy of **avoiding**, **reducing** and where necessary and possible **offsetting** the environmental footprint and effects on nature in general of its operations, discharges of substances are identified and quantified by type of environment (water, air or soil) so that appropriate measures can be taken to better control them.

In 2015, SO_2 emissions reached 59 kt. TotalEnergies has set itself the target of reducing its emissions by 75% in 2030 (compared to 2015), which entails not exceeding 15 kt.

Atmospheric chronic emissions[a]	2024	2023	2022
SO_2 emissions *(in kt)*	16	12	13
NO_x emissions *(in kt)*	57	60	60
NMVOC emissions[b] *(in kt)*	35	43	48

(a) In 2024, quantities emitted by the operated sites and above the reporting threshold values provided for in the E-PRTR[2] regulation.
(b) Non-methane volatile organic compounds.

SO_2 emissions that are likely to cause acid rain are regularly checked and reduced. In 2024, SO_2 emissions have increased mainly due to a perimeter effect with the entry of the Ratawi project (Iraq) in the Company's operated portfolio. The Ratawi field has historically resulted in the flaring of significant amounts of sulfur containing gas. The Ratawi project led by TotalEnergies aims, in the long term, to valorize this gas and reduce the associated SO_2 emissions.

In addition to local regulations, TotalEnergies has set the following voluntary environmental targets for its operated sites:

- limit the hydrocarbon content of continuous liquid discharges to less than 30 mg/l for offshore sites (permanent target);
- limit the hydrocarbon content of continuous liquid discharges to less than 1 mg/l for onshore sites by 2030.

In 2024, the integration of a new site into the scope explains the deterioration of the % of onshore sites compliant with the 2030 objective. Studies have been launched to improve the discharges from sites that are still not in compliance.

(1) Production sites of the subsidiaries of the Exploration & Production segment subsidiaries, sites producing more than 250 kt/y in the Refining & Chemicals and Marketing & Services segments, and gas-fired power plants in the Integrated Power segment, operated by the Company.
(2) European Pollutants Releases and Transfer Register.

Discharged water quality	2024	2023	2022
Hydrocarbon content of offshore continuous water discharges *(in mg/l)*	11.2	11.6	12.9
% of sites that meet the target for the quality of offshore discharges *(30 mg/l)*	93%	92%	93%
Hydrocarbon content of onshore continuous water discharges *(in mg/l)*	2.0	1.9	1.8
% of sites that meet the 2030 target for onshore discharges quality *(1 mg/l)*	82%	86%	73%

As part of the implementation of its **biodiversity ambition**, an overview of measures already taken and updated for 2024 under the four core principles of this ambition is provided in point 5.2.4.5 of chapter 5.

3.6.8.4 Climate

SCOPE OF REPORT

This part of the implementation report relates to greenhouse gas emissions resulting from the Company's Activities (Scope 1+2), in accordance with the provisions of Article L. 225-102-1 (formerly L.225-102-4) of the French Commercial Code. TotalEnergies also reports on indirect greenhouse gas emissions related to the use by customers of energy products (Scope 3[1]) and related actions, in accordance with Article L. 233-28 of the French Commercial Code, in the Sustainability reporting under the CSRD (refer to point 5.4 of chapter 5).

GOVERNANCE

To define its strategy and take into account the challenges posed by climate change, TotalEnergies relies on a structured organization and governance.

Climate issues are addressed at the highest level of the organization by the Board of Directors and the Executive Committee, which have committed the Company to a balanced transition strategy. The Chairman and Chief Executive Officer with the members of his Executive Committee as well as the Lead Independent Director participate all year long to a nourished dialogue with shareholders and different stakeholders on the Company's climate issues. As an illustration, in 2024, the Lead Independent Director maintained a close dialogue, priorly informed by the General Assembly, with shareholders representing almost a quarter of the Company's capital, in order to prepare the vote on the resolutions. These meetings have been the opportunity of a dialogue about the transition strategy of TotalEnergies, its progress and the update of its climate ambition.

The Board of Directors also reports annually to the shareholders on the progress made. Since 2021, the Board of Directors submitted at the Annual Shareholders' Meeting on May 24, 2024 to the shareholders of TotalEnergies SE for their opinion the Sustainability & Climate Progress Report 2023, reporting on the progress made in the implementation of the Corporation's ambition in terms of sustainable development and energy transition and its related targets by 2030. This resolution was approved at close to 80% of the votes cast.

In support of the Company's governance bodies, the Sustainability and Climate division shapes the approach to climate and accompanies the strategic and operational divisions of the Company's business segments. By defining and monitoring indicators, progress can be measured and the Company's actions can be adjusted (details of the indicators used are provided in point 5.4.4 of chapter 5).

Oversight by the Board of Directors

TotalEnergies' Board of Directors endeavors to promote value creation by the business in the long term by taking into consideration the social and environmental challenges of its business activities. It determines the Company's strategic orientation and reviews every year, in connection with this strategic orientation, the opportunities and risks such as financial, legal, operating, social and environmental risks, and the measures taken as a result. It ensures that climate-related issues are incorporated into the Company's strategy and the investment projects that are submitted to it. It examines climate change risks and opportunities during the annual strategic outlook review of the Company's business segments. It reviews performance each year.

The skills of the directors in the area of climate are presented in point 4.1.1.5 of chapter 4. A continuing training program relating to the climate for directors has been approved in 2021 and it includes different modules about the following themes: Energy, Climate Change and Environmental Risks; Energy and Climate; Climate Change and Financial Risks and Opportunities; Causes and challenges of global warming.

Directors are invited to Company's site visits. The visits contribute in a very concrete way to the training of Directors and allow them to deepen their knowledge of the specificities of the Company, its challenges, particularly in terms of sustainability, 4ts businesses - including new businesses - and its teams. They are often the occasion for thematic presentations.

In this context, site visits were organized in 2023, by groups of directors accompanied by a member of the Executive Committee, in Saudi Arabia (SATORP Jubail, Amiral project, renewables), Paris (Hutchinson & Belib), Uganda (Exploration & Production, Marketing & Services), Bordeaux and Nersac (Saft R&D center, ACC factory), and Feluy in Belgium (R&D center, polymers). Additionally, the members of the Audit Committee visited Le Havre (mobility, FSRU, Gonfreville Refinery).

The Strategy & CSR Committee reviews the Company's overall strategy proposed by the Chairman and CEO, as well as issues related to the Company's social and environmental responsibility (CSR), and particularly those concerning the integration of climate considerations into the Company's strategy. The annual strategy seminar of 2024 dealt particularly with the assessment of the business model of Integrated Power, in particular the integration of gas-electricity and renewables-flexible assets.

The Audit Committee, notably carried out the new tasks arising from the regulations on the reporting of sustainability information. In this context, the members of the Audit Committee all participated in external training dedicated to CSRD issues, training in which most of the Directors also participated. The Audit Committee has thus monitored the process of drawing up the Sustainability Report that has succeed the extra-financial performance declaration.

The Board of Directors has also been integrating climate issues into the compensation structures of the Chairman and Chief Executive Officer and in the criteria for performance shares for several years.

Detailed information regarding the compensation for the 2024 fiscal year and the compensation policy for the Chairman and CEO for the 2025 fiscal year are provided in point 4.3.2 of chapter 4. The compensation policy for directors is detailed in point 4.3.1 of chapter 4.

(1) GHG Protocol – Category 11 (refer to the glossary or to point 5.2.1.3 of chapter 5 for further details).

Role of management

The Executive Committee (Comex) chaired by the Chairman & Chief Executive Officer ensures that climate-related issues are taken into account and built into operational roadmaps. The Executive Committee is responsible for identifying and analyzing risks that could affect the achievement of TotalEnergies' objectives.

The TotalEnergies Risk Management Committee (TRMC) assists the Executive Committee. The TRMC's primary duties are to ensure that the Company's risk mapping is updated on a regular basis and that its existing risk management processes, procedures and systems are effective.

The Strategy & Sustainability Division coordinates the Company's activities through the entities in charge of strategy and markets analysis, sustainability and climate, and also safety, health and environment, legal affairs, relations with public authorities and internal audit. Its President also chairs the Risk Committee (CoRisk) which is in charge of the Company's investments.

The Finance Division ensures an ongoing dialogue with investors, analysts and extra-financial rating agencies on climate challenges and on extra-financial issues more broadly. In all, more than 450 meetings were held in France and worldwide in 2024.

STRATEGY

A. OUR AMBITION AND OUR PROGRESS

1. Global challenges: more energy, less emissions

More energy to fuel human development

Access to energy is essential for human development. The human development index increases with the energy available per capita. The available energy must exceed the threshold of 70 GJ/capita to reach an index level deemed sufficient.

Today, around 4.5 billion people live below this threshold. Getting them there today would require a 3-fold increase in the energy available to them. By 2050, taking into account the demographic growth of these populations, the energy available will have to be multiplied by 4.

Recent history shows that such an increase is possible: between 2000 and 2022, China increased its available energy per capita by a factor of 3, from ~40 to ~120 GJ/capita, lifting ~800 million people out of poverty. This historic economic and social development resulted from the massive exploitation of coal, an abundant and often cheap source of domestic energy

The challenge of the energy transition is therefore twofold: (i) to decarbonize the "mature" energy systems of developed countries, and (ii) to increase the energy available in the Global South and India by fuelling economic and social development with low-carbon electricity rather than coal.

Since the Paris Agreement in 2015, states have made a joint commitment *"to strengthen the global response to the threat of climate change, in the context of sustainable development and the fight against poverty, including by containing the rise in global average temperature to well below 2°C above pre-industrial levels and continuing action to limit the rise in temperature to 1.5°C above pre-industrial levels."*

TotalEnergies supports the objectives of the Paris Agreement and is deploying a strategy to meet the needs of both development and energy transition: more energy and less emissions.

Less emissions

In 2023, GHG emissions from the energy system accounted for 39 billion tonnes of the 57 billion tonnes of anthropogenic GHG emissions. Burning coal to produce electricity is the biggest contributor, at around 10 Gt CO_2, followed by using oil for transport, at around 8 Gt.

The global deployment of mature and competitive low-carbon technologies would make it possible to eliminate around 20 of these 39 Gt:

- solar and wind – and natural gas to ensure the long-term balancing of the system – to produce electricity;
- electric vehicles and heat pumps to use it; and
- technologies to reduce methane emissions in the energy system.

Reconciling economic and social development with the fight against climate change requires a pragmatic approach to deploy low-carbon technologies at a global scale, taking into account their cost (cost merit curve) and technological maturity.

2. Global challenges: COP28, COP29 and actions to be taken

The COP28, that took place in Dubaï in December 2023, concluded with an agreement which enshrines the willingness of the states to "*transitioning away from fossil fuels in energy systems, in a just, orderly and equitable manner*" and that mentions the usefulness of transitional fuels, such as gas. The agreement sets the objectives of tripling the renewable energy capacity and doubling energy efficiency by 2030, as well as eliminating most methane emissions by that time. The COP29, which was held in Baku in November 2024, agreed a new carbon credit mechanism under Article 6 of the Paris Agreement – the Paris Agreement Crediting Mechanism (PACM) – in particular allowing the member States to transfer greenhouse gas emission reductions to meet their Nationally Determined Contributions (NDCs). This mechanism is also to be open to public and private entities.

3. A two-pillar multi-energy strategy

a. TotalEnergies stays the course of its balanced integrated multi-energy strategy...

TotalEnergies reaffirms the relevance of its balanced integrated multi-energy strategy considering the developments in the oil, gas and electricity markets. Anchored on two pillars, Oil & Gas, notably LNG, and electricity, the energy at the heart of the transition, the Company plans to increase its energy production (hydrocarbons and electricity) by +4% per year between 2024 and 2030 and is in a very favorable position to take advantage of energy prices evolution. Thanks to the refocusing of the Oil & Gas portfolio on assets and projects with low breakeven and low GHG emissions, and to the diversification into electricity, notably renewable, through an integrated strategy from production to customer, the Company is implementing its transition strategy while ensuring an attractive shareholder return policy.

b. ...responsibly producing low cost, low emissions Oil & Gas...

While drastically lowering the emissions of greenhouse gas from its operations, TotalEnergies plans to grow its Oil & Gas production by around 3% per year over the next five years, predominantly from LNG, thanks to its rich low cost, low emission project portfolio which has been the subject of major investment decisions in 2024 to ensure its medium-term growth.

The Company will put more than ten projects into production by 2030 starting from 2025-2026, in oil in the United States, Brazil, Iraq and Uganda and in gas in Argentina, Nigeria, Malaysia, Qatar and Mexico.

In 2027 and 2028 the start-ups of LNG projects will follow in Qatar, the United States, and Oman. At the same time, the Company strengthens its leading position in Europe in regasification and its leading LNG exporter position in the United States.

The oil projects developed, like the liquefaction plant projects, are well positioned on their respective merit curves, enabling them to generate value for the Company, even in a low-price scenario. The key indicator of its progress on this pillar is the reduction in Scope 1+2 emissions of its Oil & Gas assets because its first duty as a producer of hydrocarbons is to reduce the greenhouse gas emissions linked to their production.

c. ...and developing a profitable and differentiated Integrated Power model to create a future cash engine of the Company

TotalEnergies is replicating its integrated Oil & Gas business model into the electricity value chain to achieve a profitability (ROACE) of ~12% for the Integrated Power segment, equivalent to Upstream Oil & Gas ROACE at 60 $/b, above the returns of the traditional Utilities model.

The Company is building a world class cost-competitive portfolio combining renewable (solar, onshore wind, offshore wind) and flexible assets (CCGT, storage) to deliver low-carbon electricity available 24/7. In particular, TotalEnergies is leveraging its scale effect in equipment purchases and digital to optimise its investment costs in its renewable assets.

TotalEnergies also uses the strength of its balance sheet to increase its market exposure from 10% in 2024 to 30% in 2030, allowing it to capture additional margins in a volatile market. Finally, the last lever is the recycling of capital through partial transfers of post-development assets in order to reinvest in new projects.

The Company aims to grow its annual power generation to more than 100 TWh (around 70% renewables / 30% flexible) by 2030, investing around $4 billion per year; the generated cash flow of this segment was $2.6 billion in 2024 and will be more than $4 billion in 2028, the Integrated Power segment becoming net cash-flow positive at that time.

Additionally, TotalEnergies plans to invest in a targeted manner in low-carbon molecules (biofuels, SAF, and biogas, as well as hydrogen and its derivatives: e-fuels) as part of an "equity light" business model with partners.

4. Our ambition of carbon neutrality by 2050, together with society

The energy transition requires the participation of all stakeholders, from regulators to end customers, including industrial players. TotalEnergies is deploying a strategy that supports this collective transition and will enable our Company to adapt to the different scenarios that may materialize, depending on developments in low-carbon technologies (adoption rate, cost reduction), geopolitical relations and international trade, and consumer behavior. In a scenario where low-carbon electrification continues to grow, both in generation and uses, and which would enable an affordable low-carbon molecules on a large scale, TotalEnergies shares a possible vision of what its own activities could be as part of its ambition of carbon neutrality by 2050, together with society.

By 2050, TotalEnergies would produce:

- about 50% of its energy in the form of electricity, including the corresponding storage capacity, totaling around 500 TWh/year, on the premise that TotalEnergies would develop about 400 GW of gross renewable capacity;
- about 25% of its energy, equivalent to 50 Mt/year of low-carbon energy molecules in the form of biogas, hydrogen, or synthetic liquid fuels from the circular reaction: $H_2 + CO_2 \rightarrow$ e-fuels;
- around 1 Mboe/d of Oil & Gas primarily liquefied natural gas (about 0.7 Mboe/d, or 25-30 Mt/year) with very low-cost oil accounting for the rest. Most of that oil would be used in the petrochemicals industry to produce about 10 Mt/year of polymers, of which two thirds would come from the circular economy.

These hydrocarbons would represent about 10 Mt CO_2e/year of Scope 1+2 residual emissions, including methane emissions aiming towards zero (below 0.1 Mt CO_2e/year); those emissions would be fully offset by nature-based carbon sink projects.

In 2050, our trading portfolio would be aligned with our productions and sales portfolio.

5. 2030: Our objectives for more energy and less emissions

Over the decade 2020-2030, the TotalEnergies' energy transition strategy based on two pillars is reflected in the production targets shown below.

TotalEnergies plans to increase its energy production (oil, gas and electricity), overall by 4% per year between 2024 and 2030.

In 2025, the electricity production should account for 10% of its hydrocarbon production. By 2030, its objective is to increase it to nearly 20%.

At the same time, the Company is pursuing its trajectory of reducing its emissions (Scope 1+2 CO_2 and methane) from its operated facilities with a view to reducing net emissions by 40% compared with 2015.

6. How TotalEnergies' 2030 objectives compare to the IEA scenarios

Reducing GHG emissions at our operated facilities (Scope 1+2) is key to our ambition to supply more energy while curbing GHG emissions. Our objective of cutting net Scope 1+2 emissions from our operated activities by 40% is consistent with the reduction targets of the European Union's "Fit-for-55" program (a 37% decrease between 2015 and 2030) and the IEA's 2024 Net Zero Emissions (NZE) scenario (a 28% decrease between 2015 and 2030).

An independent third party (Wood Mackenzie) has audited the calculations made and the trajectories presented of Scope 1+2 emissions.

B. OUR ORDERLY ENERGY TRANSITION

1. Oil: Today's energy

a. Producing oil differently: focus on low cost and low-carbon intensity oil assets

In 2024 global demand for petroleum products reached 102.9 Mb/d, i.e. +0.94 Mb/d (+~1%) compared to 2023, and should continue to grow over the decade (105.6 Mb/d by 2029 according to the IEA[1]). Beyond 2030 the trajectories of the different forecasters vary between moderate growth, plateau and start of decline. These demand forecasts remain dependent in particular on population and economic growth, market penetration pace of low-carbon technology innovations such as electric vehicles and changes in behavior.

In addition, it will evolve in a differentiated way according to the specific energy transition roadmaps of the various countries. Thus, demand for oil could start to decline between 2030 and 2040, but at a slower rate than the current natural decline rate of existing fields (around 5% per year).

TotalEnergies therefore believes that new oil projects are still needed to meet this demand and to keep prices at an acceptable level in order to create the conditions for a just transition that gives people time to adapt their energy use. In 2024, TotalEnergies produced 1.4 Mb/d of oil, equivalent to its 2019 level, representing around 1.5% of world production.

TotalEnergies' first responsibility as an oil producer is to produce differently, by reducing to the minimum emissions. To that end, it approves hydrocarbon projects on the basis of performance criteria, notably technical costs and carbon intensity (Scope 1+2). The Company operates its fields in accordance with strict requirements concerning safety, emissions reduction and environmental impact. The cash flow generated by these Oil and Gas activities contributes to financing its investments in renewable energy.

b. Relentlessly reducing our Scope 1+2 emissions, Oil & Gas

Our primary responsibility as a producer of fossil fuels is to reduce emissions on our facilities.

TotalEnergies is resolutely continuing to reduce emissions from its operated assets. Thus, within the scope of its oil and gas facilities, emissions from assets operated by the Company fell by more than 36% compared to 2015 levels. In 2024, with more than 200 GHG emissions reduction projects coming to fruition, TotalEnergies reduced its emissions by 1.3 Mt of CO_2e across its operated assets.

These ongoing reduction efforts have made it possible to reduce the Scope 1+2 intensity of the Upstream Oil & Gas operated assets, from 21 kg CO_2e/boe in 2015 to 17 kg CO_2e/boe in 2024[2]. These results put TotalEnergies among the players with the best intensities in the industry.

c. Our Scope 1+2 emissions reduction by 2030

Scope 1+2 emissions reduction objectives

Given the progress we have made towards achieving its interim targets, TotalEnergies is stepping up its ambition to reduce GHG emissions from its operated assets and has set the target for 2025 at 37 Mt CO_2e/year, compared with 38 Mt CO_2e/year previously.

TotalEnergies reaffirms its objective to reduce emissions from its operated assets, which aims to reduce its net Scope 1+2 emissions[3] by 40% by 2030 relative to 2015, after mobilizing around 5 million credits from nature-based carbon sinks projects.

This offsetting will start only from 2030 on for residual emissions on the basis of a consumption of approximately 10% per year of the stock of carbon credits of the Company.

d. Improving the Energy Efficiency of Our Sites: Implementation of the 2023-2025 Action Plan

Saving the energy used in our operations is beneficial in several ways: it contributes to the collective effort for energy efficiency, acts to reduce our GHG emissions and lower our costs.

In September 2022, TotalEnergies launched a plan to accelerate energy efficiency improvements at its operated sites worldwide. Over the period 2023-2025, we are investing $1 billion to reduce our energy consumption and cut GHG emissions by 2 Mt CO_2e.

This plan has enabled us to accelerate the actions undertaken for several years in the Company's operating sectors, with a total of more than 170 projects completed by 2024, including more than 80 initiatives for Exploration & Production, more than 80 for Refining-Chemicals and more than 10 for Marketing & Services and Gas, Renewables & Power.

At the end of 2024, these investments amounted to around $750 million: they have reduced emissions by around 1.5 Mt CO_2e/year and generated energy savings of more than 100 million dollars/year.

Taking into account the efficiency projects reported by the teams at the industrial sites, a second energy efficiency improvement plan will be rolled out over the period 2026-2028, for a total of $1 billion.

2. Gas: a transition fuel

a. Liquified Natural Gas: a key fuel for the energy transition

In the gas markets, TotalEnergies focuses on Liquefied Natural Gas (LNG), which can be shipped everywhere in the world and thus contributes to energy security, as it has been the case in Europe since 2022 with the strong reduction of Russian pipeline gas deliveries.

The growth of renewable electricity, intermittent and seasonal by nature, will require an increase in flexible power generation resources. The dispatchable generation of gas-fired power plants helps secure electricity supply against weather variability affecting renewables, while also responding to fluctuations in demand.

In addition, natural gas plays an essential role in reducing emissions from power generation as a replacement of coal, which emits half as much greenhouse gas as coal-fired power plants for the same amount of electricity produced[4]. It is particularly the case in Asia where this one still accounts for a very large part of the electricity mix of many countries (e.g. 62% in China, 72% in India[5]).

TotalEnergies, thanks to strong and diversified positions, and in particular its leading position of exporter in the United States - over 10 Mt in 2024 - TotalEnergies is the 3rd world's largest LNG player, with 40 Mt sold in 2024. In line with its balanced multi-energy strategy, TotalEnergies intends to consolidate its integrated position across the entire LNG value chain. The LNG volumes managed by the Company (excluding Russian volumes and spot volumes) are thus expected to grow by 50% between 2023 and 2030.

(1) Source: IEA, Oil 2024, June 2024.
(2) Operated Oil & Gas Upstream intensity is calculated excluding LNG plants.
(3) The calculation of net emissions includes nature-based carbon sinks projects as from 2030.
(4) IEA; Life Cycle Upstream Emission Factors 2024.
(5) Source: Enerdata.

Reducing the carbon footprint of the LNG portfolio

TotalEnergies aims to gradually reduce GHG emissions of the value chain, from the production of the gas to end use.

In addition to efforts to reduce methane emissions, initiatives are being implemented throughout the whole chain. The electrification of liquefaction plant processes is helping to reduce LNG's carbon footprint today, and tomorrow this reduction will be reinforced by CO_2 capture and storage projects.

TotalEnergies is also working to reduce shipping emissions by renewing its fleet of chartered LNG carriers with modern, high-performing vessels. (average age of the fleet under long-term charter: 6 years versus 11 years for the global fleet of LNG carriers[1]).

All LNG carriers chartered by TotalEnergies use LNG as fuel. Furthermore, TotalEnergies actively supports the industry's efforts to reduce "methane slip" (emission of unburned methane in engines) and joined the MAMII (Methane Abatement in Maritime Innovation Initiative) last February.

b. Aiming for Zero methane emissions

TotalEnergies has long been committed to reducing its methane emissions by taking specific actions on each of the four sources: flaring, vents, stationary combustion and continuous real-time detection to identify any fugitive emissions.

Actions to reduce flaring

During flaring, gas combustion at the flare is incomplete, and around 2% of the gas sent to the flare is not burnt, the rest - 98% – being transformed into CO_2 after combustion. The actions to reduce flaring described below therefore directly reduce methane emissions.

Eliminating routine flaring is a priority for reducing methane and CO_2 emissions. TotalEnergies has been committed to eliminating routine flaring for new projects since 2000. A founding member of the World Bank's "Zero Routine Flaring by 2030" initiative since 2014, the Company is committed to ending this type of flaring by 2030 and to achieve this goal, has implemented several large-scale projects at its sites. TotalEnergies is also looking to reduce other forms of flaring, and is launching projects to retrofit installations with closed flares. Closed flare systems recover and treat waste gases, reducing methane and CO_2 emissions. In 2024, the first closed flare was installed at the Tempa Rossa facility already in operation in Italy. Several projects for closed flares on existing facilities are under study, and three have already been approved, two in Angola and one in the UK, with start-ups scheduled between 2025 and 2026. They will enable an overall reduction of 160 kt CO_2e/year. In addition to actions on each of these sources, all new projects include strict design criteria to avoid methane emissions: no natural gas for pneumatic equipment, no continuous cold venting and systematic installation of closed flares.

Actions on vents

Venting is the release of methane into the atmosphere without combustion. TotalEnergies has reduced its vents since 2020 by rerouting the gas going to the vents to the gas export system or to the flare. Some equipments – such as pneumatic actuators – also use methane as an instrumentation gas, and the replacement of these equipments with innovative solutions using compressed air instead of methane has significantly reduced vents.

Continuous real-time detection

Leaks are monitored by annual detection and repair campaigns deployed at all our operated upstream sites. This regular monitoring is complemented by the deployment of AUSEA *(Airborn Ultralight Spectrometer for Environmental Application)* drone detection campaigns, as well as continuous, real-time detection resources that will be installed by the end of 2025 on all our operated upstream assets [1]. The number of sensors deployed will be around 13,000 for an investment of around $50 million. As illustration, a FPSO could be equipped with around 500 sensors to provide complete, accurate coverage of the entire installation.

Our progress since 2010

Between 2010 and 2020, TotalEnergies reduced its operated methane emissions by almost half. Operating methane emissions decreased from 64 kt CH_4 in 2020 to 29 kt CH_4 in 2024, a 55% reduction. TotalEnergies is thus one year ahead of schedule in meeting its target of reducing its operated methane emissions by 50% between 2020 and 2025: TotalEnergies has set a new, reinforced target of -60% in 2025, compared with 2020. TotalEnergies is on the way to achieving its objective of reducing its operated methane emissions by 80% in 2030, compared with 2020.

Highlights

- **OGMP 2.0 Gold standard Reporting and COP29**

TotalEnergies has been assessed Gold Standard OGMP 2.0 in 2024 for the 4th consecutive year[2]. The OGMP 2.0 (Oil & Gas Methane Partnership) is the reference framework created in 2020 and piloted by the United Nations Environment Programme (UNEP) for methane reporting in the oil and gas sector. This framework encourages companies to continue improving the completeness and accuracy of their emissions reporting, for both operated and non-operated perimeters, in order to focus on reducing the most significant emissions. To date, nearly 150 companies are members across the value chain, including 65 upstream.

TotalEnergies has been a founding member of OGMP 2.0 since 2020, is among the first companies to reach Gold Standard Reporting, the end point of the Gold Standard Pathway defined by the UNEP, and is one of the first three upstream companies to exceed the threshold of 40% of operated methane emissions in OGMP 2.0 level 5, the highest level of the reporting framework[3]. UNEP thus recognizes the excellence of TotalEnergies' methane reporting, which complies with increasing requirements for completeness and measurement at source and site level.

Patrick Pouyanné has also been invited by UNEP and the European Commission to speak at the CEO OGMP 2.0 forum at COP29 in Baku, to share his vision and the Company's leadership on methane with other industry players. TotalEnergies intends to play a positive role in the industry and regularly invites other companies in the sector to join OGMP2.0 and, beyond that, to collectively reduce methane emissions.

c. Developing carbon capture and storage to reduce our emissions and those of our customers

The IEA's NZE scenario[4] includes the use of CCS[5] up to of 6 Gt CO_2 per year in 2050, to reduce part of the emissions from residual Oil & Gas consumption, as well as those from industrial processes (cement, lime, steel, etc.). This capacity is more than 100 times greater than the 50 Mt CO_2 per year currently captured worldwide.

(1) Source: S&P.
(2) See the UNEP report "An Eye on Methane: Report 2024.
(3) The OGMP 2.0 reporting framework defines 5 reporting levels. Levels 1 to 3 do not require measurements, but call for increasingly detailed methane inventories. Level 4 requires measurements at source level, and level 5 requires measurements at site level.
(4) IEA 2024, World Energy Outlook 2024.
(5) Carbon Capture & Storage.

TotalEnergies' CCS strategy gives priority to reducing emissions from its activities in order to reduce Scope 1+2 emissions from upstream Oil & Gas assets, refining and LNG plants. For example, at the Snøhvit liquefaction plant, where we are a partner alongside Equinor, around 9 Mt of native CO_2 have been stored since 2008. Similarly, the native CO_2 separated in the new NFE and NFS LNG liquefaction trains currently under development in Qatar will be stored by QatarEnergy. Finally, for our Ichthys LNG asset in Australia, we are studying a native CO_2 storage solution for start-up beyond 2030.The study of CCS solutions on our assets therefore complements the efforts already mentioned to reduce emissions (electrification, energy efficiency, flaring reduction, etc.).

The Company also invests in CO_2 storage projects close to its own assets, which can additionally serve as a CO_2 storage solution for large industrial emitters ("Storage as a Service") which can thereby reduce their Scope 1 and secure the future of their activities. TotalEnergies is investing around $100 million per year in this business, with models that enable us to benefit from leverage. This investment will be sustained in order to contribute to a gross storage capacity of 10 Mt CO_2 per year by 2030.

Europe is at the heart of this CCS strategy. TotalEnergies is an historical operator in the North Sea, with recognized operational and geological expertise in the area. The United Kingdom, Norway and the European Union have set objectives and regulations and have provided significant financial support to promote a cross-border deployment of CCS. The Company currently developing four projects in the North Sea that will provide CO_2 storage solutions for its own assets and those of its customers.

TotalEnergies is also studying the utilization of carbon in various forms (CCU[1]), such as in reaction with renewable hydrogen, to produce fuels or synthesis gas.

d. Offsetting residual emissions with nature-based carbon sinks

Natural areas preservation and restoration can be a lever for achieving net zero emissions worldwide by 2050.

Only in 2030 will TotalEnergies begin voluntary offsetting its residual emissions via NBS (Nature Based Solutions) carbon credits and will offset only Company's Scope 1+2 residual emissions.

TotalEnergies is working to build a high-quality portfolio and are paying close attention to the integrity and permanence of the emissions reductions and sequestration achieved by the activities financed in this way.

The Company is in favor of strengthening a global framework of trust to further reinforce robust and recognized voluntary crediting mechanisms.

TotalEnergies is investing in forestry, regenerative agriculture and wetlands protection projects. Its strategy aims to combine and balance the value of people's financial revenue from agriculture and forestry and the value of the benefits to soil, biodiversity, the water cycle and the production of carbon credits. When that approach is successful, the local standard of living improves and degradation of the land diminishes – as do emissions. This search for balance among different practices makes a just transition possible.

At 2024 year-end, the Company's stock of credits stood at 13.7 million carbon credits certified by the main international standards such as Verified Carbon Standard (VCS or Verra), ACR (American Carbon Registry) or ANREU.

The annual budget allocated to these projects is $100 million. The cumulative budget pledged to date for all concluded operations amounts to nearly $770 million over their cumulated lifespan, for an expected cumulative volume of verified credits of 37 million in 2030 and 53 million in 2050, taking into account methodological revisions for certification and technical updates. Between 2025 and 2030, TotalEnergies will continue to develop new projects in order to build up a stock of carbon credits of around 50 million by 2030.

In this context and based on a consumption rate of 10% of the stock per year from 2030, TotalEnergies would consume around 5 million credits per year from 2030 onwards.

Highlight: United States

In 2024 TotalEnergies has signed a $100 million (over 3 to 7 years) agreement with Anew Climate, a North American leader in climate solutions, and Aurora Sustainable Lands, a carbon-stewardship company and forest landowner in the U.S. to deploy their projects aimed at protecting productive forests from heavy timber harvesting, advancing conversion to sustainable management practices, and enhancing their ability to store more carbon from the atmosphere. The investment supports Improved Forest Management (IFM) practices across a portfolio of 20 carbon projects, covering 300,000 hectares in 10 states across the Unites States (Arkansas, Florida, Kentucky, Louisiana, Michigan, Minnesota, New York, Virginia, West Virginia, and Wisconsin). Anew Climate and Aurora Sustainable Lands provide operational oversight to ensure the carbon projects meet the highest standards of additionality and durability.

e. Anticipating changes in demand by adapting our sales of petroleum products

TotalEnergies' downstream business has been a steady contributor to the Company's results, while transitioning and adapting its activities to focus on high value-added markets.

The Company is addressing the sustainability challenges of its downstream activities through 3 levers:

- lowering the breakeven point of its refining-petrochemicals assets in a cyclical industry;
- reducing GHG emissions from its operations;
- offering customers low-carbon mobility solutions.

In Refining & Chemicals, TotalEnergies is continuing to develop its biofuels business. It is capitalizing on its existing assets by implementing SAF production by co-processing raw materials from waste and residues (used cooking oils and animal fats), excluding first generation 1G biomass (in competition with food consumption) in jet units in operation or by converting existing refineries into biorefineries (La Mède since 2019 and Grandpuits from 2026).

For the Marketing & Services, TotalEnergies is developing a three-fold strategy:

- **Network:** focusing on geographies where it has a competitive advantage, such as France, Africa and certain niche markets, in order to adapt to the evolving demand for petroleum products, particularly in Europe as part of the implementation of the "Fit for 55" program;
- **Lubricants:** differentiating ourselves through high value-added, high-margin products and developing more sustainable products to meet growing demand for circular products (RRBO[2]);
- **Electric mobility**: expand its positions in high-power charging in Europe and develop a low-equity business model (partnerships and leverage.

(1) Carbon Capture & Utilization.
(2) Re-Refined Base Oils.

3. Electricity: the energy of decarbonation

a. Our major development in electricity: an integrated approach

Electricity demand, which is essential to the success of the energy transition, is expected to grow sharply, as decarbonization is at the heart of the roadmaps of countries committed to carbon neutrality by 2050. In response, Integrated Power, the second pillar of the Company's strategy, is developing an integrated model encompassing the entire value chain, from power generation to sales and trading activities, with a profitability target of around 12% ROACE[1].

TotalEnergies net electricity production target is to produce more than 100 TWh by 2030 (70% of production from renewable sources, 30% from flexible sources). As part of its transformation into an integrated multi-energy company, TotalEnergies is building a competitive portfolio of renewable (solar, onshore and offshore wind) and flexible (CCGT, storage) assets to provide its customers with less and less carbon-intensive electricity available 24/7.

The Company' levers to grow with a return on average capital employed of around 12% are selectivity in its choices of projects; integration across the entire electricity value chain; cost control using its project management and offshore development skills; mobilizing external financing at competitive rates and farm-downs to accelerate cash flow generation and diversify its portfolio's exposure.

b. Our renewable electricity capacity build-up

TotalEnergies is executing its roadmap in renewables. In 2024, It has reached a gross installed production capacity of 26 GW of renewable electricity and intends to continue developing these activities to reach 35 GW in 2025 and 100 GW in 2030, a level that should make it one of the world's top five producers of renewable electricity (wind and solar) Chinese producers set aside.

c. Developing electric mobility

TotalEnergies develops a network of high-power electric charging stations along motorways, major roads and in urban hubs in Europe with a target of 1,500 sites equipped with high-power charging by 2030.

The Company is also present in a number of cities around the world, with a portfolio of over 30,000 charging points in operation or under deployment in Paris, Amsterdam, London, Brussels and Singapore.

It also supports road haulers in the electrification of their fleet with the installation of terminals dedicated to trucks along European corridors and charging services at the depot with the supply of green electricity.

Finally, TotalEnergies supports its individual customers at home, with home charging solutions that include an energy supply contract or on the road with subscription offers allowing access to a very large network of charging stations.

From the production of renewable electricity to the operation of charging services, the Company is present across the entire electric mobility value chain.

4. New low-carbon energy

a. New low-carbon energy

The energy transition also requires the development of low-carbon energy based on the conversion of biomass and waste, the use of renewable hydrogen, notably for refining or the production of synthetic molecules (e-fuels) combining hydrogen with CO_2 as a raw material. TotalEnergies is thus developing these new energy: biofuels, biogas, renewable hydrogen and e-fuels.

Biofuels

Today, biofuels emit over their life cycle more than 50% less CO_2 than their fossil fuel equivalents, making them a partial decarbonization pathway for liquid fuels[2]. While demand is emerging quickly, which should lead towards a high-margin market, access to feedstocks (plants, residues, sugar, etc.) remains a barrier to growth. Among these biofuels, TotalEnergies favors the production of Sustainable Aviation Fuel (SAF) to decarbonize the aviation industry. To avoid conflicts of land usage, TotalEnergies is developing solutions based on primarily food industry waste and residues (used oils, animal fats). As of 2024, the Company increases the share of circular feedstocks to more than 75% to produce biofuels.

Biogas

Biogas, produced from the decomposition of organic waste, is a renewable gas. Injected into gas networks in the form of biomethane, it contributes to the partial decarbonization of natural gas uses. TotalEnergies' gross production capacity continued to increase in 2024, reaching 1.2 TWh/year eq. of biomethane. The Company now intends to pursue its development through growth, mainly in Europe and the United States.

Hydrogen

TotalEnergies is committed to reducing the carbon footprint associated with the production, transformation and supply of energy to its customers. One of the levers identified by the company is the use of low-carbon hydrogen to decarbonize its European refineries, which would reduce their direct CO_2 emissions by up to three million tons a year by 2030.

In September 2023, TotalEnergies launched a call for tenders to use up to 500 kt/year of low-carbon hydrogen in its European refineries from 2030.

b. Focus Sustainable Aviation Fuel (SAF)

Today, there are different technological routes for making SAF from bio feedstocks. Our approach is to maximize CO_2 abatement based on the cost merit curve and the maturity of the different technologies.

TotalEnergies intends to become a major player in the production of SAF (Sustainable Aviation Fuel), with a target of 1.5 Mt/year by 2030.

This production is either operational or currently being developed on our existing platforms in Europe, the Middle East and Asia, notably Grandpuits, Normandie, La Mède, Anvers, Leuna and SATORP.

- **Grandpuits:** The biorefinery is scheduled to come on stream in 2026. It plans to process 420 kt/year of feedstock, mainly waste and residues, to produce up to 210 kt/year of SAF. In 2022, TotalEnergies has joined forces with SARIA (European leader in the collection and valorization of organic materials into sustainable products) to guarantee the supply of lipidic feedstock.
- **Normandy:** TotalEnergies plans to increase SAF production from 60 kt/ year in 2025 to 160 kt/year before 2030 by the coprocessing of HVO biodiesel produced on its La Mède platform.
- **La Mède:** Since 2022, biodiesel produced at La Mède has already been used to produce SAF at the TotalEnergies plant in Oudalle, near Le Havre. In 2024, TotalEnergies continued to invest in the site, so as to be able to process up to 100% waste from the circular economy (used oils and animal fats) and will produce locally 14 kt/year of SAF by 2025.
- **SATORP:** For the first time in the Middle East, SATORP has succeeded in co-processing used cooking oil to produce a fuel that meets all the quality criteria of the SAF ISCC+ certified specifications.

(1) Refer to the glossary for definitions and additional information on alternative performance measures (APM, Non-GAAP measures) and to point 1.9 for reconciliation tables.
(2) According to the European Directive 2018/2001 named RED II.

- **Partnerships**

In China, TotalEnergies strengthens its partnership with Sinopec and aims for the development of SAF production of around 230 kt/year.

Beyond the SAF currently produced from used cooking oil, our mission is to prepare the next generation of aviation fuels, such as e-SAF.

Together with Masdar, the UAE Civil Aviation Authority, Airbus, Falcon Aviation Services and Axens, TotalEnergies has demonstrated the potential for converting methanol into SAF. Based on the use of renewable electricity, it could enable the production of e-SAF from CO_2 converted into methanol.

c. Innovating to accelerate the energy transition

Each year, TotalEnergies spends more than $1 billion[1] to R&D and innovation and mobilizes more than 3,500 employees.

R&D at TotalEnergies

In 2024, 68% of our R&D budget was devoted to new energies (renewable electricity, low-carbon molecules), batteries and reducing our environmental footprint (methane, CCUS, reducing energy consumption, water, biodiversity, etc.). This evolution of our research and innovation towards new low-carbon energy is at the core of TotalEnergies' transition.

The creation of the OneTech branch, in September 2021, illustrates the dynamic undertaken by General Management to mobilize teams and meet TotalEnergies' new challenges as part of its transition strategy.

OneTech's mission is to provide all the technical and R&D expertise TotalEnergies needs to implement its strategy.

One of the missions of the OneTech segment, is to provide low-carbon energy solutions, reduce CO_2 emissions and improve the energy efficiency of our projects right from the design stage and anticipate innovative technologies with our partners.

Leveraging digital technology to reduce our emissions

TotalEnergies' Digital Factory brings together around 300 developers, data scientists and other digital specialists with the objective to develop digital solutions to optimize our industrial assets (environmental impact, availability, costs) and support the Company's development in low-carbon energies.

TARGETS AND INDICATORS RELATED TO CLIMATE CHANGE

TotalEnergies has set targets and introduced a number of indicators to steer its performance.

The Company's climate targets include among others the following:

2030 targets worldwide (Scope 1+2)	In facts
– Reduce net GHG emissions (**Scope 1+2**) from operated facilities from 46 Mt CO_2e in 2015 to less than 37 Mt CO_2e by 2025. By 2030, the target is a reduction of 40% of net emissions[2] compared to 2015 for its operated activities, thus bringing them to between 25 Mt and 30 Mt CO_2e	– A reduction in GHG emissions (Scope 1+2) from operated facilities from 46 Mt CO_2e in 2015 to **34 Mt CO_2e** in 2024
– Reduce **methane emissions**[3] from operated facilities by 60% between 2020 and 2025, and by 80% between 2020 and 2030	– Methane emissions already reduced by **50%** between 2010 and 2020 and by **55%** between 2020 and 2024
– Reduce **methane emissions intensity**[4] below 0.1% of commercial gas produced at Upstream operated oil & gas facilities	– Methane intensity of **0.10%** for operated commercial gas produced at Upstream operated oil & gas facilities
– Reduce **routine flaring**[5] (Upstream oil & gas operations) to less than 0.1 Mm^3/d by 2025, with the goal of eliminating it by 2030	– **93%** reduction in routine flaring between 2010 and 2024

(1) R&D budget excluding Hutchinson.
(2) The calculation of net emissions takes into account nature-based carbon sinks projects from 2030.
(3) Excluding biogenic methane.
(4) Methane emissions intensity in relation to commercial gas produced, refer to definition in point 5.2.1.3 of chapter 5.
(5) Routine flaring, as defined by the working group of the Global Gas Flaring Reduction program within the framework of the World Bank's Zero Routine Flaring initiative. Excluding Irak.

Indicators related to climate change

GHG emissions - Scope 1+2		Operated domain 2024	2023	2022	2015
Scope 1 Direct GHG emissions	**Mt CO_2e**	**33**	**32**	**37**	**42**
Breakdown by segment					
Upstream oil & gas activities	Mt CO_2e	12	12	14	19
Integrated LNG, excluding upstream gas operations	Mt CO_2e	<1	<1	<1	–
Integrated Power	Mt CO_2e	7	6	9	–
Refining & Chemicals	Mt CO_2e	14	14	15	22
Marketing & Services	Mt CO_2e	<1	<1	<1	<1
Breakdown by geography					
Europe: EU 27 + Norway + UK + Switzerland	Mt CO_2e	18	19	23	22
Eurasia (incl. Russia)/Oceania	Mt CO_2e	<1	<1	<1	5
Africa	Mt CO_2e	7	8	9	12
Americas	Mt CO_2e	7	5	5	4
Breakdown by type of gas					
CO_2	Mt CO_2e	32	31	36	39
CH_4	Mt CO_2e	1	1	1	2
N_2O	Mt CO_2e	<1	<1	<1	<1
Scope 2 Indirect emissions from energy use	**Mt CO_2e**	**1**	**2**	**2**	**4**
of which Europe: EU 27 + Norway + UK + Switzerland	*Mt CO_2e*	*1*	*1*	*1*	*2*
Scope 1+2	**Mt CO_2e**	**34**	**35**	**40**	**46**
of which oil & gas facilities	*Mt CO_2e*	29	*30*	*33*	*46*
of which CCGT	*Mt CO_2e*	5	4	*7*	–

GHG emissions - methane		Operated domain 2024	2023	2022	2015
Methane emissions[a]	kt CH_4	29	34	42	94
Breakdown by segment					
Upstream oil & gas activities	kt CH_4	27	33	41	92
Integrated LNG, excluding upstream gas operations	kt CH_4	<1	<1	0	0
Integrated Power	kt CH_4	<1	<1	1	0
Refining & Chemicals	kt CH_4	1	1	1	1
Marketing & Services	kt CH_4	0	0	0	0
Breakdown by geography					
Europe: EU 27 + Norway + UK + Switzerland	kt CH_4	5	5	7	9
Eurasia (incl. Russia)/Oceania	kt CH_4	3	1	1	33
Africa	kt CH_4	16	18	23	49
Americas	kt CH_4	5	9	12	3

(a) Excluding biogenic methane emissions.

Intensity indicators		2024	2023	2022	2015
Intensity of GHG emissions (Scope 1+2) of operated Upstream oil & gas activities[a]	kg CO_2e/boe	17	17	17	21
Intensity of methane emissions from operated oil & gas facilities (Upstream)	%	0.10	0.11	0.11	0.23

(a) This indicator doesn't include integrated LNG assets in its perimeter.

Other indicators		2024	2023	2022	2015
Net primary energy consumption (operated perimeter)	TWh	156	157	166	153
Renewable energy consumption (operated perimeter)	TWh	4	2	1	–
Flared gas[a] (Upstream oil & gas operations)	Mm^3/d	2.5	2.5	3.3	7.2
of which routine flaring	*Mm^3/d*	*0.5*	*0.3*	*0.5*	*2.3[b]*

(a) This indicator includes safety flaring, routine flaring and non-routine flaring.
(b) Volumes estimated upon historical data.

3.6.8.5 Suppliers

SUPPLIER ASSESSMENT

The Supplier assessment process

The Company set itself the objective of assessing its 1,300 priority Suppliers by the end of 2025, on their sustainable development performance (including respect of human rights, working conditions and environment), via documentary and/or on-site audits carried out by independent third parties.

Since 2023, 76% of the 1,300 priority Suppliers were assessed via documentary audits (EcoVadis) and on-site audits.

Supplier evaluation via documentary audits

TotalEnergies joined forces with EcoVadis since 2023 to evaluate its priority Suppliers in terms of sustainable development. EcoVadis carries out a documentary assessment to assess the maturity and performance of Suppliers in terms of the environment, human rights, ethics and responsible purchasing. Each company is evaluated by independent analysts on essential issues depending on its size, location and business segment. The EcoVadis rating may be shared by the Supplier with its other customers. It also gives rise to an improvement plan.

In 2024, 391 Suppliers were evaluated via EcoVadis or similar. 95% of them obtained a score above 45/100, a score beyond which EcoVadis considers that the supplier is "committed to CSR", and the average score is 65/100.

Supplier assessment via on-site audits

Introduced in 2016 and expanded in 2022, these audits, conducted by an independent third party, include a site visit, a document review and interviews with workers covering aspects of human rights (such as forced labor, child labor, working conditions, health and safety), environment (such as pollution, waste management, water, biodiversity) and climate.

The Company set itself the objective of evaluating 300 Suppliers via these on-site audits in 2023 and this objective was achieved. In total, since 2016, the Company has audited 740 priority Suppliers in more than 86 countries, covering more than 230,000 people.

The Company achieved its target of auditing 300 suppliers on site in 2024. In total, since 2023, the Company has audited 600 priority suppliers in more than 60 countries.

The Company ensures that its Suppliers are committed to a process of continuous progress. Thus, in the event of a deficiency observed during the on-site audit, a Supplier must put in place an action plan, followed by the TotalEnergies teams and whose effectiveness is verified by an independent external service provider.

Among the 600 Suppliers audited since 2023, 171 more than 260 of them have implemented verified improvements concerning, among other things, hazardous waste management, access to grievance mechanism and overtime pay.

Other initiatives

Workers's voice tool

Aware of the importance of respecting working conditions on the sites of major construction projects, TotalEnergies has tested an innovative complementary approach to the already existing audit and complaint reporting systems. In 2023, the Company implemented a pilot "workers' voice survey" within two of its large industrial projects: Tilenga in Uganda and EACOP in Tanzania. This pilot aims to directly interview workers of tier-one Suppliers to via their mobile phones in order to collect information on respect for human rights and working conditions on site. The percentage of workers participating to the recruitment survey since 2023 varied between 79% and 100% depending on the sites. Worker participation is voluntary and anonymous. Among workers volunteering to participate in the system, the response rate to regular surveys varies from 44% to 72%. TotalEnergies shares the results of these surveys with Suppliers who are required to propose action plans.

Minerals

The origin, extraction and refining conditions and the use of certain minerals, ores and raw materials are the subject of particular attention, given the potential risks to human rights and the environment. In 2022, TotalEnergies conducted an internal study to identify the Company's priorities in this area. This study, based on a materiality analysis and a risk analysis, identified three priorities: cobalt, polysilicon and conflict minerals (gold, tungsten, tin and tantalum).

- Cobalt: since cobalt can be used in the manufacture of certain batteries, Saft Groupe (Saft) has been conducting an annual campaign since 2021 to collect information from its Suppliers. Saft relies on the Extended Minerals Reporting Template (EMRT) provided by the Responsible Minerals Initiative® (RMI®) to identify the processing units in its supply chain and the country of origin of the cobalt ores. Based on the results and using the RMI® database, Saft verifies whether its cobalt supply chains include suppliers at risk in terms of human rights and environment. Where necessary, specific actions are taken to mitigate or cancel these risks. As part of a progress-led approach, since 2023, Saft has been a member of the Cobalt Institute, the global association representing cobalt producers and users. The main objective of the Cobalt Institute is to ensure that cobalt is produced and used ethically and in a sustainable manner, while meeting the needs of industry and society.
- Polysilicon: polysilicon is used in the manufacture of solar panels. TotalEnergies Global Procurement carries out traceability audits upstream of the Supplier's selection or commissions an independent third party to conduct them. TotalEnergies has joined a pool of US developers who jointly commission and share traceability audits.
- Conflict minerals: pursuant to Rule 13p-1 of the U.S. Securities Exchange Act of 1934, as amended, which implemented certain provisions of the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010, since 2014, TotalEnergies has filed with the United States Securities and Exchange Commission (SEC) an annual document relating to "minerals from conflict zones" sourced from the Democratic Republic of the Congo or neighboring countries. This document indicates whether, during the preceding calendar year, any such minerals were necessary for the operation or for the production of a product manufactured by TotalEnergies SE or one of its consolidated companies or contracted by TotalEnergies SE or one of its consolidated companies to be manufactured. The purpose of this regulation is to prevent the direct or indirect funding of armed groups in central Africa. For more information, please refer to TotalEnergies' most recent publication, available on the TotalEnergies website or sec.gov.

As conflict minerals may potentially be present in the electrical and electronic components used in battery manufacturing, Saft Groupe conducts an annual campaign to collect information from its Suppliers. Saft Groupe relies on the Conflict Minerals Reporting Template (CMRT) provided by the Responsible Minerals Initiative® (RMI®) to determine the presence of conflict minerals in its supply chain and to identify the processing units for these minerals that are likely to participate in it and the country of origin of the ores. Saft Groupe became a member of the RMI in 2022.

In 2024, Saft also launched a campaign to collect information from suppliers in its supply chain for cadmium, aluminum, copper, silver, nickel, lithium, graphite and manganese, using the Additional Mineral Template (AMRT) of the RMI®.

MITIGATION AND PREVENTIVE ACTIONS

The training of buyers and the awareness raising and mobilization of Suppliers for a responsible purchasing approach are among the axes of TotalEnergies' Sustainable Procurement program.

Training of buyers

TotalEnergies has set up a number of channels of communication to raise employees' awareness of risks and concerns relating to its supply chain. Training modules explaining the Company's ethical commitments and the Fundamental Principles of Purchasing have been developed for and made available to buyers of the Company. In addition to training buyers, numerous awareness-raising initiatives are regularly carried out in order to strengthen the responsible purchasing culture within the Company.

Buyers are the first players in the sustainable procurement process, with their internal contacts as well as with the Company's Suppliers. A dedicated training mandatory for all new entrant to the role has been in place since 2022.

At the end of 2024, 65% of TotalEnergies purchasing function employees were trained in sustainable procurement.

In addition to training, awareness-raising initiatives are regularly carried out among Company's buyers in order to strengthen the sustainable procurement culture (themed webinars, newsletters).

Awareness-raising and training of Suppliers

The Company regularly conducts awareness-raising actions with its Suppliers on the responsible procurement approach, particularly on respect for human rights, the protection of workers' health and safety and the preservation of the environment. In 2024, the Company organized supplier days, which were an opportunity to raise awareness among stakeholders regarding sustainability issues, notably in China. The Company has also raised awareness among its Suppliers through training sessions entirely dedicated to sustainable development, such as the one organized in 2024 in Angola.

In order to support its Suppliers in improving their practices, the Company also published in May 2022 a Practical Guide on Human Rights at Work for Suppliers, accessible on the TotalEnergies website(sustainable development section).

The Company also organizes a Suppliers Day every two years, the last having been organized in November 2024. The event brought together approximatively 180 representatives of the Company's Suppliers. The Chairman and CEO and two members of the Executive Committee intervened and underlined the Company's ambition as well as the commitment expected from Suppliers in terms of sustainable development. This event was the opportunity to award a Sustainability Award to one of the Company's Suppliers.

Progress with other companies

In December 2018, the Company committed to pursuing its efforts with regard to decent work and respect for human rights in its supply chain by signing six commitments contained in the United Nations Global Compact, and, in this context, participates in certain webinars.

WHISTLEBLOWING MECHANISMS

An email address (mediation.fournisseurs@totalenergies.com) available on TotalEnergies' website allows the Company's suppliers to contact the dedicated internal mediator. It's mission is to facilitate relations between the Company and its French and international suppliers. The general purchasing terms and conditions also mention the possibility of using mediation.

MONITORING PROCEDURES

TotalEnergies Global Procurement is responsible for raising awareness among those involved in procurement, both internally and externally, and for steering the Sustainable Procurement program. The implementation of this program, adopted by the Executive Committee, is monitored in particular by the Company's management bodies.

4

Report on corporate governance

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The information set out in this chapter forms the Board of Directors' report on corporate governance, produced pursuant to Article L. 225-37 of the French Commercial Code. This report was prepared on the basis of the deliberations of the Board of Directors, and with the assistance of several of the Corporation's corporate functional divisions, including in particular the Strategy & Sustainability, Finance and People & Social Engagement Departments. After the sections relevant to their respective duties were reviewed by the Governance and Ethics Committee and the Compensation Committee, the report was approved by the Board of Directors.

4.1 Administration and management bodies

4.1.1 Composition of the Board of Directors

As of March 19, 2025

14
directors

1
Lead Independent Director

82%
independent directors[a]

5.9 years
Average length of service on the Board


of women[b]

7
nationalities represented

(a) Excluding the director representing employee shareholders and the directors representing employees, in accordance with the recommendations of the AFEP-MEDEF Code (point 10.3). For more information, refer to point 4.1.1.4.
(b) Excluding the directors representing employees in accordance with Article L. 225-27-1 of the French Commercial Code and the director representing employee shareholders in accordance with Articles L. 225-23 and L. 22-10-5 of the French Commercial Code.

The Corporation is administered by a Board of Directors whose 14 members include a director representing employee shareholders elected on the proposal of the shareholders specified in Article L. 225-102 of the French Commercial Code, in accordance with the provisions of Articles L. 225-23 and L. 22-10-5 of the French Commercial Code (hereafter referred to as the "director representing employee shareholders"), and two directors representing employees appointed in accordance with the provisions of Article L. 225-27-1 of the French Commercial Code and the Corporation's Articles of Association (the first appointed by the Central Social and Economic Works Council of the Upstream Global Services UES Amont – Global Services – Holding and the second appointed by the SE Committee, known as "TotalEnergies European Works Council").

Mr. Patrick Pouyanné is the Chairman and Chief Executive Officer of TotalEnergies SE. He has served as Chairman of the Board of Directors since December 19, 2015, the date on which the functions of Chairman of the Board of Directors and Chief Executive Officer of the Corporation were combined (refer to point 4.1.5.1).

A Lead Independent Director is in place. His duties are specified in the Rules of Procedure of the Board of Directors (refer to point 4.1.2.1).

Directors are appointed for a three-year period (Article 11 of the Corporation's Articles of Association)[1]. The terms of office of the members of the Board are staggered to space more evenly the renewal of appointments and to ensure the continuity of the work of the Board of Directors and its Committees, in accordance with the recommendations of the AFEP-MEDEF Code, which the Corporation refers to.

The profiles, experience and expertise of the directors are detailed in the biographies hereafter.

CHANGES THAT OCCURRED WITHIN THE MEMBERSHIP OF THE BOARD OF DIRECTORS AND COMMITTEES DURING FISCAL YEAR 2024

Appendix 3 of the AFEP-MEDEF Code – Situation as of March 19, 2025

	Departure	Appointment/designation	Reappointment
Board of Directors			
05/24/2024	Anne-Marie Idrac	Marie-Ange Debon	Patrick Pouyanné
			Jacques Aschenbroich
			Glenn Hubbard
Governance and Ethics Committee			
05/24/2024	Anne-Marie Idrac		
Compensation Committee			
05/24/2024	Anne-Marie Idrac	Dierk Paskert	
Strategy & CSR Committee			
05/24/2024	Anne-Marie Idrac	Anelise Lara	

(1) The Articles of Association also contain specific provisions concerning the terms of office of directors representing employees, taking into account the method of their appointment.

OVERVIEW OF THE BOARD OF DIRECTORS AS OF MARCH 19, 2025

Appendix 3 of the AFEP-MEDEF Code

	Personal information				Experience		Position on the Board			Participation in Board Committees
As of March 19, 2025	Age	Sex	Nationality	Number of shares[a]	Number of directorships[b]	Independence[c]	Initial date of appointment	Term of office expires	Length of service on the Board	
Patrick Pouyanné *Chairman and Chief Executive Officer*	61	M		493,495	1	x	2015	2027	10	
Jacques Aschenbroich *Lead Independent Director*	70	M		1,000	2		2021	2027	4	
Marie-Christine Coisne-Roquette	68	F		5,800	1	x	2011	2026	14	
Lise Croteau	64	F		1,100[d]	2		2019	2025	6	
Mark Cutifani	66	M		2,000	0		2017	2026	8	
Marie-Ange Debon	59	F		1,574	1		2024	2027	1	
Romain Garcia-Ivaldi *Director representing employees*	36	M		178	0	n/a	2020	2026	5	
Maria van der Hoeven	75	F		1,800	0		2016	2025	9	
Glenn Hubbard	66	M		1,000	1		2021	2027	4	
Emma de Jonge *Director representing employee shareholders*	61	F		1	0	n/a	2022	2025	3	
Anelise Lara	63	F		1,000	0		2023	2026	2	
Jean Lemierre	74	M		1,042	1		2016	2025	9	
Dierk Paskert	63	M		1,200	0		2023	2026	2	
Angel Pobo *Director representing employees*	55	M		781	0	n/a	2020	2026	5	

(a) As of December 31, 2024.
(b) Number of directorships held by the director at listed companies outside his or her group, including foreign companies, assessed in accordance with the recommendations of the AFEP-MEDEF Code, point 20 (refer to point 4.1.1.3).
(c) As of December 31, 2024.
(d) 100 TotalEnergies SE shares and 1,000 TotalEnergies SE ADS.

As of March 19, 2025

Audit Committee

5 members
75% independent members[a]

Maria van der Hoeven*
Marie-Christine Coisne-Roquette
Lise Croteau**
Romain Garcia-Ivaldi[b]
Glenn Hubbard

Governance and Ethics Committee

4 members
75% independent members

Jacques Aschenbroich*
Marie-Christine Coisne-Roquette
Mark Cutifani
Jean Lemierre

Compensation Committee

4 members
100% independent members[a]

Mark Cutifani*
Jacques Aschenbroich
Dierk Paskert
Angel Pobo[c]

Strategy & CSR Committee

6 members
60% independent members[a]

Patrick Pouyanné*
Jacques Aschenbroich
Marie-Christine Coisne-Roquette
Emma de Jonge[c]
Anelise Lara
Jean Lemierre

(a) Excluding the director representing employee shareholders and the directors representing employees, in accordance with the recommendations of the AFEP-MEDEF Code (point 10.3).
(b) Director representing employees.
(c) Director representing employee shareholders.
* Chair of the Committee.
** Financial expert.

RENEWAL OF DIRECTORSHIPS AND APPOINTMENTS PROPOSED TO THE SHAREHOLDERS' MEETING TO BE HELD ON MAY 23, 2025

The directorships of Ms. Lise Croteau, Ms. Maria van der Hoeven as well as of Mr. Jean Lemierre expire at the end of the Annual Ordinary Shareholders' Meeting on May 23, 2025.

Renewal of a directorship

At its meeting on March 19, 2025, the Board of Directors, upon the proposal of the Governance and Ethics Committee, decided to submit to the Annual Shareholders' Meeting to be held on May 23, 2025, the renewal of the directorship of Ms. Lise Croteau, for a three-year term, which will expire at the end of the Annual Shareholders' Meeting to be held in 2028 to approve the 2027 financial statements.

Ms. Lise Croteau, a Canadian national, has been a director of TotalEnergies SE since May 29, 2019. After being Executive Vice President and Chief Financial Officer of Hydro-Québec, one of the world's largest producers of hydroelectricity, Ms. Lise Croteau provides the Board of Directors and its Audit Committee where she is an independent director with the benefit of her financial expertise and her skills and her knowledge in terms of renewables and risk management, particularly related to climate change. Since 2018, she has been a director of Boralex, a Canadian leader in renewable energies, and since June 2019, a director of Québecor inc.

Given the governance practice of the Company's Board of Directors under which a director must not reach the age of 75 during his or her term of office, Ms. Maria van der Hoeven and Mr. Jean Lemierre did not request the renewal of their directorships.

The Board of Directors warmly thanked Ms. Maria van der Hoeven for her exceptional contribution, as she shared her knowledge of the global energy economy, the challenges of the energy transition and the associated geopolitical issues with the Board for almost 10 years. In her capacity as Chairwoman of the Audit Committee since 2021, Maria van der Hoeven has notably overseen this committee's work on taking account of regulatory developments in extra-financial reporting.

The Board of Directors also wished especially to thank Mr. Jean Lemierre, who throughout his term of office gave the Board the benefit of his long experience of the financial world, both in France and internationally, as well as of the governance of major French companies. His advices were valuable to the work of the Board and its committees, notably the Governance and Ethics Committee and the Strategy & CSR Committee.

Proposed appointment of directors

The Board of Directors, at its meeting on March 19, 2025, decided, on the proposal of the Governance and Ethics Committee, to submit to the Annual Shareholders' Meeting on May 23, 2025 the appointment of **Ms. Helen Lee Bouygues** and of Mr. Mignon as directors for a three-year term, expiring at the end of the Annual Shareholders' Meeting to be held in 2028 to approve the 2027 financial statements.

Of Korean origin, of American and French nationalities, and residing in France, **Ms. Helen Lee Bouygues** holds a Bachelor of Arts, magna cum laude, from Princeton University in Political Science and a Master in Business Administration from Harvard Business School. An American national, she has been residing in France since 2004.

For over 25 years, she has been supporting the strategic transformation of leading French and international companies. Ms. Helen Lee Bouygues began her career in 1995 at J.P. Morgan, as partner in M&A at New York and Hong Kong. In 1997, she was appointed Director of Development at Pathnet, a telecommunications service provider based in Washington DC, then joined Cogent Communications in 2000, where she held the positions of Treasurer, Chief Operating Officer, and Chief Financial Officer until 2004. Helen Lee Bouygues was then appointed partner at Alvarez & Marsal in Paris, that she left in 2010 to create her own consulting firm. She sold it in 2014 to McKinsey & Company, where she became a partner in charge of the Recovery and Transformation Services division. Ms. Helen Lee Bouygues has been *Operating Partner* within the *private equity* fund Ardian since 2024.

Ms. Helen Lee Bouygues was a director of numerous companies, holding various chair positions on board committees, particularly in the energy sector (Lead Independent Director of Neoen SA until March 20, 2025, director of CGG (now Viridien SA) until 2024). Ms. Helen Lee Bouygues will bring to the Board her financial and strategic expertise and her extensive knowledge of the various challenges faced by businesses.

Mr. Laurent Mignon, a French national, a graduate from HEC and from the Executive Program at Stanford, has been Chairman of the Executive Board (*Président du Directoire*) of Wendel since December 2, 2022 and Chairman of the Board of Directors of Bureau Veritas, a company that Wendel controls and fully consolidates.

From 1986 to 1996, Mr. Laurent Mignon worked for Indosuez bank before joining Schroders in London, and then AGF (Assurances Générales de France) in 1997 as Chief Financial Officer, than Vice Chief Executive Officer in 2002 and Chief Executive Officer in 2006. From 2007 to 2009, he was Managing Partner at Oddo & Cie. From 2009 to 2022, Mr. Laurent Mignon carried out his functions within Groupe BPCE where he was Chief Executive Officer of Natixis and member of the Executive Board of BPCE from 2009 to May 2018, and Chairman of the Executive Board (*Président du Directoire*) of Groupe BPCE from May 2018 to December 2022, as well as Chairman of the Board of Directors of Natixis.

Mr. Laurent Mignon will bring to the Board his leading expertise in the banking and financial sector and the wealth of his experience in investments and general management of listed companies. Throughout his career, he has successfully led the transformation and development of the companies he has managed, with a constant desire to create sustainable value.

The Governance and Ethics Committee has examined the situation of Mr. Laurent Mignon with regard to his mandates as Chairman of the Executive Board (*Président du Directoire*) of Wendel, as Chairman of the Board of Directors of Bureau Veritas and Board member of LVMH. It noted that Wendel is an investment company whose main purpose is to acquire and manage interests in companies. Wendel holds a controlling interest in Bureau Veritas and fully consolidates it. As a result, the number of directorships of Mr. Laurent Mignon in listed companies is compliant with the Afep-Medef Code, which the Company refers to. Indeed, within the meaning of the Afep-Medef Code, if he is appointed by the Shareholders' Meeting of TotalEnergies, Laurent Mignon will hold two mandates of directors outside the activity of the Wendel company, the directorship in LVMH and the one in TotalEnergies.

Beyond the compliance to the Afep-Medef Code, the Governance and Ethics Committee has furthermore considered that Mr. Laurent Mignon, in particular with regard to the commitment he has made in this respect to the Governance and Ethics Committee, had the necessary availability to participate regularly and actively in the work of the Board of Directors and, where applicable its Committees.

Appointment of the director representing employee shareholders

The directorship of Ms. Emma de Jonge, director representing employee shareholders, expires at the end of the Annual Ordinary Shareholders' Meeting on May 23, 2025. The Board of Directors thanked Emma de Jonge for her active contribution to the work of the Board.

The Shareholders' Meeting on May 23, 2025 will be called on to appoint the new director representing employee shareholders from the two candidates for the position of director representing employee shareholders to the Board of Directors of TotalEnergies SE. The two candidates are the following:

- **Ms. Valérie Della Puppa-Tibi**, a French national, was designated by the Supervisory Board of the collective investments fund (FCPE) TotalEnergies Actionnariat France at the Supervisory Board meeting on November 28, 2024;
- **Ms. Hazel Clinton Fowler**, a British national, was designated by the Supervisory Board of the collective investments fund (FCPE) TotalEnergies Actionnariat International Capitalisation at the Supervisory Board meeting on December 5, 2024.

In accordance with Article 11 of the Corporation's Articles of Association, on the proposal of the Governance and Ethics Committee, the Board of Directors, at its meeting on March 19, 2025, placed on the agenda of the Shareholders' Meeting on May 23, 2025, the resolutions adopted by the Board of Directors and approved the first candidate.

After the candidates had been interviewed by the Chairman of the Governance and Ethics Committee, your Board of Directors decided to approve the candidacy of **Valérie Della Puppa-Tibi**, nominated by the Supervisory Board of the TotalEnergies Actionnariat France collective investments fund.

In fact, her candidacy is presented by the collective investments fund (FCPE) TotalEnergies Actionnariat France (TAF), i.e., the largest employee shareholding fund in terms of share of capital held (4.82% of the Corporation's capital as of December 31, 2024 compared to 1.76% of the capital for the collective investments fund (FCPE) TotalEnergies Actionnariat International Capitalisation (TAIC)). In addition, Ms. Valérie Della Puppa-Tibi was already a member of the Board of Directors from 2019 to 2022 and will therefore immediately be able to contribute fully to the work of the Board.

The candidate for the position of director representing employee shareholders who receives the highest number of votes from the shareholders present or represented at the Ordinary Shareholders' Meeting will be designated as the director representing employee shareholders.

At the end of the Shareholders' Meeting on May 23, 2025, if the proposed and agreed resolutions are approved, the Board of Directors will be composed of 14 members, including 8 French nationals and 6 non-French nationals. The proportion of independent directors in the meaning of the Afep-Medef Code will be 82%, which is at the level of the best standards, and the proportions of women and men, calculated excluding directors representing employees or employee shareholders, will be respectively 45.5% and 54.5%.

The Board of Directors points out that the directors of TotalEnergies SE have different profiles. They are present, active and involved in the work of the Board of Directors and the Committees in which they participate. The complementarity of their professional experience and their skills are all assets for the quality of the deliberations of the Board of Directors in the context of the decisions it is called upon to make.

4.1.1.1 Profiles, experience and expertise of the directors (information as of December 31, 2024)[1]



Patrick Pouyanné

Chairman and Chief Executive Officer of TotalEnergies SE*

Chairman of the Strategy & CSR Committee

Born on June 24, 1963 (French)

Director of TotalEnergies SE since the Annual Shareholders' Meeting on May 29, 2015
Last reappointment: Annual Shareholders' Meeting on May 24, 2024
End of current term: 2027 Annual Shareholders' Meeting

Number of TotalEnergies shares held: 493,495
Number of TotalEnergies Actionnariat France collective investment fund units held: 13,876.3661 (as of December 31, 2024)

Business address: TotalEnergies SE, 2 place Jean Millier, La Défense 6, 92400 Courbevoie, France

Main function: Chairman and Chief Executive Officer of TotalEnergies SE*

Biography & Professional Experience

A graduate of École Polytechnique and a Chief Engineer of France's Corps des Mines, Mr. Pouyanné held, between 1989 and 1996, various administrative positions in the Ministry of Industry and of Environment and other cabinet positions (technical advisor to the Prime Minister – Édouard Balladur – in the fields of the Environment and Industry from 1993 to 1995, Chief of staff for the Minister for Information and Aerospace Technologies – François Fillon – from 1995 to 1996). In January 1997, he joined TotalEnergies' Exploration & Production division, first as Chief Administrative Officer in Angola, before becoming Company representative in Qatar and President of the Exploration and Production subsidiary in that country in 1999. In August 2002, he was appointed President, Finance, Economy and IT for Exploration & Production. In January 2006, he became Senior Vice President, Strategy, Business Development and R&D in Exploration & Production and was appointed a member of the Company's Management Committee in May 2006. In March 2011, Mr. Pouyanné was appointed Deputy General Manager, Chemicals, and Deputy General Manager, Petrochemicals. In January 2012, he became President, Refining & Chemicals and a member of the Company's Executive Committee.

On October 22, 2014, he became Chief Executive Officer of TOTAL S.A. and Chairman of the Company's Executive Committee. On May 29, 2015, he was appointed by the Annual Shareholders' Meeting as director for a three-year term. The Board of Directors appointed him as Chairman of the Board of Directors as of December 19, 2015. Mr. Pouyanné thus became the Chairman and Chief Executive Officer. Following the renewal of Mr. Pouyanné's directorship at the Shareholders' Meeting on June 1, 2018 and then on May 28, 2021 for a three-year period, the Board of Directors renewed Mr. Pouyanné's term of office as Chairman and Chief Executive Officer for a period equal to that of his directorship.

Mr. Pouyanné is thus the Chairman and Chief Executive Officer of TotalEnergies SE.

On June 1, 2022, Mr. Pouyanné was appointed Chairman of the French association, Entreprises pour l'Environnement (EpE). Mr. Pouyanné has also been the Chairman of the Alliance pour l'Education – United Way association from June 2018 to January 29, 2025, having accepted this office as Chairman and Chief Executive Officer of the Corporation. In addition, he has been a member of the Board of Directors of Capgemini (since May 2017), of the Board of Directors of École Polytechnique (since September 2018), of the Institut du Monde Arabe (since 2017) and of the foundation La France s'engage (since 2017). Mr. Pouyanné is an Officer of the Légion d'honneur.

Directorships and functions held

Directorships held at any company during fiscal year 2024

Within the Company

- Chairman and Chief Executive Officer of TotalEnergies SE* and Chairman of the Strategy & CSR Committee

Outside the Company

- Director of Capgemini S.E.* (since May 2017), member of the Strategy and CSR Committee (until May 2022), member of the Ethics and Governance Committee and, since May 2022, Chairman of the Compensation Committee

Directorships that have expired in the previous five years

None

Other positions held during fiscal year 2024

- Chairman of the l'Association Alliance pour l'Education – United Way (from June 2018 to January 29, 2025)
- Chairman of the French business coalition Entreprises pour l'Environnement (EpE) (from June 1, 2022 to June 5, 2025)
- Member of the Board of Directors of École Polytechnique (a public scientific, cultural and professional establishment under French law) (since September 2018)
- Member of the Board of Directors of the Institut Polytechnique de Paris (until March 8, 2024)
- Member of the Board of Directors of AFEP (French Association of private companies) (since 2014)
- Member of the Board of Directors of the Institut du Monde Arabe (since 2017)
- Member of the Board of Directors of the La France s'engage foundation (since 2017)

(1) Including the information referred to in Articles L. 22-10-10 and L. 225-37-4 of the French Commercial Code, and point 12.1 of Annex I to Commission Delegated Regulation EU 2019/980 of March 14, 2019, supplementing Regulation (EU) 2017/1129 of the European Parliament and of the Council on the form, content, review and approval of the prospectus to be published when securities are offered to the public or admitted to trading on a regulated market.

* For information relating to the offices held by directors, companies marked with an asterisk are listed companies.



Jacques Aschenbroich

Independent director – Lead Independent Director

Chairman of the Governance and Ethics Committee
Member of the Compensation Committee
Member of the Strategy & CSR Committee

Born on June 3, 1954 (French)

Director of TotalEnergies SE since the Annual Shareholders' Meeting on May 28, 2021
Last reappointment: Annual Shareholders' Meeting on May 24, 2024
End of current term: 2027 Annual Shareholders' Meeting

Number of TotalEnergies shares held: 1,000 (as of December 31, 2024)

Business address: 111 quai du Président Roosevelt, 92130 Issy Les Moulineaux, France

Main function: Chairman of the Board of Directors of Orange*

Biography & Professional Experience

As an engineer graduate of the Corps des Mines, Mr. Jacques Aschenbroich held several positions in the French administration and served in the Prime Minister's office in 1987 and 1988. He then pursued an industrial career in the Saint-Gobain group from 1988 to 2008. After having managed subsidiaries in Brazil and Germany, he became Managing Director of the Flat Glass division of Compagnie de Saint-Gobain and went on to become Chairman of Saint-Gobain Vitrage in 1996.

As Senior Vice-President of Compagnie de Saint-Gobain from October 2001 to December 2008, he managed the flat glass and high-performance materials sectors as from January 2007 and, as the Vice-Chairman of Saint-Gobain Corporation and General Delegate to the United States and Canada, he directed the operations of the group in the United States as from September 1, 2007. He was also a director of Esso SAF until June 2009.

Mr. Jacques Aschenbroich was appointed Director and Chief Executive Officer of Valeo in March 2009 and then Chairman and Chief Executive Officer of Valeo, positions he held from February 2016 to January 26, 2022. Following the change in the Valeo Group's governance, he remained the Chairman of the Board of Directors of Valeo from January 26, 2022 until December 31, 2022, when Mr. Jacques Aschenbroich left the Chairmanship and the Board of Directors of Valeo.

In May 2022, Jacques Aschenbroich was appointed Chairman of the Board of Directors of Orange.

Directorships and functions held

Directorships held at any company during fiscal year 2024

- Chairman of the Board of Directors of Orange* since May 2022
- Director of TotalEnergies SE*, Lead Independent Director, chairman of the Governance and Ethics Committee, member of the Compensation Committee and member of the Strategy & CSR Committee
- Director of BNP Paribas*, Chairman of the Corporate Governance, Ethics, Nominations and CSR Committee, and member of the Financial Statements Committee

Directorships that have expired in the previous five years

- Chairman of the Board of Directors of Valeo* until December 31, 2022 and Chief Executive Officer of Valeo until January 26, 2022
- Director of Veolia Environnement*, Chairman of the Comité de recherche, innovation et développement durable and member of the Comité des comptes et de l'audit (until May 28, 2021)
- Chairman of Valeo Finance, Valeo S.p.A. (Italy) and Valeo (UK) Limited (United Kingdom)

Other positions held during fiscal year 2024

- Chairman of the Board of Directors of the Ecole nationale supérieure des mines ParisTech (until February 2024)
- Co-Chair of the Franco-Japanese Business Club
- Chairman of the French-American Foundation France (until January 2024)



Marie-Christine Coisne-Roquette

Director

Member of the Audit Committee
Member of the Governance and Ethics Committee
Member of the Strategy & CSR Committee

Born on November 4, 1956 (French)

Director of TotalEnergies SE since the Annual Shareholders' Meeting on May 13, 2011
Last reappointment: Annual Shareholders' Meeting on May 26, 2023
End of current term: 2026 Annual Shareholders' Meeting

Number of TotalEnergies shares held: 5,800 (as of December 31, 2024)

Business address: Sonepar, 25 rue d'Astorg, 75008 Paris, France

Main function: Chairwoman of the Board of Sonepar S.A.S. and Permanent Representative of Colam Entreprendre SAS

Biography & Professional Experience

Ms. Coisne-Roquette has a Bachelor's Degree in English. A lawyer by training, with a French Masters' in law and a Specialized Law Certificate from the New York bar, she started her career as an attorney in 1981 at the Paris and New York bars, as an associate of Cabinet Sonier & Associés in Paris. In 1984, she became a member of the Board of Directors of Colam Entreprendre, a family holding company that she joined full time in 1988. As Chairwoman of the Board of Colam Entreprendre and the Sonepar Supervisory Board, she consolidated family ownership, reorganized the group structures and strengthened its shareholding base to sustain the group's growth strategy. Chairwoman and Chief Executive Officer of Sonepar as of 2002, Marie-Christine Coisne-Roquette became Chairwoman of Sonepar S.A.S. in 2016. At the same time, she heads Colam Entreprendre as its Chairwoman and Chief Executive Officer. Formerly a member of the Young Presidents' Organization (YPO), she served on the Executive Committee of MEDEF (France's main employers' association) for 13 years and was Chairwoman of its Tax Commission from 2005 to 2013. She was a member of the Economic, Social and Environmental Council from 2013 and 2015 and is currently a director of TotalEnergies SE.

Directorships and functions held

Directorships held at any company during fiscal year 2024

Within the Sonepar group

- Chairwoman of Colam Entreprendre S.A.S. until April 30, 2024
- Permanent Representative of Colam Entreprendre S.A.S., Chairwoman of the Board of Sonepar S.A.S.
- Director of Sonepack SAS until May 2024
- Chairwoman of Sonepack SAS since May 2024
- Chairwoman of Développement Mobilier et Industriel (S.A.S.) until April 30, 2024
- Managing Partner of Ker Coro (société civile immobilière)

Outside the Sonepar group

- Director of TotalEnergies SE*, member of the Audit Committee, member of the Governance and Ethics Committee and of the Strategy & CSR Committee
- Director of EssilorLuxottica*

Directorships that have expired in the previous five years

- Chairwoman of Colam Entreprendre S.A.S. until April 30, 2024
- Director of Sonepack SAS until May 2024
- Chairwoman of Développement Mobilier et Industriel (S.A.S.) until April 30, 2024
- Chief Executive Office of Sonepack S.A.S. until mid-2020
- Chairwoman of CMI until June 2020
- Member of the Supervisory Board of Akuo Energy S.A.S. (until June 2020)

Other positions held during fiscal year 2024

- Director at the association FONDACT until March 2024
- Director at the Fondation Recherche Alzheimer
- Member of the Board of Directors of AFEP (French association of private companies)
- Vice Chair of the Board of Directors of the Association Nationale des Sociétés par Actions (ANSA)
- Member of the Bureau and director of MEDEF International
- Chairwoman of the Télémaque association since July 2024



Lise Croteau

Independent director

Member of the Audit Committee

Born on May 5, 1960 (Canadian)

Director of TotalEnergies SE since the Annual Shareholders' Meeting on May 29, 2019
Last reappointment: Annual Shareholders' Meeting on May 25, 2022
End of current term: Annual Shareholders' Meeting on May 23, 2025

Number of TotalEnergies shares held: 100
Number of TotalEnergies ADS held: 1,000 (as of December 31, 2024)

Business address: 580 Chemin de la Réserve, Mont-Tremblant, Québec, J8E 3L8, Canada

Main function: Independent director

Biography & Professional Experience

Ms. Croteau began her career in 1982 as an auditor within the audit firms, today Raymond Chabot Grant Thornton, then Deloitte, and she joined Hydro-Québec in 1986 where she held positions of control, of risk management and of financial management of increasing responsibility.

From 2015 to 2018, she held the position of Executive Vice President and Chief Financial Officer of Hydro-Québec prior to retiring.

A chartered professional accountant since 1984, Ms. Croteau holds a Bachelor's degree in Business Administration and in 2008 was named a Fellow of the Order of Chartered Professional Accountants of Québec in recognition of her contribution to the profession and for her collaboration in the development of Canadian accounting standards for derivatives.

Her functions within Hydro-Québec have enabled her in particular to develop significant expertise in risk management from 2008, as she has been in charge of risk management, responsible for the company's risk portfolio drawn up as part of the annual exercise of the company's long-term strategic planning. In this context, she had in particular to identify, quantify and monitor risk trends and means of mitigation.

Ms. Croteau was also in charge of market risk management activities, and "Middle Office" credit of Hydro-Québec's market activities for energy transactions on Northeast American markets, debt management and management of the company's employee pension fund.

Ms. Croteau has been an independent director of Boralex since 2018, the Chair of the Audit Committee since 2019 and a member of the Investment and Risk Management Committee since 2021. Boralex, listed in Toronto, is a Canadian leader in renewable energies with operations in wind, solar, hydroelectricity and storage. It also has operations in France, the United States and the United Kingdom.

Since June 2019, Ms. Croteau has been a director on the Boards of Québecor inc. and Québecor Média inc. as well as a member of the Human Resources and Corporate Governance Committee and of the Audit and Management Risks Committee since May 2022, when she was also appointed director of the Board of Directors of Vidéotron and member of the Audit and Management Risks Committee. Québecor is a Canadian leader in the telecommunications, entertainment, news media and culture fields.

Directorships and functions held

Directorships held at any company during fiscal year 2024

- Director of TotalEnergies SE* and member of the Audit Committee
- Director of Québecor inc.* since June 16, 2019, member of the Human Resources and Corporate Governance Committee and member of the Audit and Management Risks Committee since May 12, 2022; director of Québecor Média inc. since June 16, 2019, member of the Human Resources and Corporate Governance Committee and member of the Audit and Management Risks Committee since May 12, 2022 and director and member of the Audit and Management Risks Committee of Vidéotron (Québecor's wholly-owned subsidiary) since May 12, 2022
- Director of Boralex* since 2018, Chairwoman of the Audit Committee since 2019 and member of the Investment and Risk Management Committee since 2021

Directorships that have expired in the previous five years

None

Other positions held during fiscal year 2024

None



Mark Cutifani CBE

Independent director

Chairman of the Compensation Committee
Member of the Governance and Ethics Committee

Born on May 2, 1958 (Australian)

Director of TotalEnergies SE since the Annual Shareholders' Meeting on May 26, 2017
Last reappointment: Annual Shareholders' Meeting on May 26, 2023
End of current term: 2026 Annual Shareholders' Meeting

Number of TotalEnergies shares held: 2,000 (as of December 31, 2024)

Business address: Rex House, Level 7, 4-12 Regent Street, London SW1Y 4RG, United Kingdom

Main function: Director and Executive Business Advisor

Biography & Professional Experience

Mr. Cutifani is a Director and Executive Business Advisor after retiring from Anglo American plc. in June 2022. He has more than 47 years of experience in the mining industry in various parts of the world, covering a broad range of products. He was previously the Chief Executive Officer of AngloGold Ashanti Limited. Before joining AngloGold Ashanti, Mr. Cutifani was COO responsible for global nickel business at Vale. Prior to that, he held various management roles at Normandy Group, Sons of Gwalia, Western Mining Corporation, Kalgoorlie Consolidated Gold Mines and CRA (Rio Tinto).

Mr. Cutifani has a degree in Mining Engineering (with honors) from the University of Wollongong in Australia. He is a Fellow of the Royal Academy of Engineering, the Australasian Institute of Mining and Metallurgy and the Institute of Materials, Minerals and Mining in the United Kingdom.

Mr. Cutifani received an honorary doctorate from the University of Wollongong in Australia in 2013 and an honorary doctorate from Laurentian University in Canada in 2016. Mr. Cutifani is Commander of the Order of the British Empire (CBE).

Directorships and functions held

Directorships held at any company during fiscal year 2024

- Director of TotalEnergies SE*, Chairman of the Compensation Committee and member of the Governance and Ethics Committee
- Senior Independent Non-Executive Director – Laing O'Rourke (Private) since September 1, 2022
- Chair of Vale Base Metals since July 2023
- Non-Executive Director – Development Partner Institute since August 2022

Directorships that have expired in the previous five years

- Director and Chief Executive of Anglo American plc.* until April 19, 2022
- Non-executive director of Anglo American Platinum Limited until May 12, 2022
- Chairman of De Beers plc. until May 12, 2022
- Chairman of De Beers Investments plc. until May 12, 2022

Other positions held during fiscal year 2024

- Chairman of Board of Trustees – Power of Nutrition since July 2022
- Chair – International Advisory Committee for Global Foundation since July 2022
- Member of International Advisory Committee – AUSIMM since October 2022
- Advisor to Mevco since April 2023
- Advisor to ERM since July 2023
- Mentor for CMI since January 2022



Marie-Ange-Debon

Independent director

Born on May 18, 1965 (French)

Director of TotalEnergies SE since the Annual Shareholders' Meeting on May 24, 2024
End of current term: 2027 Annual Shareholders' Meeting

Number of TotalEnergies shares held: 1,574 (as of December 31, 2024)

Business address: 34 avenue Leonard de Vinci, Courbevoie, France

Main function: Executive Chair (Présidente du Directoire), Groupe Keolis

Biography & Professional Experience

Born in 1965, Marie-Ange Debon is graduate from the French Ecole des Hautes Etudes Commerciales (HEC) and from the French Ecole Nationale de l'Administration (ENA).

She has been Chairwoman of the Keolis Group Executive Board since August 2020. Prior to joining Keolis, she held a number of positions in both the public and private sectors: auditeur, then conseiller référendaire à la Cour des comptes from 1990 to 1994, then directrice générale adjointe at France 3 from 1994 to 1998. She then joined the Thomson/Technicolor group as Deputy CFO, before becoming General Secretary. In 2008, she joined the Suez group as General Secretary and became CEO of the International Division in 2013, then CEO for France from 2018 to 2020.

Directorships and functions held

Directorships held at any company during fiscal year 2024

Within the Keolis group:

- Executive Chair (Présidente du Directoire) of Groupe Keolis

Outside the Keolis group:

- Director of TotalEnergies SE* since May 24, 2024
- Director and Chairwoman of the Audit Committee of Technip Energies* until May 6, 2024
- Director and Chairwoman of the Audit and Accounts Committee of Arkema*

Directorships that have expired in the previous five years

- Director and Chairwoman of the Audit Committee of Technip Energies until May 6, 2024
- Director of La Française des jeux

Other positions held during fiscal year 2024

- Chairwoman of the UTPF (Union des transports publics et ferroviaires)
- Member of the bureau and director of MEDEF International



Romain Garcia-Ivaldi

Director representing employees

Member of the Audit Committee

Born on September 14, 1988 (French)

Director representing employees of TotalEnergies SE since June 9, 2020
Last reappointment (by the Central Social and Economic Works Council of the Corporation): February 28, 2023
End of current term: 2026 Annual Shareholders' Meeting

Number of TotalEnergies shares held: 178
Number of TotalEnergies Actionnariat France collective investment fund units held: 5,235.3646
(as of December 31, 2024)

Business address: TotalEnergies SE, 2 place Jean Millier, La Défense 6, 92400 Courbevoie, France

Main function: Employee at TotalEnergies Renewables

Biography & Professional Experience

An engineer and economist, graduate of ENSTA Paris and IFP School, Mr. Garcia-Ivaldi began his career at TotalEnergies in 2012 as an economist on oil and gas projects in Americas region between 2012 and 2015 and for new business between 2021 and 2024. Between 2015 and 2021, he was a reservoir engineer, serving in a variety of positions in Paris and Lagos (Nigeria). He is asset manager of offshore wind projects (inc. Seagreen) within TotalEnergies Renewables. He also obtained the "Certificat Administrateur de Sociétés" IFA-Sciences Po. He also completed the "Climate Change: Economics and Governance" training program at the London School of Economics.

Mr. Garcia-Ivaldi was chairman of the Supervisory Board of the TotalEnergies Actionnariat France and TotalEnergies France Capital+ employee shareholding funds from November 9, 2018 to June 17, 2020.

Directorships and functions held

Directorships held at any company during fiscal year 2024

- Director representing employees of TotalEnergies SE* and member of the Audit Committee

Other positions held during fiscal year 2024

None

Directorships that have expired in the previous five years

None



Maria van der Hoeven

Independent director

Chairwoman of the Audit Committee

Born on September 13, 1949 (Dutch)

Director of TotalEnergies SE since the Annual Shareholders' Meeting on May 24, 2016
Last reappointment: Annual Shareholders' Meeting on May 25, 2022
End of current term: Annual Shareholders' Meeting on May 23, 2025

Number of TotalEnergies shares held: 1,800 (as of December 31, 2024)

Business address: Sadatdomein 31, 6229 HC Maastricht, The Netherlands

Main function: Independent director

Biography & Professional Experience

Ms. van der Hoeven trained as a teacher, becoming a professor in economic sciences and administration then a school counselor. She subsequently headed the Adult Vocational Education Center in Maastricht for seven years, before leading the Limburg Technology Center. She was a member of the Dutch Parliament, served as Minister of Education, Culture and Science from 2002 to 2007, and was Minister of Economic Affairs of the Netherlands from 2007 to 2010. Ms. van der Hoeven was Executive Director of the International Energy Agency (IEA) from September 2011 to August 2015. During this period, she helped to increase the number of members of the Agency and emphasized the close link between climate and energy policy. In September 2015, Ms. van der Hoeven joined the Board of Trustees of Rocky Mountain Institute (USA) and in the spring of 2016, she became a member of the Supervisory Board of Innogy SE (Germany). Ms. van der Hoeven was Vice Chairwoman of the High-level Panel of the European Decarbonisation Pathways Initiative within the European Commission between 2016 and 2018. Since January 2020, she has been a member of the Supervisory Board of COVRA, a privately held Dutch company that serves as the central depository for radioactive waste in the Netherlands.

Directorships and functions held

Directorships held at any company during fiscal year 2024

- Director of TotalEnergies SE* and Chairwoman of the Audit Committee
- Member of the Supervisory Board of Covra since January 2020 (Netherlands)

Directorships that have expired in the previous five years

- Member of the Board of Trustees of Rocky Mountain Institute (USA) until October 30, 2021

Other positions held during fiscal year 2024

- Member of the EACLN, European Audit Committee Leaders Network, since August 2021
- Member of the Supervisory Board of Erasmus Entreprise (Netherlands) since June 2021 until 2024
- Special Advisor on energy literacy to the Secretary General of World Energy Council (WEC) since May 2021
- Member of the Board of Leaders pour la Paix (France) since January 2019
- Member of the International Advisory Panel on Energy in Singapore since January 2019
- Senior fellow in CIEP (Center for International Energy Policies) (Netherlands)



Glenn Hubbard

Independent director

Member of the Audit Committee

Born on September 4, 1958 (American)

Director of TotalEnergies SE since the Annual Shareholders' Meeting on May 28, 2021
Last reappointment: Annual Shareholders' Meeting on May 24, 2024
End of current term: 2027 Annual Shareholders' Meeting

Number of TotalEnergies shares held: 1,000 (as of December 31, 2024)

Business address: 572 Kravis Hall, 665 West 130th Street, New York, NY 10027, United States

Main function: Russell L. Carson Professor of Finance and Economics, Columbia University and Chairman of the Board, MetLife, Inc.

Biography & Professional Experience

Mr. Glenn Hubbard obtained in 1983 a PhD in Economics at Harvard University. After graduation, he joined Northwestern University as Assistant Professor of Economics, where he stayed for five years. In 1988 he joined Columbia University, where he continues to teach today. Since then, he has been a visiting professor at Harvard's Kennedy School of Government and Harvard Business School as well as The University of Chicago. In 1991, Glenn Hubbard was appointed Deputy Assistant Secretary for Tax Policy at the United States Department of the Treasury. In 1993, he joined the Federal Reserve Bank of New York's Panel of Economic Advisors, a position he vacated in 2001 when he became Chairman of the United States Council of Economic Advisers (CEA). He also served as Chair of the Economic Policy Committee of the Organization for Economic Cooperation and Development (OECD) as well as a Member of the White House National Economic Council, National Security Council, and the President's Council on Science and Technology. He stepped down as Chair of the CEA in 2003, returning to Columbia University. In 2007, he also rejoined the Panel of Economic Advisors for the Federal Reserve Bank of New York, a position he maintained for 10 years. In 2004, he joined the Boards of Dex Media, KKR Financial Corporation, and Automatic Data Processing (ADP), positions he held for many years. In 2004, he was named Dean Emeritus of Columbia Business School (Columbia University's graduate school of business), keeping this position until 2019. In 2007, Glenn Hubbard joined the Board of MetLife, Inc. where he continues to serve today after being named Lead Independent Director in 2017 and Chairman in 2019.

Directorships and functions held

Directorships held at any company during fiscal year 2024

- Chairman of the Board of MetLife, Inc.*
- Director of BlackRock Fixed Income Funds
- Director of TotalEnergies SE* and member of the Audit Committee

Directorships that have expired in the previous five years

- Director of Automatic Data Processing until November 2020

Other positions held during fiscal year 2024

- Russell L. Carson Professor of Finance and Economics, Columbia University
- Co-Chair, Committee on Capital markets Regulation
- Board Member of Resources for the Future



Emma de Jonge

Director representing employee shareholders

Member of the Strategy & CSR Committee

Born on March 20, 1963 (Dutch)

Director representing employee shareholders of TotalEnergies SE since the Annual Shareholders' Meeting on May 25, 2022
End of current term: Annual Shareholders' Meeting on May 23, 2025

Number of TotalEnergies shares held: 1
Number of TotalEnergies Actionnariat France collective investment fund units held: 1,752.8516
(as of December 31, 2024)

Business address: TotalEnergies SE, 2 place Jean Millier, La Défense 6, 92400 Courbevoie, France

Main function: Employee of TotalEnergies*

Biography & Professional Experience

After obtaining a double degree in information systems and management at the University of Grenoble, Emma de Jonge began her career as a project manager and pre-sales support in the Cap Gémini group in 1987. She joined Elf Aquitaine in 1990, where she held several positions as project manager, buyer and internal consultant in the Refining Distribution IT Department. In 2004, as assistant to the SAP support manager for 150 subsidiaries of Total Marketing & Services, she managed relations with the subsidiaries' managers and supplier relations.

From 2010, Emma de Jonge worked primarily as a project manager and in change management in international contexts, in the Europe Card Development Department and then in the Governance Department of Total Marketing & Services. In 2017, she continued these activities as Head of Procure to Pay and then as project manager, first within TotalEnergies Global Procurement, and then within TotalEnergies Global Services in 2022.

Furthermore, Emma de Jonge holds the IFA-Science Po Corporate Director Certificate. She was a member of the European Works Council from 2020 to 2024 and an elected member of the Supervisory Board of the TotalEnergies Actionnariat France collective investment fund from 2020 to 2023.

Directorships and functions held

Directorships held at any company during fiscal year 2024

- Director representing employee shareholders of TotalEnergies SE*, member of the Strategy & CSR Committee

Directorships that have expired in the previous five years

None

Other positions held during fiscal year 2024

- Elected member of the CSE AGSH TotalEnergies Paris (since 2018)
- Elected member of the CSEC AGSH TotalEnergies (since 2018)
- Member of the TotalEnergies European Works Council (since September 15, 2020 until September 12, 2024)



Anelise Lara

Independent director

Member of the Strategy & CSR Committee

Born on May 24, 1961 (Brazilian)

Director of TotalEnergies SE since the Annual Shareholders' Meeting on May 26, 2023
End of current term: 2026 Annual Shareholders' Meeting

Number of TotalEnergies shares held: 1,000 (as of December 31, 2024)

Business address: Instituto Brasileiro de Petróleo e Gás Avenida Almirante Barroso, 52 – 26º andar - Centro, Rio de Janeiro - RJ, Brasil - CEP: 20031-918

Main function: Independent director

Biography & Professional Experience

Mrs. Anelise Lara is a chemical engineer with an MSc in Petroleum Engineering and a Ph.D. in Earth Sciences from "Université Pierre et Marie Curie," France. She was also certified in ESG Competent Boards Program, including climate change risks, in 2021. Mrs. Lara has 37 years of experience in the energy industry. In 1986, she joined Petrobras, the most important company in the energy segment in Brazil. She began her career in the Research and Development Center. In 2003, she joined the Exploration and Production Department as General Manager for the Reservoir Team at the corporate level. In 2011, after the first pre-salt discoveries, she was appointed General Manager for pre-salt development projects. Then in 2013, she was invited to become the Director of the Libra Joint Project Team. In 2016, she was appointed as Head of M&A, responsible for a portfolio of more than 40 projects of divestments and strategic partnerships in Brazil and abroad. During this period, Mrs. Lara was also a member of the Company's Investment Committee. In 2019, she was appointed as Chief Executive Officer for Refining, Natural Gas, and Power, responsible for the strategic, risk management, HSE, and operational results of Refining, Gas & Power areas, covering the areas of refining, biofuels, petrochemicals, fertilizers plants, distribution and transportation of natural gas, regas terminals, and thermal power plants. She left Petrobras in January 2021. Mrs. Lara served as President of the Society of Petroleum Engineers (SPE) – Brazil Section from 2005 to 2008. She also joined the International Board of SPE from 2014 until 2017 as Regional Director for Latin America and Caribe. She also served as Chair of the Brazilian Petroleum Institute (IBP) from 2019 to 2021. Mrs. Lara volunteers for the cause of D&I (diversity and inclusion). She is a board member of WILL (Women Leadership in Latin America) and has already mentored many young women interested in working in the energy segment.

Directorships and functions held

Directorships held at any company during fiscal year 2024

- Director of TotalEnergies SE* and, since May 24, 2024, member of the Strategy & CSR Committee
- Board Member of Mubadala Capital Downstream Brazil, since March 2022
- Board Member of Trident Energy since April 2022; Member of the ESG Committee; Member of the Technical Committee

Directorships that have expired in the previous five years

- Chief Executive Officer for Refining, Natural Gas, and Power of Petrobras until January 2021
- Chair of the Brazilian Petroleum Institute until March 2021

Other positions held during fiscal year 2024

- Advisory Board Member for Ultrapar* since September 2022
- Board Member of IBP (Brazilian Petroleum Institute)
- Board member of WILL (Women Leadership in Latin America)



Jean Lemierre

Independent director

Member of the Governance and Ethics Committee
Member of the Strategy & CSR Committee

Born on June 6, 1950 (French)

Director of TotalEnergies SE since the Annual Shareholders' Meeting on May 24, 2016
Last reappointment: Annual Shareholders' Meeting on May 25, 2022
End of current term: Annual Shareholders' Meeting on May 23, 2025

Number of TotalEnergies shares held: 1,042 (as of December 31, 2024)

Business address: BNP Paribas, 3 rue d'Antin 75002 Paris, France

Main function: Chairman of the Board of Directors of BNP Paribas*

Biography & Professional Experience

Mr. Lemierre is a graduate of the Institut d'Études Politiques de Paris and the École Nationale d'Administration. He also has an undergraduate law degree. Mr. Lemierre held various positions at the French tax authority, including as Head of the Fiscal Legislation Department and Director-General of Taxes. He was then appointed as Cabinet Director at the French Ministry of Economy and Finance before becoming Director of the French Treasury in October 1995. Between 2000 and 2008, he was President of the European Bank for Reconstruction and Development (EBRD). He became an advisor to the Chairman of BNP Paribas in 2008 and has been Chairman of the Board of Directors of BNP Paribas since December 1, 2014. During his career, Mr. Lemierre has also been a member of the European Monetary Committee (1995-1998), Chairman of the European Union Economic and Financial Committee (1999-2000) and Chairman of the Paris Club (1999-2000). He later became a member of the International Advisory Council of China Investment Corporation (CIC) and the International Advisory Council of China Development Bank (CDB). He is currently Chairman of the Centre d'Études Prospectives et d'Informations Internationales (CEPII) and a member of the Institute of International Finance (IIF).

Directorships and functions held

Directorships held at any company during fiscal year 2024

Within the BNP Paribas group

- Chairman of the Board of Directors of BNP Paribas*
- Director of TEB Holding AS (Turkey)

Outside the BNP Paribas group

- Director of TotalEnergies SE*, member of the Governance and Ethics Committee and of the Strategy & CSR Committee

Directorships that have expired in the previous five years

None

Other positions held during fiscal year 2024

- Member of the Board of Directors of AFEP (French association of private companies)
- Chairman of Centre d'Études Prospectives et d'Informations Internationales (CEPII)
- Member of the Institute of International Finance (IIF)
- Member of the International Advisory Council of China Development Bank* (CDB)
- Member of the International Advisory Council of China Investment Corporation (CIC)
- Member of the International Advisory Panel (IAP) of the Monetary Authority of Singapore (MAS)
- Vice-Chairman of Paris EUROPLACE since 2014
- Member of the Board of the Institut de la Finance Durable (Paris)



Dierk Paskert

Independent director

Member of the Compensation Committee

Born on April 29, 1961 (German)

Director of TotalEnergies SE since the Annual Shareholders' Meeting on May 26, 2023
End of current term: 2026 Annual Shareholders' Meeting

Number of TotalEnergies shares held: 1,200 (as of December 31, 2024)

Business address: Asamstr. 5, 83700 Rottach-Egern, Germany

Main function: Independent director

Biography & Professional Experience

Mr. Dierk Paskert obtained a PhD in Economics at Münster University in 1990. Having made his first professional steps in Investment Banking with Trinkaus Samuel Montague and West Merchant Bank, he started his industrial career in VEBA Group from 1995 onwards. With VEBA Group focusing entirely on power and gas and turning into E.ON, he became Senior Vice-President for Corporate Development at E.ON AG in 2003. He was inter alia responsible to further internationalize the gas business (Ruhrgas), to integrate the power and gas activities downstream and to develop the first renewable strategy of E.ON. In 2008 he joined the Board of E.ON-Energie and directed the Transmission and Distribution Grid business in Germany, Czech, Hungary, Slovakia, Romania and Bulgaria. In 2012, he was asked by the German Industry Association to found and manage Resource Alliance, a Joint-Venture of 16 German Industrial Companies focusing on supply of critical raw materials. From 2017 until end of 2022, he was appointed CEO of Encavis AG, a M-Dax listed Independent Power Producer (IPP) from Renewable Energy Sources at that time. He was Member of the Executive Risk Committee. Whilst growing the production portfolio to > 4 GW and focusing on Power Purchase Agreements as well as Traded Markets, he introduced in particular a risk management system coping with the growing merchant exposure of the company in Renewable Energy.

Directorships and functions held

Directorships held at any company during fiscal year 2024

- Director of TotalEnergies SE* and, since May 24, 2024, member of the Compensation Committee
- Member of the Administrative Board KAEFER SE&Co and, since May 2024, non-executive director of Vaering Beteiligung SE
- Member of the Supervisory Board Intilion AG
- Non-executive Board Member of Zelestra Corporacion Tecnologia SAU (formerly Solarpack SA)
- Member of the Board of Directors The Mobility House AG, member of the Risk Committee, member of the Strategy Committee (until June 10, 2024)

Directorships that have expired in the previous five years

- Member of the Board of Directors The Mobility House AG, member of the Risk Committee, member of the Strategy Committee (until June 10, 2024)
- Member of the Board of Directors Pexapark AG (until January 11, 2023)
- Member of the Board of Management and Chief Executive Officer Encavis AG (until December 31, 2022)

Other positions held during fiscal year 2024

- Member of the Advisory Board of East-Energy GmbH



Angel Pobo

Director representing employees

Member of the Compensation Committee

Born on August 14, 1969 (French)

Director representing employees of TotalEnergies SE since October 14, 2020
Last reappointment (by the SE Committee): February 16, 2023
End of current term: 2026 Annual Shareholders' Meeting

Number of TotalEnergies shares held: 781
Number of TotalEnergies Actionnariat France collective investment fund units held: 2,135.8170 (as of December 31, 2024)

Business address: TotalEnergies SE, 2 place Jean Millier, La Défense 6, 92400 Courbevoie, France

Main function: Employee of TotalEnergies SE*

Biography & Professional Experience

Mr. Pobo joined TotalEnergies in 1989 as part of Argedis, the subsidiary responsible for service station management and operations in France, where he held a variety of positions before becoming site director in 1998. In 2013, he became a member of the European Works Council. He was the central union representative for the Marketing & Services Unit of Economic and Employee Interest (UES) from 2014 to 2017, and then for the Upstream/Global Services/Holding Company UES beginning in 2017. He is also the union representative on the Economic and Employee Interest Committee and the Central Economic and Employee Interest Committee. On October 14, 2020, he was appointed by the SE Committee, known as the European Works Committee, to sit on the Board of Directors of TotalEnergies SE as a director representing employees and accordingly resigned from his union responsibilities.

Directorships and functions held

Directorships held at any company during fiscal year 2024

- Director representing employees of TotalEnergies SE* and member of the Compensation Committee

Other positions held during fiscal year 2024

- Mayor of Aubais (France)

Directorships that have expired in the previous five years

None

DIRECTORSHIPS OF TotalEnergies SE THAT EXPIRED IN 2024

Anne-Marie Idrac

Director of TotalEnergies SE since the Annual Shareholders' Meeting on May 11, 2012 until the Annual Shareholders' Meeting on May 24, 2024

Member of the Governance and Ethics Committee, of the Compensation Committee and of the Strategy & CSR Committee until May 24, 2024

Born on July 27, 1951 (French)

Main function: Chairwoman of the Board of Directors of Sanef

Biography & Professional Experience

A graduate of Institut d'Études Politiques de Paris and formerly a student at École Nationale d'Administration (ENA-1974), Ms. Idrac began her career holding various positions as a senior civil servant at the French Ministry of Infrastructure (Ministère de l'Équipement) in the fields of environment, housing, urban planning and transportation. She served as Executive Director of the public institution in charge of the development of Cergy-Pontoise (Établissement public d'Aménagement de Cergy-Pontoise) from 1990 to 1993 and Director of land transport from 1993 to 1995. Ms. Idrac was France's State Secretary for Transportation from May 1995 to June 1997, elected member of Parliament for Yvelines from 1997 to 2002, regional councilor for Île-de-France from 1998 to 2002 and State Secretary for Foreign Trade from March 2008 to November 2010. She also served as Chairwoman and Chief Executive Officer of RATP from 2002 to 2006 and then as Chairwoman of SNCF from 2006 to 2008.

Directorships and functions held

Directorships held at any company during fiscal year 2024(1)

- Director of TotalEnergies SE*, member of the Governance and Ethics Committee, member of the Compensation Committee and member of the Strategy & CSR Committee until May 24, 2024
- Director of Air France-KLM* and Chairwoman of the Sustainable Development and Compliance Committee
- Director of Sanef and Chairwoman of the Board of Directors of this Company since December 12, 2023

Directorships that have expired in the previous five years

- Director of TotalEnergies SE*, member of the Governance and Ethics Committee, member of the Compensation Committee and member of the Strategy & CSR Committee until May 24, 2024
- Director of Saint-Gobain* and Chairwoman of the Nominations and Compensation Committee until June 2022
- Director of Bouygues* until June 2021

Other positions held during fiscal year 2024

- Chairwoman of the professional association France Logistique since January 2020
- Member of the Board of Directors of the Fondation Robert Schuman
- Chairwoman of the Fondation Alima since November 2020

4.1.1.2 Absence of conflicts of interest or convictions

The Board of Directors' Rules of Procedure stipulate the specific rules for preventing conflicts of interest applicable to directors in the following terms (refer to point 4.1.2.1 for the full version of the Rules of Procedure):

"2.5. Duty of loyalty

Directors must not take advantage of their office or duties to gain, for themselves or a third party, any monetary or non-monetary benefit.

They must notify the Chairman of the Board of Directors and the Lead Independent Director, if one has been appointed, of any existing or potential conflict of interest with the Corporation or any subsidiary of the Company, and they must refrain from participating in the vote relating to the corresponding resolution as well as from participating in any debates preceding such vote.

Directors must inform the Board of Directors of their participation in any transaction that directly involves the Corporation, or any subsidiary of the Company, before such transaction is finalized.

Directors must not assume personal responsibilities in companies or businesses having activities in competition with those of the Corporation or any subsidiary of the Company without first having informed the Board of Directors.

Directors undertake not to seek or accept from the Corporation, or from companies related to the Corporation, directly or indirectly, any advantages liable to be considered as being of a nature that may compromise their independence."

"7.2 Duties of the Lead Independent Director

5. Prevention of conflicts of interest

Within the Governance and Ethics Committee, the Lead Independent Director organizes the performance of due diligence in order to identify and analyze potential conflicts of interest within the Board of Directors. He informs the Chairman and Chief Executive Officer of any conflicts of interest identified as a result and reports to the Board of Directors on these activities.

Pursuant to the obligation to declare conflicts of interest set out in article 2.5 of these Rules, any director affected by an existing or potential conflict of interest must inform the Chairman and Chief Executive Officer and the Lead Independent Director."

The Lead Independent Director has performed due diligence in order to identify and analyze potential conflicts of interest.

The Lead Independent Director is thus consulted by directors who were considering accepting a mandate in other companies. No situation relating to a project to take up a mandate or an external function by a director has led the Lead Independent Director to refer the matter to the Governance and Ethics Committee.

On the basis of the work carried out, the Board of Directors noted the absence of potential conflicts of interest between the directors' duties with respect to TotalEnergies and their private interests.

(1) Information as of May 24, 2024.

To the Corporation's knowledge, there is no family relationship among the members of the Board of Directors of TotalEnergies SE; there is no arrangement or agreement with the major shareholders, customers or suppliers under which a director was selected; and there is no service agreement that binds a director to TotalEnergies SE or to any of its subsidiaries and provides for special benefits under the terms thereof.

The current directors of TotalEnergies have informed the Corporation that they have not been convicted of fraud, have not been associated with bankruptcy, sequestration, receivership or court-ordered liquidation proceedings, and have not been subject to any incrimination, conviction or sanction pronounced by an administrative authority or professional body, nor have they been prohibited from managing a company or disqualified as stipulated in item 12.1 of Annex I of Commission Delegated Regulation (EU) 2019/980 of March 14, 2019, over the last five years.

4.1.1.3 Plurality of directorships held by directors

The number of directorships held by directors in listed companies outside their group, including foreign companies, was assessed as of December 31, 2024, in accordance with the recommendations of the AFEP-MEDEF Code (point 20), which states that "*an executive officer should not hold more than two other directorships in listed corporations, including foreign corporations, outside of his or her group. [This] limit [...] does not apply to directorships held by an executive officer in subsidiaries and holdings, held alone or together with others, of companies whose main activity is to acquire and manage such holdings. [...] A director may not hold more than four other directorships in listed corporations, including foreign corporations, outside of the group.*"

SUMMARY OF OTHER DIRECTORSHIPS HELD BY MEMBERS OF THE BOARD OF DIRECTORS

As of December 31, 2024	Number of directorships held at listed companies[a]	Compliance with the criteria of the AFEP-MEDEF Code
Patrick Pouyanné	1	✓
Jacques Aschenbroich	2	✓
Marie-Christine Coisne-Roquette	1	✓
Lise Croteau	2	✓
Mark Cutifani	0	✓
Marie-Ange Debon	1	✓
Romain Garcia-Ivaldi[b]	0	✓
Maria van der Hoeven	0	✓
Glenn Hubbard	1	✓
Emma de Jonge[c]	0	✓
Anelise Lara	0	✓
Jean Lemierre	1	✓
Dierk Paskert	0	✓
Angel Pobo[b]	0	✓

(a) In accordance with the criteria of the AFEP-MEDEF Code.
(b) Director representing employees.
(c) Director representing employee shareholders.

4.1.1.4 Directors' independence

At its meeting on March 19, 2025, the Board of Directors, on the proposal of the Governance and Ethics Committee, reviewed the independence of the Corporation's directors as of December 31, 2024. Upon that Committee's proposal, the Board considered that, pursuant to the AFEP-MEDEF Code to which the Corporation refers, a director is independent when "*he or she has no relationship of any kind whatsoever with the corporation, its group or its management that may interfere with the exercise of his or her freedom of judgment*".

For each director, this assessment was based on the independence criteria set forth in points 10.5 to 10.7 of the AFEP-MEDEF Code, updated in December 2022, and as described below.

Criterion 1: **Employee corporate officer within the previous five years**

"Not to be or not to have been within the previous five years:

- *an employee or executive officer of the company;*
- *an employee, executive officer or director of a company consolidated within the corporation;*
- *an employee, executive officer or director of the company's parent company or a company consolidated within this parent company."*

Criterion 2: **Cross-directorships**

"Not to be an executive officer of a company in which the corporation holds a directorship, directly or indirectly, or in which an employee appointed as such or an executive officer of the corporation (currently in office or having held such office within the last five years) holds a directorship."

Criterion 3: **Significant business relationships**

"Not to be a customer, supplier, commercial banker, investment banker or consultant:

- *that is significant to the corporation or its group;*
- *or for which the corporation or its group represents a significant portion of its activity.*

The evaluation of the significance or otherwise of the relationship with the company or its group must be debated by the Board, and the quantitative and qualitative criteria that led to this evaluation (continuity, economic dependence, exclusivity, etc.) must be explicitly stated in the annual report."

Criterion 4: **Family ties**

"Not to be related by close family ties to a company officer."

Criterion 5: **Auditor**

"Not to have been an auditor of the corporation within the previous five years."

Criterion 6: **Period of office exceeding 12 years**

"Not to have been a director of the corporation for more than twelve years. Loss of the status of independent director occurs on the date of this 12th anniversary."

Criterion 7: **Status of non-executive officer**

"A non-executive officer cannot be considered independent if he or she receives variable compensation in cash or in the form of securities or any compensation linked to the performance of the corporation or group."

Criterion 8: **Status of the major shareholder**

"Directors representing major shareholders of the corporation or its parent company may be considered independent, provided these shareholders do not take part in the control of the corporation. Nevertheless, beyond a 10% threshold in capital or voting rights, the Board, upon a report from the nominations committee, should systematically review the qualification of a director as independent in the light of the make-up of the corporation's capital and the existence of a potential conflict of interest."

It was confirmed, regarding the independence as of December 31, 2024, of Mr. Aschenbroich, Ms. Croteau, Mr. Cutifani, Ms. Debon, Ms. van der Hoeven, Mr. Hubbard, Ms. Lara, Mr. Lemierre, as well as Mr. Paskert that the independence analyzes previously carried out remained relevant.

In particular, the following was noted as of the date of December 31, 2024.

- The level of business relations between the companies of the Company and those of the Orange group, of which **Mr. Aschenbroich** is Chairman of the Board of Directors, is not significant for TotalEnergies or for Orange. The amount of purchases made by the Company from Orange in 2024 (below $40 million) represents less than 0.13% of the purchases made by the Company in 2024 (*i.e.*, approximately $31 billion[1]). The amount of purchases made by Orange from the Company's companies in 2024 (below $40 million) represents less than 0.23% of the total amount of purchases made by Orange in 2024 (*i.e.*, $18.02 billion). It was noted the absence of economic dependence and exclusive business relations between the two groups.
- The level of business relations between the Company's companies and those of the BNP Paribas group, of which **Mr. Lemierre** is Chairman of the Board of Directors, and **Mr. Aschenbroich** is a director, chairman of the Corporate Governance, Ethics, Nominations and CSR Committee and member of the Financial Statements Committee, is not significant for TotalEnergies and BNP Paribas. It represents an insignificant portion of BNP Paribas' overall activity (less than 0.2% of the net banking income[2] of this bank) and an insignificant portion of the total amount of external financing for the Company's activities (less than 5%). It was noted the absence of economic dependence and exclusive business relations between the two groups.

  It was thus concluded that Mr. Lemierre and Mr. Aschenbroich could be deemed to be independent directors.
- The level of business relations between the Company's companies and those of the Vale group, of which Vale Base is a subsidiary chaired by **Mr. Cutifani**, is not significant for TotalEnergies or for Vale. The amount of purchases made by the Company from Vale in 2024 (*i.e.*, $10 million) represents 0.05% of the purchases made by the Company in 2024 (*i.e.*, approximately $31 billion). The amount of purchases made by Vale from the Company's companies in 2024 (approximately $15 million) represents less than 0.2% of the total amount of purchases made by Vale in 2024 (approximately $10 billion). It was noted the absence of economic dependence and exclusive business relations between the two groups.

  It was thus concluded that Mr. Cutifani could be deemed to be an independent director.
- The level of business relations between the Company's companies and those of the Keolis group, of which **Ms. Debon** is Executive Chair (Présidente du Directoire), is not significant for TotalEnergies or for Keolis. The amount of purchases made by Keolis from the Company in 2024 is lower than $20,000 i.e., an amount not significant with regards to the purchases made by the Company in 2024 (i.e., approximately $31 billion). The amount of purchases made by Keolis from the Company's companies in 2024 (approximately $45 million) represent an amount below 1.7% of the total amount of purchases made by Keolis in 2024 (approximately $2.7 billion). It was noted the absence of economic dependence and exclusive business relations between the two groups.

  It was thus concluded that Ms. Debon could be deemed to be independent.
- The level of business relations between the Company's companies and those of the MetLife Inc. group, of which **Mr. Hubbard** is Chairman of the Board of Directors, is not significant for TotalEnergies or MetLife Inc. The amount of insurance premiums paid by the Company's companies to the MetLife Inc. group in 2024 represents a non significant portion of the sales generated by this group in 2024. It was noted the absence of economic dependence and exclusive business relationships between the two groups.

  It was thus concluded that Mr. Hubbard could be deemed to be an independent director.

Ms. Coisne-Roquette, who was appointed director by the Shareholders' Meeting on May 13, 2011, (*i.e.*, more than 12 years ago) cannot be considered as an independent director pursuant to Article 10.5.6 of the AFEP-MEDEF Code, with the meaning of the AFEP-MEDEF Code even though she meet all of the independence criteria. Mrs Coisne-Roquette is therefore considered independent under US regulations, which do not provide for loss of independence due to length of service, and can sit on the Audit Committee in this capacity.

(1) Purchases of goods and services (excluding petroleum products and chartering for Trading-Shipping activities).
(2) 2024 net banking income.

The proportion of independent directors within the Board in its composition as of December 31, 2024, was 82%[1]. The rate of independence of the Board of Directors is higher than that recommended by the AFEP-MEDEF Code, which specifies that at least half of the members of the Board in widely-held companies with no controlling shareholders should be independent.

With regard to Ms. Helen Lee Bouygues and Mr. Mignon, whose appointment as directors will be submitted to the Shareholders' Meeting on May 23, 2025, the Governance and Ethics Committee noted that they established no relationship with the Corporation, the Company or its General Management that would be likely to compromise their freedom of judgment.

In particular, the level of business relations between the Company's companies and those of the Wendel group, of which **Mr. Mignon** is Chairman of the Executive Board (*Président du Directoire*), is not significant for TotalEnergies or for Wendel group. The amount of purchases made by Wendel group from the Company in 2024 (approximatively $26 million) represents less than 0.1% of purchases made by the Company in 2024 (approximately $31 billion[2]). The amount of the purchases made by Wendel group from the Company's companies in 2024 (approximatively $18 million) represents around 0.006% of the total amount of the purchases made by Wendel group in 2024 (approximately $3 billion).

The Governance and Ethics Committee noted the absence of economic dependence and exclusive business relations between the two groups.

The Governance and Ethics Committee thus concluded that **Ms. Helen Lee Bouygues** and Mr. Mignon could be deemed to be independent directors.

SUMMARY OF THE INDEPENDENCE OF THE MEMBERS OF THE BOARD OF DIRECTORS

Appendix 3 of the AFEP-MEDEF Code – Independence of directors

As of December 31, 2024

Criteria[a]	Patrick Pouyanné	Jacques Aschenbroich	Marie-Christine Coisne-Roquette	Lise Croteau	Mark Cutifani	Marie-Ange Debon	Romain Garcia-Ivaldi[b]	Maria van der Hoeven	Glenn Hubbard	Emma de Jonge[c]	Anelise Lara	Jean Lemierre	Dierk Paskert	Angel Pobo[b]
Criterion 1: Employee corporate officer within the past 5 years	✗	✓	✓	✓	✓	✓	n/a	✓	✓	n/a	✓	✓	✓	n/a
Criterion 2: Cross-directorships	✓	✓	✓	✓	✓	✓	n/a	✓	✓	n/a	✓	✓	✓	n/a
Criterion 3: Significant business relationships	✓	✓	✓	✓	✓	✓	n/a	✓	✓	n/a	✓	✓	✓	n/a
Criterion 4: Family ties	✓	✓	✓	✓	✓	✓	n/a	✓	✓	n/a	✓	✓	✓	n/a
Criterion 5: Auditor	✓	✓	✓	✓	✓	✓	n/a	✓	✓	n/a	✓	✓	✓	n/a
Criterion 6: Period of office exceeding 12 years	✓	✓	✗	✓	✓	✓	n/a	✓	✓	n/a	✓	✓	✓	n/a
Criterion 7: Status of non-executive officer	✓	✓	✓	✓	✓	✓	n/a	✓	✓	n/a	✓	✓	✓	n/a
Criterion 8: Status of the major shareholder	✓	✓	✓	✓	✓	✓	n/a	✓	✓	n/a	✓	✓	✓	✓
Compliance with the independence criteria of the AFEP-MEDEF Code	✗	✓	✗	✓	✓	✓	n/a[d]	✓	✓	n/a[d]	✓	✓	✓	n/a[d]

(a) In this table, ✓ signifies that a criterion for independence is satisfied and ✗ signifies that a criterion for independence is not satisfied.
(b) Director representing employees.
(c) Director representing employee shareholders.
(d) Excluding the director representing employee shareholders and the directors representing employees, in accordance with the recommendations of the AFEP-MEDEF Code (point 10.3).

(1) Excluding the director representing employee shareholders and the directors representing employees, in accordance with the recommendations of the AFEP-MEDEF Code (point 10.3).
(2) Purchases of goods and services (excluding petroleum products and chartering for Trading-Shipping activities).

4.1.1.5 Diversity policy of the Board of Directors (Article L. 22-10-10 of the French Commercial Code)

The Board of Directors places a great deal of importance on its composition and the composition of its Committees. In particular, it draws on the work of the Governance and Ethics Committee, which reviews annually and proposes, as circumstances may require, desirable changes to the composition of the Board of Directors and Committees based on TotalEnergies' strategy.

The Governance and Ethics Committee conducts its work within the framework of a formal procedure so as to ensure in particular that the directors' areas of expertise are complementary and their backgrounds are diverse, to maintain an overall rate of independent members that is appropriate to the TotalEnergies' governance structure and shareholder base, to allow for a balanced representation of women and men on the Board, and to promote an appropriate representation of directors of different nationalities. These principles underpin the selection process for directors.

As part of an effort that began several years ago, the composition of the Board of Directors has changed significantly since 2010 to achieve better balance between men and women and an openness to more international profiles. Based on its composition as of March 19, 2025, the 14 members of the Board of Directors include 8 male directors and 6 female directors, with 7 nationalities represented.

In accordance with Articles L. 225-27-1, L. 225-23 and L. 22-10-5 of the French Commercial Code, the directors representing employees and the director representing employee shareholders are not taken into account for the application of the provisions relating to the balance between men and women on the Board. Therefore, the proportion of women on the Board was 45.5% as of December 31, 2024 (i.e., 5 women and 6 men out of 11 directors). The threshold of 40% of directors of each sex required by Articles L. 225-18-1 and L. 22-10-3 of the French Commercial Code was reached on December 31, 2024.

COMPETENCE OF THE DIRECTORS

	Patrick Pouyanné	Jacques Aschenbroich	Marie-Christine Coisne-Roquette	Lise Croteau	Mark Cutifani	Marie-Ange Debon	Romain Garcia-Ivaldi	Glenn Hubbard	Maria van der Hoeven	Emma de Jonge	Anelise Lara	Jean Lemierre	Dierk Paskert	Angel Pobo	Total	Total (%)
Corporate management	✓	✓	✓	✓	✓	✓					✓	✓	✓		9	64%
International	✓		✓	✓	✓	✓	✓	✓	✓			✓	✓		10	71%
Finance, accounting, economics	✓	✓	✓	✓		✓	✓	✓			✓	✓	✓		10	71%
Risk management			✓	✓		✓			✓		✓	✓	✓		7	50%
Governance	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓		12	86%
Climate - sustainable development	✓	✓	✓	✓	✓	✓		✓	✓		✓	✓	✓		11	79%
Industry	✓	✓	✓	✓	✓	✓	✓			✓	✓		✓		10	71%
Energy	✓		✓	✓		✓	✓		✓	✓	✓		✓	✓	10	71%
Public affairs, geopolitics	✓	✓	✓		✓	✓		✓	✓		✓	✓	✓		10	71%

FOCUS ON THE COMPETENCE OF DIRECTORS IN SUSTAINABILITY, IN PARTICULAR IN CLIMATE MATTERS

Patrick Pouyanné

In environmental matters, Patrick Pouyanné held the positions of Inspector of installations classified for environmental protection and Head of the regional industrial environment department of Nord Pas de Calais (1989-1992). He was a member of the High Council for Classified Facilities (1990-1993).

Patrick Pouyanné has been involved in climate issues since the 1990s when he was in the French administration. Thus, he followed the preparation of the COP1 in Berlin in 1995 when he was technical advisor in charge of environmental issues in the French Prime Minister's office.

Since his appointment at the head of the Company at the end of 2014, Patrick Pouyanné has committed TotalEnergies to a major energy transition with determination and consistency, more rapidly and resolutely than his peers. His roadmap is to drive forward the energy transition while creating value for the Company's shareholders, with a dual challenge for TotalEnergies: to supply more energy with less emissions. It gives TotalEnergies with a new ambition in terms of sustainable development and the energy transition towards carbon neutrality.

From 2021 to 2024, he proposed that the Board of Directors submit this ambition to the Annual Shareholders' Meeting for approval. TotalEnergies thus submitted its ambition in terms of sustainable development and energy transition to shareholders for an advisory opinion for four consecutive years.

As Chairman of the Board of Directors and Chairman of the Strategy & CSR Committee, Patrick Pouyanné takes the initiative of organizing strategic seminars for directors on climate-related issues, with contributions from recognized leaders and experts. In October 2020, Ms. Christina Figueres spoke at a seminar on "Climate issues and the impact on energy demand: implications for the Company's strategy". In October 2021, Mr. Fatih Birol, Executive Director of the International Energy Agency, spoke on energy and climate issues. In October 2022, Mr. Larry Fink, Chairman & CEO of BlackRock, spoke at the strategy seminar on the following topics: energy markets - geopolitics; new energies in mobility by 2030 (road, marine and aviation); integrated electricity business model. At the September 2023 strategy seminar, Patrick Pouyanné invited Mr .Dan Yergin, Vice President of S&P Global, to discuss the challenges of energy transition in the United States and worldwide. The strategy seminar also provided an opportunity to examine Integrated Power's profitability drivers, as well as the state of hydrogen technologies and cost assessments. During the strategy seminar in September 2024 a focus was made on Integrated Power's business model, in particular the integration of gas-electricity and renewables-flexible assets.

In addition to the energy transition, Patrick Pouyanné's responsibilities at TotalEnergies have given him extensive experience of the sustainability issues facing the Company.

Patrick Pouyanné also brings his strategic vision on the major global challenges of sustainable development, participating in numerous international forums such as the World Economic Forum and the United Nations Global Compact. At COP28 at the end of 2023, more than 50 oil and gas companies signed the OGDC (Oil & Gas Decarbonization Charter), committing them to reducing emissions from their operations and, in particular, aiming for near-zero upstream methane emissions by 2030. Under the leadership of Patrick Pouyanné, TotalEnergies has actively supported the success of OGDC. One year after its launch, the OGDC has been joined by five new members and now represents 45% of the global oil production. Its first baseline report, which provides an essential platform for prioritizing actions and tracking the progress achieved by the signatories, was unveiled on the sidelines of COP29 Conference. As a co-champion of the OGDC, Patrick Pouyanné looked back at this milestone and reaffirmed TotalEnergies' commitment to helping the industry move forward in reducing its greenhouse gas emissions.

Jacques Aschenbroich

The automotive industry, and mobility in general, are particularly concerned by the challenge of decarbonization, which requires massive investments in technologies and products. At the head of Valeo since 2009 until 2022, Jacques Aschenbroich has implemented a strategic plan aimed at ensuring the group's growth through the development of technologies to reduce CO_2 emissions. As early as 2010, he put the reduction of CO_2 at the center of the strategy. In 2015, Valeo signed the Climate Manifesto, through which major companies affirm their driving role and leadership in favor of a more sustainable world. In 2021, Valeo presented its commitment to carbon neutrality by 2050 (with an intermediary target to reduce by 45% the carbon footprint by 2030) and joined the "Business Ambition for 1.5 °C" campaign, bringing together companies committed to carbon neutrality by 2050 using the SBTi (Science-Based Targets initiative) framework.

Through his positions at Valeo and then Orange, Jacques Aschenbroich has developed a significant knowledge of the issues surrounding artificial intelligence, both technological (creation in 2017 of Valeo.ai, the world's first research center dedicated to artificial intelligence and deep learning in automotive applications) and ethical (launch at the end of 2022 of Positive AI by Orange France and three other major partner companies, numerous works since 2023 on the responsibility and ethics of data and artificial intelligence).

Jacques Aschenbroich brings to the Board of Directors of TotalEnergies his experience as the head of an industrial, international and technological group that is exposed to climate issues.

Marie-Christine Coisne-Roquette

As Chairwoman of Sonepar and permanent representative of its animating holding, Marie-Christine Coisne-Roquette is driving the strategy of the Sonepar group, the world leader in the distribution of electrical equipment, solutions and related services to professionals. Marie-Christine Coisne-Roquette's experience as a Sonepar corporate officer for over 25 years and her other mandates have led her to develop a solid understanding of sustainability issues.

She thus engaged Sonepar in a global Sustainable Development approach by adhering to the United Nations Global Compact and Science Based Targets and by joining the Medef's "Ambition 4 Climate" initiative. Sonepar implements a sustainable development approach in close partnership with its stakeholders and has launched the "Energy Transition Academy", an online training program for its 45,000 employees and customers to help them reduce their emissions and become actors of change. The energy transition is at the heart of the family-owned group's activity, both through the adoption of a trajectory to reduce its carbon footprint and through the promotion of a "green offer" that provides its customers with clean energy solutions and the development of circular, renewable and eco-efficient products and services.

In the social and societal sphere, Marie-Christine Coisne-Roquette oversaw the implementation of Sonepar's diversity and inclusion policies and value-sharing programs by introducing an annual worldwide plan for allocating free shares to all Sonepar employees.

In the sphere of corporate governance, Marie-Christine Coisne-Roquette has ensured that a more concrete version of the code of conduct on compliance, ethics and anti-corruption issues has been distributed to all Sonepar employees and that audit and due diligence procedures concerning human rights have been extended.

As a Lead Independent Director on the Board of Directors of TotalEnergies until May 2023, Marie-Christine Coisne-Roquette participated in numerous discussions and roadshows with shareholders and investors on climate change and energy transition issues.

Lise Croteau

After serving as Executive Vice President and Chief Financial Officer of Hydro-Québec, one of the world's largest producers of hydroelectricity, Ms. Lise Croteau now uses her skills and knowledge of renewables and of the management of risks, in particular related to climate change, in the service of the companies in which she sits as an independent director. Since 2018, she has been a director of Boralex, the Canadian leader in renewable energy, and since June 2019, a director of Québecor inc. She has followed various training courses in sustainability, particularly on reporting and materiality issues.

Mark Cutifani

As the Chief Executive of the mining company Anglo American Plc. until April 2022, Mark Cutifani has driven a transformational strategy for the group in a sector particularly challenged by climate issues. As head of the company, Mark Cutifani had been instrumental in advancing climate and environmental transition plans, including refocusing the company's business and separating it from its thermal coal assets.

Marie-Ange Debon

Marie-Ange Debon is Executive Chair of the Public Transport group KEOLIS. Her company plays an important role in the fight against climate change by actively promoting an alternative to self-drive, a significant source of greenhouse gas emissions. Furthermore, KEOLIS leads a proactive policy to reduce its emissions, a policy whose objectives have been validated in 2024 by the SBTi Science Based Target initiative.

Previously, Marie-Ange Debon had held positions of responsibility for 11 years in the SUEZ Environnement group, major global player in waste recycling and water reuse technologies, which are key to promoting sustainable development.

Marie-Ange Debon brings to the Board her experience as a general manager in industrial and service companies, in France and internationally.

Romain Garcia-Ivaldi

An engineer and economist, graduate of ENSTA Paris and IFP School, Romain Garcia-Ivaldi is asset manager of offshore wind projects (inc. Seagreen) at TotalEnergies Renewables. His position gives him a deep knowledge of the challenges related to the development of renewable energies within the Company. Through his experience within the Company, he contributes as a director representing employees, in a concrete way to the Board of Directors' discussions on the challenges of the transformation of the industry and energy efficiency as well as to issues related to extra-financial reporting within the Audit Committee. Romain Garcia-Ivaldi has taken part in numerous training sessions offered by the Company on the challenges of the energy transition.

He also holds a certificate for company directors from IFA-Sciences Po. He also completed the "Climate Change: Economics and Governance" training program at the London School of Economics.

Romain Garcia-Ivaldi has actively contributed to social dialogue within the Company, particularly in relation to employee shareholding, to which he is particularly attached.

Maria van der Hoeven

Maria van der Hoeven led the International Energy Agency (IEA) from 2011 to 2015 during a period of great change in the global energy economy, with a particular focus on the consideration of climate change in energy policy. One of her main priorities has been the implementation of a new strategy to integrate the main emerging players in the energy sector of the 21st century. Another of her priorities was to extend energy services to the one billion people in the world who had no access to them. In recognition of the IEA's efforts to address the crisis of energy poverty, Maria van der Hoeven served on the advisory board of the UN Sustainable Energy for All initiative. She was named a Senior Fellow of the Clingendael International Energy Program in 2015. Her personal skills led to her appointment as Vice-Chair of the European Decarbonisation Pathways Initiative High-Level Experts Group of the European Commission, whose final report was published in November 2018. Maria van der Hoeven was also appointed as a member of the Global Commission on Economics and Climate and the Global Commission on the Geopolitics of Energy Transformation, an independent initiative launched at the IRENA Assembly in January 2018. Previously, Maria van der Hoeven served as the Minister of Economic Affairs of the Netherlands from 2007 to 2010, during which time she influenced energy policy on the national, regional and global levels. Before becoming Minister of Economic Affairs, Maria van der Hoeven was Minister of Education, Culture and Science from 2002 to 2007. She was a member of the Board of Directors of Rocky Mountain Institute, an organization recognized in the field of the energy transition.

Glenn Hubbard

Glenn Hubbard is Professor of Finance and Economics and Dean Emeritus of the Columbia Business School at Columbia University, holding the Russell L. Carson Chair in Finance and Economics. He has published numerous scientific articles on economics and finance. His work covers a variety of areas, including energy economics and taxation, and in particular the issue of CO_2 pricing, as well as the role of companies in climate change mitigation and how they address their exposure to climate risk. Glenn Hubbard is co-chair of the American committee on capital markets regulation and was the co-chair of the Study Group on Corporate Boards.

Glenn Hubbard is also a member of the Board of Directors of Resources for the Future, a non-profit organization dedicated to independent economic research in the areas of the environment, natural resources and energy. Glenn Hubbard is also a director of BlackRock Fixed Income Funds and the Chairman of MetLife, a US-based energy transition insurer that has set environmental goals for 2030 to reduce the environmental impact of its global operations and supply chain. MetLife is a founding member of the Climate Leadership Council, supporting carbon pricing.

Emma de Jonge

Emma de Jonge joined the Company in 1990. In 2020, she is an elected member of the Supervisory Board of the TotalEnergies Actionnariat France collective investment fund units and is appointed as a director representing employee shareholders at the Shareholders' Meeting held on May 25, 2022. Emma de Jonge was a member of the TotalEnergies European Works Council (Committee of the European Company), social negotiation body within which the social issues of the Company's transformation and changes in the Energy sector are dealt with.

She takes advantages of her knowledge of the Company and her experience in the Information Systems, Procurement and Project Management to contribute to the work of the Board's as part of its transformation strategy.

Emma de Jonge participated in numerous training courses offered within the Company on the challenges of energy transition as well as the training Integrating sustainable development into business strategy of HEC Paris. She also holds a certificate for company directors from IFA-Sciences Po.

Anelise Lara

As Chief Executive of Petrobras Refining, Gas and Energy, a Brazilian oil&gas company, until January 2021, Anelise Lara actively contributed to the transformation strategy of this company towards energy transition. She also helped this company to reduce its GHG emissions in its operations, while reducing energy consumption and maximizing the use of renewable energies at operational sites. In addition, Anelise Lara created "Biorefinery 2030", a program aimed at the production of renewable fuels.

Anelise Lara has also taken part in numerous seminars in Brazil and abroad on climate issues and the energy transition. She also holds the ESG Certificate issued by the Competent Board learning platform, whose content, if it is particularly focused on climate challenges and the energy transition, also covers various sustainability issues such as working conditions across the entire value chain and the fight against corruption.

In addition, Ms. Lara volunteers for the cause of diversity and inclusion. She is a member of the WILL (Women Leadership in Latin America) board and has already mentored many young women who want to work in the energy sector.

Jean Lemierre

Jean Lemierre is the Chairman of BNP Paribas. As early as 2015, BNP Paribas committed to accelerate the energy transition by aligning its financing and investment activities with the conclusions of the Paris Agreement. In 2021, the group took another important step in the fight against global warming and the energy transition towards a more planet-friendly economy, by joining the Net-Zero Banking Alliance. This initiative brings together banks wishing to contribute to the financing of a "net zero" economy by 2050, in particular through strong commitments to align the greenhouse gas emissions generated by their lending and investment activities with a target of global carbon neutrality by 2050.

In addition, Jean Lemierre has been the Vice-Chairman of the Paris Europlace Association since 2014, whose priorities include the promotion of sustainable and responsible finance. In this context, Paris Europlace's objective is to perpetuate and raise awareness of the Paris financial center's action in environmental and sustainable finance and to develop initiatives on the European and international levels in these various fields. As a result, Paris Europlace launched a new initiative "Paris Green & Sustainable Finance" in May 2016, which became "Finance for Tomorrow" in June 2017. This initiative aims to promote sustainable finance in France and internationally, by helping to redirect financial flows ("Shift the Trillions") towards a low-carbon and inclusive economy, in line with the Paris Agreement.

With his experience and competence in sustainable finance, Jean Lemierre contributes to the reflections of the Board of Directors and the Strategy & CSR Committee, of which he is a member, on these subjects.

Dierk Paskert

Having served in senior executive roles in Chemicals, Transport & Logistics as well as Energy, Dierk Paskert has been exposed to climate matters related to industrial activities throughout his career, starting in the 90ies. He fundamentally believes that using the inexhaustible natural sources of energy to a much larger extent compared to the past will make the biggest contribution to achieve ambitious climate goals as stated in the Paris Agreement.

In particular he was responsible to form the first Renewable Energy strategy for E.ON in 2007. As CEO of Encavis, a producer of electricity from renewable energy sources, he was first to boost bilateral off take agreements between energy producer and industry without using any support mechanisms granted by governments. Furthermore, Dierk Paskert is an avid investor in new technologies with positive impact on climate change, including E-Mobility, Renewable Energy Production and Battery Storage. It's the combination of new technologies and the usage of sustainable, natural resources catching his interest.

Dierk Paskert served in leadership positions in various companies and sectors exposing him to challenges in Governance, Business Conduct, Ethics & Anti-Corruption on a global scale. In particular he received explicit trainings on this subject throughout his career, latest as Member of the Administrative Board of KAEFER SE&Co, a leading global industrial service company, in 2024.

Angel Pobo

Angel Pobo joined the Company in 1989. In October 2020, he was appointed by the SE Works Council to sit on the Company's Board of Directors as the director representing employees, and became a member of the Strategy & CSR Committee in 2021. He uses his knowledge of the Company to bring a social dimension to the Board of Directors and the Strategy & CSR Committee, particularly at a time when the Company is taking a major turn in its strategy and initiating an in-depth transformation. Angel Pobo has taken part in numerous training sessions offered by the Company on the challenges of the energy transition. Before he became director representing employees, Angel Pobo has been particularly involved within his union organization in social dialogue linked to the transformation of the Company. As mayor of a municipality of more than 3,000 inhabitants, Angel Pobo was confronted with the management of different sustainable development issues, particularly in terms of water pollution management and sustainable energy.

4.1.1.6 Training of directors and knowledge of the Company

In 2024, the members of the Audit Committee all took part in an external training course dedicated to CSRD issues, which most of the directors also attended. In 2024, a director representing employees attended the "Climate Change: Economics and Governance" training program at the London School of Economics. In 2024, the director representing employee shareholders also attended the 4-day training module offered by HEC on integrating sustainable development into corporate strategy.

A training session will also be offered to directors who express a wish to follow additional training in the detection and prevention of corruption or who have not already followed specific training.

Directors may ask to receive training in the specificities of the Company, its businesses and its business segment, as well as any training that may help them perform their duties as directors. An ongoing climate training program for directors has been approved in 2021. It includes various modules on the following topics "Energy, Climate Change and Environmental Risks", "Solutions for a low-carbon future", "The low-carbon energy transition" and "Climate Change: Financial risks and opportunities".

In addition, directors representing employees or employee shareholders may submit requests for training under the specific rules applicable to them, as defined by the Board of Directors.

- The directors representing employees receive additionally in-house training time at the Corporation and/or economics training offered by an outside body chosen by the director, after the Secretary to the Board has accepted the body and the training program. This training time, which was initially set at 20 hours per year, was increased to 60 hours per year by decision of the Board of Directors at its meeting on July 26, 2017, a decision the Board confirmed at its meeting on July 29, 2020, pursuant to Article L. 225-30-2 of the French Commercial Code.
- The director representing employee shareholders may, at his or her request, be given training time set at 40 hours per year. Training may be undertaken within the Corporation or the Company, and/or provided by an external body chosen by the director, once the body and program have been accepted by the Secretary to the Board, in line with the conditions set out in the regulations.

Pursuant to Article R. 225-34-3 of the French Commercial Code, and upon a proposal made by the Governance and Ethics Committee, the Board of Directors decided that the training should enable the directors representing employees and the directors representing employee shareholders to acquire and refine the knowledge and techniques needed for the performance of their duties, and that the content of the training should principally address the role and operations of the Board of Directors, the rights and obligations of directors and their liability, and the organization and business activities of the Corporation and more generally the Company. It includes a climate component in accordance with what the Board decided to propose to all of its members at its meeting held on October 27, 2021. The training may be provided at an outside training body or within the Corporation itself. The Secretary to the Board, with the consent of the Chairman of the Board of Directors, is responsible for the procedures by which the training program determined by the Board of Directors is implemented.

Directors are invited to Company's site visits. These site visits by the directors are opportunities to meet with the Company's employees, partners and local leading figures in the energy sector.

Site visits contribute in a very concrete way to the training of directors and allow them to deepen their knowledge of the specificities of the Company, its challenges in particular regarding sustainability, its businesses - including new businesses - and its teams. They are often the occasion for thematic presentations.

In this context, site visits were organized in 2024, by groups of directors accompanied by a member of the Executive Committee, in Saudi Arabia (SATORP in Jubail, Admiral project, renewables), Paris (Hutchinson & Belib), Uganda (Exploration & Production, Marketing & Services), Bordeaux and Nersac (Saft R&D center, ACC plant) and Feluy, Belgium (R&D center, polymers). Additionally, Audit Committee members visited Le Havre (mobility, FSRU, Gonfreville refinery). Site visits are planned for 2025.

At its meeting on March 19, 2025, the Strategy & CSR Committee examined the Company's digital ambitions and the opportunities offered by artificial intelligence in the Company's various businesses, in support of its strategy.

The directors also have regular contact with Company management, either with members of the Executive Committee at Board meetings or operational managers during visits to the Company's sites. These interactions help the directors better understand TotalEnergies' activities in a practical way.

4.1.2 Functioning of the Board of Directors

10
meetings of the Board of Directors in 2024

97.9%
Directors' average attendance rate at Board meetings in 2024

1
executive session chaired by the Lead Independent Director in 2024

4.1.2.1 Working procedures of the Board of Directors

The working procedures of the Board of Directors are set out in its Rules of Procedure, which specify the mission of the Board of Directors and the rules related to the organization of its work. The Board's Rules of Procedure also specify the obligations of each director, as well as the role and powers of the Chairman and the Chief Executive Officer.

A member of the Central Social and Economic Committee attends the Board meetings in an advisory capacity, pursuant to Article L. 2312-75 of the French Labor Code.

The Rules of Procedure of the Board of Directors are reviewed on a regular basis in order to adapt them to changes in governance rules and practices. In 2014, changes were made to include, in particular, new provisions relating to information of the Board of Directors in the event of new directorships being assumed by the directors or changes in existing directorships, together with a reminder of the obligations of confidentiality inherent to the work of the Board.

In December 2015, changes were made to provide for the appointment of a Lead Independent Director in the event of the combination of the functions of Chairman of the Board and Chief Executive Officer and to define his or her duties. In July 2018, changes were made in response to the new demands pertaining to social and environmental responsibility further to the revision of the AFEP-MEDEF Code in June 2018. In July 2020, the Rules of Procedure governing the Board of Directors were amended further to reflect the Corporation's conversion into a European company and the changes introduced by the PACTE Law. In July 2021, it was again amended to incorporate the change of name of the Corporation, decided at the Shareholders' Meeting on May 28, 2021.

The text of the latest unabridged version of the Rules of Procedure of the Board of Directors, as approved by the Board of Directors at its meeting on July 28, 2021, is provided below. It is also available on the Corporation's website under "Our Company/Our identity/Our governance."

Rules of procedure of the Board of Directors

The Board of Directors of TotalEnergies SE[1] has approved the following rules of procedure.

1. Role of the Board of Directors

The Board of Directors is a collegial body that determines the course of the Corporation's business and oversees its implementation, in accordance with its corporate interest by taking into account the social and environmental challenges of its activity. With the exception of the powers and authority expressly reserved for shareholders and within the limits of the corporate purpose, the Board may address any issue related to the Corporation's operation and make any decision concerning the matters falling within its purview. Within this framework, the Board's duties and responsibilities include, but are not limited to, the following:

- appointing the executive directors[2] and supervising the handling of their responsibilities;
- striving to promote creation of long-term value by the Company;
- defining the Corporation's strategic orientations and, more generally, that of the Company;
- regularly reviewing, in relation with such strategic orientations, opportunities and risks such as financial, legal, operational, social and environmental risks as well as measures taken as a result;
- being informed of market developments, the competitive environment and the main challenges facing the Company, including with regard to social and environmental responsibility;
- approving investments or divestments being considered by the Company that exceed 3% of shareholders' equity as well as any significant transaction outside the announced strategy of the Company;
- reviewing information on significant events related to the Corporation's operations, in particular for investments and divestments involving amounts exceeding 1% of shareholders' equity;
- conducting any audits and investigations it deems appropriate. In particular, the Board, with the assistance of the Committees it has established, ensures that:
  - authority has been properly defined and that the various corporate bodies of the Corporation make proper use of their powers and responsibilities,
  - no individual is authorized to commit to pay or to make payments, on behalf of the Corporation, without proper supervision and control,
  - a system for preventing and detecting corruption and influence peddling is in place,
  - a non-discrimination and diversity policy within the Corporation and its Company exists and is implemented,

(1) TotalEnergies SE is referred to in these rules of procedure as the "Corporation" and collectively with all its direct and indirect subsidiaries as the "Company".
(2) The term "executive director" refers to the Chairman and Chief Executive Officer, if the Chairman of the Board of Directors is also responsible for the management of the Corporation; the Chairman of the Board of Directors and the Chief Executive Officer, if the two roles are carried out separately; and, where applicable, any Deputy Chief Executive Officers or Chief Operating Officers, depending on the organisational structure adopted by the Board of Directors.

- the internal control function operates properly and the statutory auditors are able to perform their mission satisfactorily, and
- the Committees duly perform their responsibilities;
- approving the internal assessment procedure regarding ordinary agreements finalized under normal conditions as well as "regulated" agreements;
- ensuring the quality of the information provided to shareholders and financial markets through the financial accounts that it closes and the reports that it publishes, as well as when major transactions are completed;
- convening and setting the agenda for Shareholders' Meetings or meetings of bond holders;
- ensuring that its composition as well as that of the Committees it establishes are balanced in terms of diversity (nationality, age, men/women, skills and professional experience);
- preparing on an annual basis, according to criteria set by the Code of corporate governance to which the Corporation refers, the list of directors it deems to be independent amongst the directors other than the director representing employee shareholders and the director or directors representing employees who are not counted for the purpose of determining the proportion of independent directors within the Board of Directors as well as within its Committees; and
- appointing a Lead Independent Director under the conditions set out in article 7, when the Chairman of the Board of Directors is also the Chief Executive Officer pursuant to a decision by the Board of Directors.

2. Obligations of the Directors of TotalEnergies SE

Before accepting a directorship, all candidates receive a copy of the Corporation's Articles of Association and these Rules of Procedure. They must ensure that they have broad knowledge of the general and particular obligations related to their duty, especially the laws and regulations governing directorships in European companies (*Societas Europaea*) registered in France, whose shares are listed in one or several regulated markets. They must also ensure that they are familiar with the guidelines set out in the Corporate Governance Code to which the Corporation refers.

Accepting a directorship creates an obligation to comply with applicable regulations relating in particular to the functioning of the Board of Directors, and with the ethical rules of professional conduct for directors as described in the Corporate Governance Code to which the Corporation refers.

It also creates an obligation to comply with these rules of procedure and to uphold the Company's values as described in its Code of Conduct.

When directors participate in and vote at meetings of the Board of Directors, they are required to represent all of the Corporation's shareholders and to act in the interest of the Corporation as a whole.

2.1. Independence of judgment

Directors undertake to maintain, in all circumstances, the independence of their analysis, judgment, decision-making and actions as well as not to be unduly influenced, directly or indirectly, by other directors, particular groups of shareholders, creditors, suppliers or, more generally, any third party.

2.2. Other directorships or functions

Directors must keep the Board of Directors informed of any position they hold on the management team, board of directors or supervisory board of any other company, whether French or foreign, listed or unlisted. This includes any positions as a non-voting member (*censeur*) of a board. To this end, directors expressly undertake to promptly notify the Chairman of the Board of Directors, and the Lead Independent Director if one has been appointed, of any changes to the positions held, for any reason, whether appointment, resignation, termination or non-renewal.

2.3. Participation in the Board's work

Directors undertake to devote the amount of time required to duly consider the information they are given and otherwise prepare for meetings of the Board of Directors and of the Committees of the Board of Directors on which they sit. They may request from the executive directors any additional information they deem necessary or useful to their duties. If they consider it necessary, they may request training on the Company's specificities, businesses and industry sector, its challenges in terms of social and environmental responsibility as well as any other training that may be of use to the effective exercise of their duties as directors.

Unless unable, in which case the Chairman of the Board shall be provided advance notice, directors are to attend all meetings of the Board of Directors, meetings of Committees of the Board of Directors on which they serve and Shareholders' Meetings.

The Chairman of the Board ensures that directors receive all relevant information concerning the Corporation, including that of a negative nature, particularly analyst reports, press releases and the most important media articles.

2.4. Confidentiality

Directors and any other person who attends all or part of any meeting of the Board of Directors or its Committees are under the strict obligation not to disclose any details of the proceedings.

All documents reviewed at meetings of the Board of Directors, as well as information conveyed prior to or during the meetings, are strictly confidential.

With respect to all non-public information acquired during the exercise of their functions, directors are bound, even after their functions have ceased, by professional secrecy not to divulge such information to outside parties of the Corporation and to employees of the Company. This obligation goes beyond the mere duty of discretion provided for by law.

Directors must not use confidential information obtained prior to or during meetings for their own personal benefit or for the benefit of anyone else, for whatever reason. They must take all necessary steps to ensure that the information remains confidential. Confidentiality and privacy are lifted when such information is made publicly available by the Corporation.

2.5. Duty of loyalty

Directors must not take advantage of their office or duties to gain, for themselves or a third party, any monetary or non-monetary benefit.

They must notify the Chairman of the Board of Directors and the Lead Independent Director, if one has been appointed, of any existing or potential conflict of interest with the Corporation or any subsidiary of the Company, and they must refrain from participating in the vote relating to the corresponding resolution as well as from participating in any debates preceding such vote.

Directors must inform the Board of Directors of their participation in any transaction that directly involves the Corporation, or any subsidiary of the Company, before such transaction is finalized.

Directors must not assume personal responsibilities in companies or businesses having activities in competition with those of the Corporation or any subsidiary of the Company without first having informed the Board of Directors.

Directors undertake not to seek or accept from the Corporation, or from companies related to the Corporation, directly or indirectly, any advantages liable to be considered as being of a nature that may compromise their independence.

2.6. Duty of expression

Directors undertake to clearly express their opposition if they deem a decision being considered by the Board of Directors is contrary to the Corporation's corporate interest and they must endeavor to convince the Board of Directors of the pertinence of their position.

2.7. Transactions in the Corporation's securities and stock exchange rules

While in office, directors are required to hold the minimum number of registered shares of the Corporation as set by the Articles of Association.

Generally speaking, directors must act with the highest degree of prudence and vigilance when completing any personal transaction involving the financial instruments of the Corporation, its subsidiaries or affiliates that are listed or that issue listed financial instruments.

To that end, directors must comply with the following requirements:

1. Any shares or ADRs of the Corporation or its listed subsidiaries are to be held in registered form, either with the Corporation or its agent, or as administered registered shares with a French broker (or North American broker for ADRs), whose contact details are communicated by the director to the Secretary of the Board of Directors.
2. Directors shall refrain from directly or indirectly engaging in (or recommending engagement in) transactions involving the financial instruments (shares, ADRs or any other securities related to such financial instruments) of the Corporation or its listed subsidiaries or shareholding, or any listed financial instruments for which the director has insider information.

   Inside information is precise information, which has not yet been made public, relating directly or indirectly, to one or more issuers of financial instruments or to one or more financial instruments, and which, if it were made public, would be likely to have a significant effect on the prices of those financial instruments or on the price of financial instruments related to them.
3. Any transaction in the Corporation's financial instruments (shares, ADRs or related financial instruments) is strictly prohibited during the thirty calendar days preceding the publication of its periodic results (quarterly, half-year or annual) as well as on the day of any such announcement.
4. Moreover, directors shall comply with the provisions under which performance shares may not be sold:
   - within thirty calendar days prior to the publication by the Corporation of a press release relating to the half-year and annual results, such publication constituting the announcement of an interim financial report or a year-end report within the meaning of the applicable regulations;
   - as well as in the event of knowledge of inside information within the meaning of Article 7 of Regulation (EU) No 596/2014 on market abuse, and which has not been made public.
5. Directors are prohibited from carrying out transactions on any financial instruments related to the Corporation's share (Paris option market (MONEP), warrants, exchangeable bonds, etc.) and from buying on margin or short selling such financial instruments.
6. Directors are also prohibited from hedging the shares of the Corporation and any financial instruments related to them, and in particular:
   - Corporation shares that they hold; and, where applicable:
     - Corporation shares subscription or purchase options;
     - rights to Corporation shares that may be awarded free of charge; and
     - Corporation shares obtained from the exercise of options or definitively granted.
7. Directors must make all necessary arrangements to declare, pursuant to the form and timeframe provided by applicable law, to the French securities regulator (*Autorité des marchés financiers*) and to the Financial Conduct Authority, as well as to the Secretary of the Board of Directors, any transaction involving the Corporation's securities conducted by themselves or by any other person to whom they are closely related.

3. Functioning of the Board of Directors

3.1. Board meetings

The Board of Directors meets whenever circumstances require and at least every three months.

Prior to each Board meeting, the directors receive the agenda and, whenever possible, all other materials necessary to consider for the session.

Directors may be represented by another director at a meeting of the Board, provided that no director holds more than one proxy at any single meeting.

Whenever authorized by law, directors are considered present for quorum and majority purposes who attend Board meetings through video conferencing or other audiovisual means that are compliant with the technical requirements set by applicable regulations.

3.2. Directors' compensation

Within the limit of a ceiling set by the Shareholders' Meeting, the Board of Directors determines the directors' compensation based on a fixed portion as well as a variable portion that takes into account each director's actual participation in the work of the Board of Directors and its Committees together with, if applicable, the exercise of the duties of the Lead Independent Director.

The Chief Executive Officer or, if the functions are combined, the Chairman and Chief Executive Officer, does not receive any compensation for his participation in the work of the Board and its Committees.

3.3. Secretary of the Board of Directors

The Board of Directors, based on the recommendation of its Chairman, appoints a Secretary of the Board who assists the Chairman in organizing the Board's activities, and particularly in preparing the annual work program and the schedule of Board meetings.

The Secretary of the Board drafts the minutes of Board meetings, which are then submitted to the Board for approval.

The minutes of the Board meetings are drafted in French and executed by the Chairman of the meeting and at least one director. If the Chairman of the meeting is unable to attend, it is executed by at least two directors. Non-binding translations of extracts from the minutes may be drawn up into another language than French. However, only the minutes in French shall prevail.

The Secretary of the Board is authorized to dispatch Board meeting minutes and to certify copies and extracts of the minutes.

The Secretary is responsible for all procedures pertaining to the functioning of the Board of Directors. These procedures are reviewed periodically by the Board.

All Board members may ask the Secretary for information or assistance.

3.4. Evaluation of the functioning of the Board

The Board evaluates its functioning at regular intervals not exceeding three years. The evaluation is carried out under the supervision of the Lead Independent Director, if one has been appointed, or under the supervision of the Governance and Ethics Committee, with the assistance of an outside consultant. The Board of Directors also conducts an annual review of its practices.

4. Role and authority of the Chairman

The Chairman represents the Board of Directors and, except under exceptional circumstances, has sole authority to act and speak on behalf of the Board of Directors.

The Chairman organizes and oversees the work of the Board of Directors and ensures that the corporate bodies operate effectively and in compliance with good governance principles. The Chairman coordinates the work of the Board of Directors and its Committees. The Chairman establishes the agenda for each Board meeting, including items suggested by the Chief Executive Officer.

The Chairman ensures that directors receive, in a timely manner and in a clear and appropriate format, the information they need to effectively carry out their duties.

In liaison with the general management, the Chairman is responsible for maintaining relations between the Board of Directors and the shareholders of the Corporation. The Chairman monitors the quality of information disclosed by the Corporation.

In close cooperation with the general management, the Chairman may represent the Corporation in high-level discussions with government authorities and major partners of the Company, both at a national and international level.

The Chairman is regularly informed by the Chief Executive Officer of significant events and situations relating to the Company, particularly with regard to strategy, organisation, monthly financial reporting, major investment and divestment projects and key financial transactions. The Chairman may ask the Chief Executive Officer or other senior executives of the Corporation, provided that the Chief Executive Officer is informed, to supply any information that may help the Board or its Committees to carry out their duties.

The Chairman may meet with the statutory auditors in order to prepare the work of the Board of Directors and the Audit Committee.

Every year, the Chairman reports to shareholders at the Shareholders' Meeting on the Board of Directors' work.

5. Authority of the Chief Executive Officer

The Chief Executive Officer is responsible for the Corporation's overall management. He represents the Corporation in its relationships with third parties and chairs the Executive Committee. The Chief Executive Officer is vested with the broadest powers to act on behalf of the Corporation in all circumstances, subject to the powers that are, by law, restricted to the Board of Directors and to the Annual Shareholders' Meeting, as well as to the Corporation's corporate governance rules and in particular these rules of procedure of the Board of Directors. The Board of Directors decides on any limitations of the powers of the Chief Executive Officer.

The Chief Executive Officer is responsible for presenting the Company's results and prospects to shareholders and the financial community on a regular basis. At each meeting of the Board of Directors, the Chief Executive Officer presents an overview of significant events of the Company.

The Chief Executive Officer proposes to the Board of Directors who present it to the shareholders at the Shareholders' Meeting, the Management Report of the Corporation as well as the consolidated Management Report.

6. Board Committees

The Board of Directors approved the creation of:

- an Audit Committee;
- a Governance and Ethics Committee;
- a Compensation Committee; and
- a Strategy & CSR Committee.

The roles and composition of each Committee are set forth in their respective rules of procedure, which have been approved by the Board of Directors.

The Committees perform their duties under the authority and for the benefit of the Board of Directors.

Each Committee reports on its activities to the Board of Directors.

7. Lead Independent Director

7.1. Appointment of the Lead Independent Director

When the functions of the Chairman of the Board and Chief Executive Officer are combined, the Board of Directors appoints a Lead Independent Director, on the recommendation of the Governance and Ethics Committee, among the directors considered to be independent by the Board of Directors.

The appointed Lead Independent Director holds this position while in office as director, unless otherwise decided by the Board of Directors, which may choose to terminate his duties at any time. If for any reason the director is no longer deemed to be independent, his or her position as Lead Independent Director will be terminated.

The Lead Independent Director, if one is appointed, chairs the Governance and Ethics Committee.

7.2. Duties of the Lead Independent Director

The Lead Independent Director's duties include:

1. Convening meetings of the Board of Directors – Meeting Agenda

   The Lead Independent Director may request that the Chairman and Chief Executive Officer call a meeting of the Board of Directors to discuss a given agenda.

   He may request that the Chairman and Chief Executive Officer include additional items on the agenda of any meeting of the Board of Directors.

2. Participation in the work of the Committees

   If not a member of the Compensation Committee, the Lead Independent Director is invited to attend meetings and participates in the work of the Compensation Committee relating to the annual review of the executive directors' performance and recommendations regarding their compensation.

3. Acting as Chairperson of Board of Directors' meetings

   When the Chairman and Chief Executive Officer is unable to attend all or part of a meeting of the Board of Directors, the Lead Independent Director chairs the meeting. In particular, he or she chairs those Board meetings the proceedings of which relate to the evaluation of the performance of the executive directors and the determination of their compensation, which take place in their absence.

4. Evaluation of the functioning of the Board of Directors

   The Lead Independent Director manages the evaluation process relating to the functioning of the Board of Directors and reports on this evaluation to the Board of Directors.

5. Prevention of conflicts of interest

   Within the Governance and Ethics Committee, the Lead Independent Director organizes the performance of due diligence in order to identify and analyze potential conflicts of interest within the Board of Directors. He informs the Chairman and Chief Executive Officer of any conflicts of interest identified as a result and reports to the Board of Directors on these activities.

   Pursuant to the obligation to declare conflicts of interest set out in article 2.5 of these Rules, any director affected by an existing or potential conflict of interest must inform the Chairman and Chief Executive Officer and the Lead Independent Director.

6. Monitoring of the satisfactory functioning of the Board and compliance with the Rules of Procedure

   The Lead Independent Director ensures compliance with the rules of the Corporate Governance Code to which TotalEnergies SE refers and with the Rules of Procedure of the Board of Directors. He or she may make any suggestions or recommendations that he deems appropriate to this end.

   He or she ensures that the directors are in a position to carry out their tasks under optimal conditions and that they have sufficient information to perform their duties.

With the agreement of the Governance and Ethics Committee, the Lead Independent Director may hold meetings of the directors who do not hold executive or salaried positions on the Board of Directors. He reports to the Board of Directors on the conclusions of such meetings.

7. Relationships with Shareholders

The Chairman and Chief Executive Officer and the Lead Independent Director are the shareholders' dedicated contacts on issues that fall within the remit of the Board.

When a shareholder approaches the Chairman and Chief Executive Officer in relation to such issues, the latter may seek the opinion of the Lead Independent Director before responding appropriately to the shareholder's request.

When the Lead Independent Director is approached by a shareholder in relation to such issues, he or she must inform the Chairman and Chief Executive Officer, providing his or her opinion, so that the Chairman and Chief Executive Officer may respond appropriately to the request. The Chairman and Chief Executive Officer must inform the Lead Independent Director of the response given.

With the consent of the Chairman of the Board of Directors, the Lead Independent Director may represent the Board of Directors at meetings with the shareholders of the Corporation on matters of corporate governance.

7.3. Resources – conditions of office and activity report

The Chairman and Chief Executive Officer must regularly update the Lead Independent Director on the Corporation's activities.

The Lead Independent Director has access to all of the documents and information necessary for the performance of his or her duties.

The Lead Independent Director may consult the Secretary of the Board and use the latter's services in the performance of his or her duties.

Under the conditions set out in article 3.2 of these Rules and those established by the Board of Directors, the Lead Independent Director may receive additional compensation for the duties entrusted to him or her.

The Lead Independent Director must report annually to the Board of Directors on the performance of his or her duties. During Annual Shareholders' Meetings, the Chairman and Chief Executive Officer may invite the Lead Independent Director to report on his or her activities.

4.1.2.2 Activity of the Board of Directors in 2024

Directors are in principle summoned to Board meetings by letter sent the week preceding the meetings. Whenever possible, documents to be considered for decisions to be made at Board meetings are sent with the notice of meetings. The minutes of the previous meeting are expressly approved at the following Board meeting.

In 2024, the Board of Directors met 10 times. The overall attendance rate for the directors was 97.9%. The Audit Committee met 7 times, with an attendance rate of 100%; the Compensation Committee met 3 times, with 100% attendance; the Governance and Ethics Committee held 5 meetings, with 100% attendance; and the Strategy & CSR Committee met 3 times, with 88.9% attendance.

A table summarizing individual attendance at the Board of Directors and Committee meetings is provided below.

DIRECTORS' ATTENDANCE AT BOARD AND COMMITTEE MEETINGS IN 2024

	Board of Directors		Audit Committee		Compensation Committee		Governance and Ethics Committee		Strategy & CSR Committee	
Directors	Attendance rate	Number of meetings	Attendance rate	Number of meetings	Attendance rate	Number of meetings	Attendance rate	Number of meetings	Attendance rate	Number of meetings
Patrick Pouyanné, *Chairman and Chief Executive Officer*	100%	10/10	–	–	–	–	–	–	100%	3/3
Jacques Aschenbroich *Lead Independent Director*	100%	10/10	–	–	100%	3/3	100%	5/5	100%	3/3
Marie-Christine Coisne-Roquette	90%	9/10	100%	7/7	–	–	100%	5/5	100%	3/3
Lise Croteau	100%	10/10	100%	7/7	–	–	–	–	–	3[e]
Mark Cutifani	90%	9/10	–	–	100%	3/3	100%	5/5	–	3[c]
Marie-Ange Debon[b]	100%	6/6	–	–	–	–	–	–	–	2[e]
Romain Garcia-Ivaldi[c,d]	100%	10/10	100%	7/7	–	–	–	–	–	3[c]
Maria van der Hoeven	100%	10/10	100%	7/7	–	–	–	–	–	3[e]
Glenn Hubbard	100%	10/10	100%	7/7	–	–	–	–	–	3[e]
Anne-Marie Idrac[a,b]	100%	4/4	–	–	100%	2/2	100%	3/3	100%	1/1
Emma de Jonge[a,d]	100%	10/10	–	–	–	–	–	–	100%	3/3
Anelise Lara	100%	10/10	–	–	–	–	–	–	100%	3/3[f]
Jean Lemierre	90%	9/10	–	–	–	–	100%	5/5	33%	1/3
Dierk Paskert	100%	10/10	–	–	100%	1/1	–	–	–	3[e]
Angel Pobo[c,d]	100%	10/10	–	–	100%	3/3	–	–	–	3[c]
Attendance rate	**97.9%**		**100%**		**100%**		**100%**		**88.9%[g]**	

(a) Director since May 24, 2024.
(b) Director representing employees.
(c) Director until May 24, 2024.
(d) Director representing employee shareholders.
(e) Voluntary participation (director not a member of the Strategy & CSR Committee).
(f) Including one voluntary participation.
(g) Excluding voluntary participation.

The Board meetings included, but were not limited to, a review of the following subjects:

February 6

- update on the acquisition of gas assets in Malaysia
- closing of the 2023 accounts (Consolidated Financial Statements, parent company accounts) after the Audit Committee's report and work performed by the statutory auditors
- draft allocation of the result of the Corporation, setting of the dividend for fiscal year 2023, ex-dividend and payment dates of final dividend for 2023
- 2024 shareholder return policy
- main investor relations messages
- presentation to the Board of the work of the Governance and Ethics Committee, which met on January 31, 2024
- report on the 2023 assessment of the Board of Directors and discussion on its functioning
- report of the Lead Independent Director on his mandate for fiscal year 2023
- allocation of the directors' compensation for the 2023 fiscal year
- information on transactions on the Corporation's securities carried out by the executive directors
- update on directors' and executives' liability insurance
- presentation to the Board of the work of the Compensation Committee, which met on January 31, 2024: assessment of the compensation of the Chairman and Chief Executive Officer for fiscal year 2023 and compensation policy for fiscal year 2024 (in his absence)
- preparation of the Annual Shareholders' Meeting: management report of the Board of Directors
- report on the implementation of the procedure to assess current transactions finalized under normal conditions and information on regulated agreements finalized by the Corporation
- information on Corporation share buybacks
- reduction in the Corporation's share capital by cancellation of treasury shares
- renewal of the authorization to issue bonds
- renewal of the authorization to issue security, commitments and guarantees
- renewal of the authorization to issue guarantees for certain financial transactions
- setting of the calendar related to the dividend (interim dividends and final dividend) for fiscal year 2025
- information on the declarations regarding the crossings of the thresholds in the Corporation's share capital
- Market Abuse Regulations – blackout periods

March 13

- approval of the Company's financial policy
- Sustainability & Climate 2024 Progress Report
- update on the presentation of the Sustainability and Climate strategy exposed to investors on March 21, 2024 and related press release draft
- presentation to the Board of the work of the Governance and Ethics Committee at its meeting on March 11, 2024
- assessment of the independence of the directors as of December 31, 2023
- presentation to the Board of the work of the Compensation Committee at its meeting on March 12, 2024
- confirmation of the final grant of performance shares under the 2021 Plan in the light of the fulfillment of the performance conditions
- review of the draft resolution submitted to the Shareholders' Meeting regarding the granting of free shares
- presentation to the Board of the work of the Audit Committee at its meeting on March 11, 2024
- approval of the Audit Committee's recommendation on the choice of the Sustainability auditors
- approval of the amendment of the Audit Committee's rules of procedure to include the transposition in French law of the European CSRD (Corporate Sustainability Reporting Directive)
- preparation for the Annual Shareholders' Meeting: date and location of the Shareholders' Meeting; setting of the agenda for the Shareholders' Meeting; approval of the various chapters of the Universal Registration Document forming the management report as defined by the French Commercial Code, the report on corporate governance and the special reports on subscription and purchase options on shares of the Corporation and the granting of performance shares; closing ot the report on purchases and sales of the shares of the Corporation as defined by Article L. 225-211 of the French Commercial Code; approval of the report of the Board of Directors and of the text of the draft resolutions submitted to the Shareholders' Meeting; press release
- information on shares buybacks and authorization to buy back shares in the second quarter of 2024
- information on the declarations regarding the crossings of the thresholds in the Corporation's share capital

April 25

- update on the EP project in Angola consisting of exploiting two oil reservoirs of the Block 20
- report to the Board of the work of the Strategy & CSR Committee at its meeting on March 13, 2024
- consolidated financial statements, results for the first quarter of 2024 after the Audit Committee's report and work performed by the statutory auditors
- presentation to the Board of the work of the Audit Committee at its meeting on April 23, 2024
- setting of a first interim dividend for fiscal year 2024
- main investor relations messages
- preparation and organization of the Shareholders' Meeting on May 24, 2024: feedback on the Lead Independent Director's roadshows and letters from shareholders, examination of shareholder resolution filings
- approval of the principle of establishing a Worldwide Plan in 2024 up to 100 free shares per eligible employee
- information on the 2024 capital increase reserved for employees
- information on Corporation share buybacks and authorization regarding 2024
- information on bond issues
- information on the declarations regarding the crossings of the thresholds in the Corporation's share capital

May 23

- preparation and organization of the Shareholders' Meeting on May 24, 2024: answers to written questions, decision not to register the advisory resolution, legal proceedings and discussions with proxy advisors and investors, information on the vote on draft resolutions
- decision of a worldwide free shares allocation plan
- approval of the oil deep offshore Atapu 2 and Sépia 2 projects in Brazil
- information related to the 2024 capital increase reserved for employees
- update on litigation

May 24

- appointment of the Chairman and of the Chief Executive Officer, management form of the Corporation, compensation to the Chairman and Chief Executive Officer, commitments made by the Corporation to the Chairman and Chief Executive Officer
- reimbursement of expenses incurred by directors and the Chairman and Chief Executive Officer
- evolution of the composition of the Board Committees
- post-AGM press release

- free allocation of performance shares (Plan 2024) to the Chairman and Chief Executive Officer and other beneficiaries
- authorisation of the share buybacks at third quarter of 2024
- delegation of powers to trade in the Corporation shares
- renewal of the authorization to issue bonds
- renewal of the authorization to issue security, commitments and guarantees
- renewal of the authorization to issue guarantees for certain transactions

July 24

- analysis of the results of the votes at the Shareholders' Meeting held on May 24, 2024, of the comments of shareholders and main proxy advisors and lessons to be learnt
- confidentiality of the work of the Board of Directors
- presentation of the strategic outlook for Exploration & Production, including safety, reduction of the environmental footprint, improvement of operational efficiency, resilience and project selectivity
- Consolidated Financial Statements, results for the second quarter of 2024 and the first half of 2024 after the Audit Committee's report and work performed by the statutory auditors; results of the parent company for the first half of 2024
- half-yearly financial report
- minutes of the Audit Committee meetings on June 10, 2024 and July 22, 2024
- setting of a second interim dividend for fiscal year 2024
- main investor relations messages
- information on share buybacks and decision on the implementation of the share buyback program
- information on the declarations regarding the crossings of the thresholds in the Corporation's share capital rights
- program of the 2024 Strategy seminar
- training of directors and site visit projects for members of the Board of Directors
- update on legal proceedings
- legal update on the golden share following the report of the Senate commission of inquiry
- update on the evolution of the institutional shareholders

September 26

- approval of an EP offshore investment project in Suriname
- strategic outlook for Gas, Renewables & Power activities
- Company's five-year plan
- shareholder return policy and share buybacks
- presentation of the review of the 2024 capital increase reserved for employees
- approval of the Board's supplementary report on the 2024 capital increase reserved for employees
- approval of the orientations regarding a new capital increase reserved for employees
- information on bond issues
- information on the declarations regarding the crossings of the thresholds in the Corporation's share capital
- update on legal proceedings

October 2

- approval of the shareholder return policy; share buyback authorization
- update on the project to transform ADRs into shares
- presentation of the draft communication to investors on the outlook of TotalEnergies

October 30

- strategic outlook for Refining & Chemicals' activities
- strategic outlook for Marketing & Services' activities
- Consolidated Financial Statements, results for the third quarter of 2024, after the Audit Committee's report and work performed by the statutory auditors
- presentation to the Board of the work of the Audit Committee at its meetings on October 7 and 28, 2024
- setting of a third interim dividend on the dividend for fiscal year 2024
- main investor relations messages
- approval of the principle of the 2025 capital increase reserved for employees
- presentation of the company's strategic orientations (Articles L. 2312-17 and L. 2312-24 of the French Labor Code)
- information on Corporation share buybacks
- delegation of powers to the Treasurer
- update on the transformation of ADRs into ordinary shares
- review of the inclusion of a formal item for debate on the agenda of the next Shareholders' Meeting on the presentation of the Sustainability & Climate Report
- update on legal proceedings

December 11

- information on an acquisition project in the field of renewables
- 2025 budget
- examination of the results of 2024 TotalEnergies Survey
- the Corporation's equality policy between men and women in the workplace and in terms of pay
- information on Corporation share buybacks in 4th quarter 2024 and authorization of Corporation share buybacks for 1st quarter 2025
- information on bond issues
- renewal of the authorization to issue bonds
- renewal of the authorization to issue security, commitments and guarantees
- renewal of the authorization to issue guarantees for certain financial transactions
- update on Market Abuse Regulations and the blackout periods
- information on the notifications regarding the crossings of the thresholds concerning the Corporation
- update on the Adani situation
- update on the evolution of the institutional shareholding
- 2025 work program for the Board of Directors
- update on legal proceedings.

4.1.2.3 Committees of the Board of Directors

THE AUDIT COMMITTEE

5	75%*	7	100%
members	Independence rate	meetings in 2024	Attendance rate

* Excluding the director representing employees.

Composition

As of March 19, 2025, the Audit Committee is made up of 5 members, with a 75% rate of independence (excluding director representing employees).

Ms. Maria van der Hoeven chairs the Committee. Ms. Marie-Christine Coisne-Roquette, Ms. Lise Croteau, Mr. Romain Garcia-Ivaldi and Mr. Glenn Hubbard sit on the Committee. Ms. Lise Croteau was appointed financial expert in this Committee by the Board of Directors. The careers of the Committee members confirm their possession of acknowledged expertise in the financial, accounting or audit fields (refer to point 4.1.1.1).

Duties

The rules of procedure of the Audit Committee define the Committee's duties as well as its working procedures.

The Audit Committee's rules of procedure were last amended on March 13, 2024 to include the transposition in French law of the European CSRD (Corporate Sustainability Reporting Directive) directive. They had previously been amended on July 28, 2021 to take account of the change in the Corporation's name decided at the Shareholders' Meeting on May 28, 2021, on February 8, 2017, in order to adapt the Committee's role and responsibilities to the European audit reform, on July 25, 2018, in order to take account of new social and environmental responsibility requirements, further to the revision of the AFEP-MEDEF Code in June 2018, and on July 29, 2020, to reflect the Corporation's conversion to a European company and various amendments to the Corporation's Articles of Association that were approved by the Shareholders' Meeting on May 29, 2020.

The text of the unabridged version of the rules of procedure approved by the Board of Directors on July 28, 2021, is available on the TotalEnergies website under "Our Company/Our identity/Our governance."

Notwithstanding the duties of the Board of Directors, the Audit Committee is tasked with the following missions in particular:

Regarding the statutory auditors and the sustainability auditor(s) in charge of carrying out the certification mission of the sustainability information:

- making a recommendation to the Board of Directors on the statutory auditors and the sustainability auditor(s) in charge of carrying out the certification mission of the sustainability information, put before the Annual Shareholders' Meeting for designation or renewal, following their selection procedure organized by General Management and enforcing the applicable regulations;
- monitoring the performance of their missions of audit and certification of sustainability information and, examining notably reports, in particular the additional report drawn up by the statutory auditors for the Committee, while taking account of the observations and conclusions of the High Authority of the Audit (*Haute autorité de l'Audit*) further to the inspection of the auditors in question in application of the legal provisions, where appropriate;
- ensuring that the conditions of independence required for persons exercising the account certification and sustainability information certification missions are met, and analyzing the risks to their independence and the measures taken to mitigate these risks; to this end, examining all the fees paid, including for services other than the certification of the financial statements or for services other than the certification of the sustainability information, and making sure that the rules applying to the maximum length of the terms and the obligation to alternate are obeyed;
- approving the delivery of services other than those relating to the certification of the financial statements or of services other than those relating to the certification of the sustainability information, in accordance with the applicable regulations.

Regarding accounting, financial and sustainability information:

- following the process to produce financial information, the process to produce sustainable information, including in digital form, and the process implemented to determine the information to be disclosed in accordance with sustainability reporting standards, as well as, where appropriate, formulating recommendations to guarantee the integrity, of such processes;
- monitoring the implementation and the proper workings of a disclosures Committee in the Corporation and reviewing its conclusions;
- examining the assumptions used to prepare the financial statements, assessing the validity of the methods used to handle significant transactions and examining the Corporation financial statements and annual, half-yearly, and quarterly Consolidated Financial Statements prior to their examination by the Board of Directors, after regularly monitoring the financial situation, cash position and off-balance sheet commitments;
- guaranteeing the appropriateness and the permanence of the accounting policies and principles chosen to prepare the statutory and Consolidated Financial Statements of the Corporation;
- examining the scope of the consolidated companies and, where appropriate, the reasons why companies are not included;
- examining the process to validate the proved reserves of the companies included in the scope of consolidation;
- reviewing, if requested by the Board of Directors, major transactions contemplated by the Corporation.

Regarding internal control and risk management procedures:

- monitoring the efficiency of the internal control and risk management systems, and of internal audits, in particular with regard to the procedures relating to the production and processing of accounting, financial and sustainability information, including in digital form, without compromising its independence, and in this respect:
  - checking that these systems exist and are deployed, and that actions are taken to correct any identified weaknesses or anomalies;
  - reviewing, based in particular on the risk maps developed by the Corporation, the exposure to risks, such as financial risks (including material off-balance sheet commitments), legal risks, operational risks, social and environmental risks, as well as measures taken as a result;

- annually examining the reports on the work of the TotalEnergies Risk Management Committee and the major issues for the Company;
- examining the annual work program of the internal auditors and being regularly informed of their work;
- reviewing significant litigation at least once a year;
- overseeing the implementation of the Financial Code of Ethics;
- proposing to the Board of Directors, for implementation, a procedure for complaints or concerns of employees, shareholders and others, related to accounting, internal control or auditing matters, and monitoring the implementation of this procedure;
- where appropriate, examining important operations in which a conflict of interests could have arisen;
- annually examining the results of the controls carried out within the framework of the procedure implemented in order to assess the agreements on current operations finalized under normal conditions and verifying the relevance of the criteria used to qualify those agreements.

The Audit Committee reports to the Board of Directors on the performance of its duties. It also reports on the results of the mission concerning the certification of the financial statements, of the mission of certification of the sustainability information as well as on how these missions contributed to the integrity of the accounting and financial information, and the sustainability information as well as its role in this process. It shall inform the Board of Directors without delay of any difficulties encountered.

Organization of activities

The Committee meets at least seven times each year: each quarter to review in particular the statutory financial statements of the Corporation and the annual and quarterly Consolidated Financial Statements, and at least on three other occasions to review matters not directly related to the review of the quarterly financial statements.

At each Committee meeting where the quarterly financial statements are reviewed, the Chief Financial Officer presents the Consolidated Financial Statements and the statutory financial statements of the Corporation, as well as the Company's financial position and, in particular, its liquidity, cash flow and debt situation. A memo describing risk exposure and off-balance sheet commitments is communicated to the Committee. This review of the financial statements includes a presentation by the statutory auditors underscoring the key points observed.

As part of monitoring the efficiency of the internal control and risk management systems, as well as internal audits with regard to the procedures relating to the production and processing of accounting, financial and sustainability information, the Committee is informed of the work program of the Audit & Internal Control division and its organization, on which it may issue an opinion. The Committee also receives a summary of the internal audit reports, which is presented at each Committee meeting where the quarterly financial statements are reviewed. The risk management processes implemented within the Company, as well as updates to them, are presented regularly to the Committee.

The Committee may meet with the Chairman and Chief Executive Officer or, if the functions are separate, the Chairman of the Board of Directors, the Chief Executive Officer as well as, if applicable, any Deputy Chief Executive Officer of the Corporation. It may perform inspections and consult with managers of operating or non-operating department, as may be useful in performing its duties. The Chairman of the Committee gives prior notice of such meeting to the Chairman and Chief Executive Officer or, if the functions of Chairman of the Board of Directors and Chief Executive Officer are separate, both the Chairman of the Board of Directors and the Chief Executive Officer. In particular, the Committee is authorized to consult with those involved in preparing or auditing the financial statements and sustainability information (Chief Financial Officer and principal Finance Department managers, Audit Department, Strategy & Sustainability) by asking the Corporation's Chief Financial Officer to call them to a meeting.

The Committee consults with the statutory auditors regularly, including at least once a year without any Corporation representative present. If it is informed of a substantial irregularity, it recommends to the Board of Directors all appropriate action.

If it considers that it is necessary for the accomplishment of its mission, the Committee asks the Board of Directors for resources to receive assistance or conduct external studies on subjects within its competence. If the Committee calls on external consulting services, it makes sure that they are objective.

Work of the Audit Committee

In 2024, the Audit Committee met 7 times, with an attendance rate of 100%. The Chairman and Chief Executive Officer did not attend any of the meetings of the Audit Committee.

The Audit Committee's work mainly focused on the following areas:

February 5

- review of the Consolidated Financial Statements and statutory financial statements of the parent company for the fourth quarter and of the 2023 fiscal year. Presentation by the statutory auditors of their work performed in accordance with French and American professional audit standards
- review of the Company's financial position as of December 31, 2023
- update on outstanding balance of guarantees granted by TotalEnergies SE as of December 31, 2023
- update on the 2023 internal audit
- update on the organizational framework of the Company's risk management system and the missions of the TotalEnergies Risk Management Committee (TRMC) - presentation of the works undertaken by the TRMC
- update on the Sarbanes-Oxley process: self-assessment carried out by the Company and audit of the internal control related to financial reporting by the statutory auditors as part of the SOX 404 process
- review of the results of the controls carried out concerning the assessment procedure of ordinary transactions entered into under normal terms
- presentation of the section of the Universal Registration Document on risk factors, countries under economic sanctions, legal proceedings and arbitration, internal control and risk management procedures relating to accounting and financial information
- update on call for tenders for sustainability auditors

March 11

- amendment of the rules of procedures of the Audit Committee to include the new legal requirements resulting from the Ordinance dated December 6, 2023 transposing the CSRD directive onto French law
- update on the call for tenders for the selection of the sustainability and recommendation made to the Board of Directors
- review of the statutory auditors' reports, their declaration of independence and their obligations to the Audit Committee
- review of the Company's financial policy
- review of the Company's insurance policy
- presentation of the statement of extra-financial performance
- presentation of the update to the Vigilance plan and the implementation report
- presentation of the works on the European taxonomy
- process for validating hydrocarbon reserves at the end of the 2023 fiscal year
- presentation of the report on the payments made to governments and of the tax transparency report

April 23

- review of the Consolidated Financial Statements and statutory financial statements of the parent company for the first quarter of 2024, with a presentation by the statutory auditors of a summary of their limited review
- update on the Company's financial position as of March 31, 2024
- presentation of the 2024 health, safety and environment audit plan and review of the fiscal year 2023
- review of the internal audit

June 10 (visit of several TotalEnergies' sites in Normandy)

- visit of a service station, a Floating Storage and Regasification Unit (FSRU) and a refining-petrochemical platform and presentation of concerned activities

July 22

- review of the Consolidated Financial Statements of the parent company of the second quarter and the first half of 2024, with a presentation by the statutory auditors of a summary of their limited review
- review of the Company's financial position as of June 30, 2024
- review of the internal audit
- update on accounting new developments, financial information and regulatory developments

October 7

- review of significant litigation
- review of the Company's tax situation
- review of 2023 and 1st half 2024 audits regarding cybersecurity
- CSRD training
- presentation by the auditors of the audit approach on consolidated financial statements and on non-financial reporting (CSRD) as of December 31, 2024

October 28

- agenda proposal for 2025 Audit Committee meetings
- review of the Consolidated Financial Statements and statutory financial statements of the third quarter and the first nine months of 2024, with a presentation by the statutory auditors of a summary of their limited review
- review of the Company's financial situation as of September 30, 2024
- update on the internal audits conducted in the third quarter of 2024
- information of the Committee on compliance by relevant employees with the provisions of the Financial Code of Ethics
- update on the status of progress on CSRD work.

At each meeting related to the quarterly financial statements, the Committee reviewed the Company's financial position in terms of liquidity, cash flow and debt, as well as the significant risks and off-balance sheet commitments of TotalEnergies. The Audit Committee was periodically informed of the risk management processes implemented within the Company as well as the work carried out by the Audit & Internal Control division, which was presented at each Committee meeting where the quarterly financial statements were reviewed.

The Audit Committee reviewed the financial statements in a sufficient amount of time as set out in the recommendations of the AFEP-MEDEF Code.

The statutory auditors attended all Audit Committee meetings held in 2024.

The Chief Financial Officer and the Senior Vice President Audit & Internal Control division, the Corporate Treasurer, as well as Vice President Accounting attended all Audit Committee meetings related to their area.

The Chairman of the Committee reported to the Board of Directors on the Committee's work.

THE GOVERNANCE AND ETHICS COMMITTEE

4	75%	5	100%
members	Independence rate	meetings in 2024	Attendance rate

Composition

As of March 19, 2025, the Governance and Ethics Committee is made up of four members, with a 75% rate of independence. Mr. Jacques Aschenbroich chairs the Committee. Ms. Marie-Christine Coisne-Roquette, Mr. Mark Cutifani and Mr. Jean Lemierre are members of the Committee.

Duties

The rules of procedure of the Governance and Ethics Committee define the Committee's duties as well as its working procedures.

The Governance and Ethics Committee's rules of procedure were last amended on July 28, 2021 to take account of the change in the Corporation's name decided at the Shareholders' Meeting on May 28, 2021. They had previously been amended on July 25, 2018 to extend the Committee's role and responsibilities to subjects related to compliance and the prevention and detection of corruption and influence peddling, and on July 29, 2020, to take account of the Corporation's conversion to a European company and various amendments to the Corporation's Articles of Association that were approved by the Shareholders' Meeting on May 29, 2020.

The text of the unabridged version of the rules of procedure approved by the Board of Directors on July 28, 2021, is available on the TotalEnergies website under "Our Company/Our identity/Our governance."

The Governance and Ethics Committee is focused on:

- recommending to the Board of Directors the persons that are qualified to be appointed as directors, so as to guarantee the scope of coverage of the directors' competencies and the diversity of their profiles;
- recommending to the Board of Directors the persons that are qualified to be appointed as executive directors;
- preparing the Corporation's corporate governance rules and supervising their implementation;
- ensuring compliance with ethics rules and examining any questions related to ethics and situations of conflicting interests;
- reviewing matters regarding compliance as well as the prevention and detection of corruption and influence peddling.

Its duties include:

- presenting recommendations to the Board of Directors for its membership and the membership of its Committees, and the qualification in terms of independence of each applicant for Directors' positions on the Board of Directors;
- proposing annually to the Board of Directors the list of directors who may be considered as "independent directors";
- examining, for the parts within its remit, reports to be sent by the Board of Directors or its Chairman to the shareholders;

- assisting the Board of Directors in the selection of the organization of the governance of the Corporation as well as the selection and evaluation of the executive directors and examining the preparation of their possible successors including establishing a succession plan, including cases of unforeseeable absence;
- recommending to the Board of Directors the persons that are qualified to be appointed as directors;
- recommending to the Board of Directors the persons that are qualified to be appointed as members of a Committee of the Board of Directors;
- proposing methods for the Board of Directors to evaluate its performance, and in particular preparing means of regular self-assessment of the workings of the Board of Directors, and the possible assessment thereof by an external consultant;
- proposing to the Board of Directors the terms and conditions for allocating directors' compensation and the conditions under which expenses incurred by the directors are reimbursed;
- developing and recommending to the Board of Directors the corporate governance principles applicable to the Corporation;
- preparing recommendations requested at any time by the Board of Directors or the general management of the Corporation regarding appointments or governance;
- examining the conformity of the Corporation's governance practices with the recommendations of the Code of Corporate Governance to which the Corporation refers;
- supervising and monitoring the implementation of the approach of the Corporation with regard to ethics, compliance, prevention and detection of corruption and influence peddling and, in this respect, ensuring that the necessary procedures are in place, including those for updating the Company's Code of Conduct and that this Code is disseminated and applied;
- examining any questions related to ethics and potential situations of conflicting interests;
- examining changes in the duties of the Board of Directors.

Work of the Governance and Ethics Committee

In 2024, the Governance and Ethics Committee held 5 meetings, with 100% attendance. Its work mainly focused on the following areas:

January 31

- assessment of the Board of Directors' practices in 2023
- report of the Lead Independent Director on his mandate
- allocation of the compensation to directors and members of the Committees for fiscal year 2023
- information on transactions involving the Corporation's securities by executive directors
- update on directors' and executives' liability insurance
- update on the terms of office of the directors and the members of the Committees

March 11

- proposals to the Board of Directors on the assessment of the directors' independence, based on the independence criteria specified in the AFEP-MEDEF Code
- amendment of the Audit Committee's rules of procedure in view of including the missions resulting from the transposition of the CSRD into French legislation

April 25

- examination of requests for filing proposed resolutions
- draft press release

July 24

- presentation of the Company's ethics and compliance policy
- analysis of the outcome of the votes at the Shareholders' Meeting held on May 24, 2024, of the comments of shareholders and main proxy advisors and lessons to be learnt
- update on the confidentiality of the works of the Board of Directors
- update on the directors' training in connection with CSRD
- update on the designation of an external consultant in view of the formalized assessment of the Board of Directors
- discussions on changes in the composition of the Board of Directors
- update on the succession plans

December 11

- evolution of the composition of the Board of Directors
- review of the process and of the questionnaire for assessing the functioning of the Board of Directors in 2024
- update on the directors compensation policy.

THE COMPENSATION COMMITTEE

4	100%*	3	100%
members	Independence rate	meetings in 2024	Attendance rate

* Excluding the director representing employees.

Composition

As of March 19, 2025, the Compensation Committee is made up of four members, with a 100% rate of independence[1]. The Committee is chaired by Mr. Mark Cutifani. Mr. Jacques Aschenbroich, Mr. Dierk Paskert and Mr. Angel Pobo (director representing employees) are members of the Committee.

Duties

The rules of procedure of the Compensation Committee define the Committee's duties as well as its working procedures.

The Compensation Committee's rules of procedure were last amended on July 28, 2021 to take account of the change in the Corporation's name decided at the Shareholders' Meeting on May 28, 2021. They had previously been amended on July 25, 2018, in order to take account of new social and environmental responsibility requirements, further to the revision of the AFEP-MEDEF Code in June 2018, and on July 29, 2020, to reflect the Corporation's conversion to a European company and various amendments to the Corporation's Articles of Association that were approved by the Shareholders' Meeting on May 29, 2020.

The text of the unabridged version of the rules of procedure approved by the Board of Directors on July 28, 2021, is available on the TotalEnergies website under "Our Company/Our identity/Our governance."

(1) Excluding the director representing employee shareholders in accordance with the recommendations of the AFEP-MEDEF Code (point 10.3).

The Committee is focused on:

- examining the executive compensation policies implemented by the Company and the compensation of members of the Executive Committee;
- evaluating the performance and recommending the compensation of each executive director;
- preparing reports which the Corporation must present in these areas.

The Committee's duties include:

- examining the main objectives proposed by the Corporation's general management regarding compensation of the Company's senior executives, including stock option and performance share grant plans as well as equity-based plans, and advising on this subject;
- presenting recommendations and proposals to the Board of Directors concerning:
  - compensation, pension and life insurance plans, in-kind benefits and other compensation (including severance benefits) for the executive directors of the Corporation; in particular, the Committee proposes compensation structures that take into account the Corporation's strategic orientations, objectives and earnings, market practices as well as one or more criteria related to social and environmental responsibility;
  - stock option and performance share grants, particularly grants of restricted shares to the executive directors;
- examining the compensation of the members of the Executive Committee, including stock option and performance share grant plans as well as equity-based plans, pension and insurance plans and in-kind benefits;
- preparing and presenting reports in accordance with these rules of procedure;
- examining, for the parts within its remit, reports to be sent by the Board of Directors or its Chairman to the shareholders;
- preparing recommendations requested at any time by the Chairman of the Board of Directors or the general management of the Corporation regarding compensation;
- at the request of the Chairman of the Board, examining all draft reports of the Corporation regarding compensation of the executive officers or any other matters within its competence.

Work of the Compensation Committee

In 2024, the Compensation Committee held 3 meetings, with 100% attendance. The Chairman and Chief Executive Officer does not attend the Committee's deliberations regarding his own situation.

Its work mainly focused on the following areas:

January 31

- review of the new French benchmark used to determine how the compensation of the Chairman and Chief Executive Officer is positioned
- assessment of the compensation of the Chairman and Chief Executive Officer for fiscal year 2023
- compensation policy of the Chairman and Chief Executive Officer for fiscal year 2024
- review of the draft letter of the Chairman of the Compensation Committee

March 12

- confirmation of the final grant of performance shares in respect of the 2021 plan
- proposed resolution to the Shareholders' Meeting on May 24, 2024 regarding the grant of free shares
- review of the Letter of the Chairman of the Compensation Committee and of the section of the report on corporate governance regarding compensation
- compensation of the members of the Executive Committee

December 11

- analysis of the proxy advisors' recommendations
- benchmark elements (peer group compensation CEO)
- first assessment of the compensation for the Chairman and Chief Executive Officer for 2024 and guidelines governing compensation for the Chairman and Chief Executive Officer for fiscal year 2025.

THE STRATEGY & CSR COMMITTEE

6	60%*	3	88.9%
members	Independence rate	meetings in 2024	Attendance rate

* Excluding the director representing employee shareholders.

Composition

As of March 19, 2025, the Strategy & CSR Committee is made up of six members, including three independent directors and one director representing employees. Mr. Patrick Pouyanné chairs the Committee. Ms. Marie-Christine Coisne-Roquette, Ms. Anelise Lara, Ms. Emma de Jonge, Mr. Jacques Aschenbroich and Mr. Jean Lemierre are members of the Committee.

Duties

The rules of procedure of the Strategy & CSR Committee define the Committee's duties as well as its working procedures.

The Strategy & CSR Committee's rules of procedure were last amended on July 28, 2021 to take account of the change in the Corporation's name decided at the Shareholders' Meeting on May 28, 2021. They had previously been amended notably on July 25, 2018, in order to take account of new social and environmental responsibility requirements, further to the revision of the AFEP-MEDEF Code in June 2018, and on July 29, 2020, to reflect the Corporation's conversion to a European company and various amendments to the Corporation's Articles of Association that were approved by the Shareholders' Meeting on May 29, 2020.

The text of the unabridged version of the rules of procedure approved by the Board of Directors on July 28, 2021, is available on the TotalEnergies website under "Our Company/Our identity/Our governance."

To allow the Board of Directors of the Corporation to ensure the Company's development, the Strategy & CSR Committee's duties include:

- examining the Company's overall strategy proposed by the Corporation's Chief Executive Officer;
- examining the Company's corporate social and environmental responsibility (CSR) issues and, in particular, matters relating to the incorporation of the Climate challenge in the Company's strategy;
- examining transactions that are of particular strategic importance;
- reviewing the competitive environment, the main challenges the Company faces, including with regard to social and environmental responsibility, as well as the resulting medium and long-term outlook for the Company.

Work of the Strategy & CSR Committee

In 2024, the Strategy & CSR Committee met 3 times, with 88.9% attendance. Its work notably focused on the following areas:

March 13

- presentation of the Sustainability & Climate 2024 Progress Report
- proposed resolution to be submitted to the Shareholders' Meeting on the advisory resolution on the Sustainability & Climate 2024 Progress Report
- presentation of climate litigation (worldwide and of the Company)

September 25 and 26 (strategy seminar)

- presentation of the Company's strategic environment: evolution of energy markets and benchmark of the majors' strategy
- presentation dedicated to the Integrated Power business model and its levers of profitability
- reflections on the evolution of the Climate legal context of the European Union
- discussion with Michele della Vigna, Senior Analyst at Goldman Sachs
- update on TotalEnergies' communication in France
- Strategy and Outlook presentation to investors
- shareholder return policy.

4.1.3 Report of the Lead Independent Director on his mandate

During the Board meeting of February 4, 2025, Mr. Aschenbroich presented a report on his mandate as Lead Independent Director in fiscal year 2024.

The duties of Lead Independent Director were exercised as follows during fiscal year 2024:

Contact with the Chairman and Chief Executive Officer

The Lead Independent Director is a privileged interlocutor of the Chairman and Chief Executive Officer with respect to significant matters concerning the Company's business and preparing meetings of the Board of Directors and of the Governance and Ethics Committee that he chairs. In addition to occasional exchanges, the Lead Independent Director thus met in 2024 the Chairman and Chief Executive Officer on a monthly basis and before each meeting of the Board of Directors.

Assessment of the Board of Directors' practices

The Lead Independent Director conducted the assessment of the Board of Directors' practices in 2024, with the support of an external consultant.

Prevention of conflicts of interest

The Lead Independent Director has performed due diligence in order to identify and analyze potential conflicts of interest.

The Lead Independent Director is thus consulted by directors who are considering accepting a mandate in other companies. No situation relating to a project to take up a mandate or an external function by a director has led the Lead Independent Director to refer the matter to the Governance and Ethics Committee.

Monitoring of the Board's practices

The Lead Independent Director held a meeting on December 11, 2024 with the directors having no executive nor salaried position on the Board.

The directors were able to discuss in a constructive and transparent atmosphere, it being recalled that they were asked to complete the questionnaire submitted to them as part of the annual assessment of the functioning of the Board.

More generally, the working program of the Board meetings in 2025 makes it possible to cover all the matters raised during this meeting.

During the meeting, it was confirmed that the current pace of one executive session per year was deemed appropriate. If necessary, and at the requests of several directors having no executive nor salaried position, an additional session could be organized on a specific topic.

The directors welcomed the fact that, in addition to the work of the Audit Committee, the main litigations are subject to regular examination by the Board.

In addition, at this meeting, the non-executive directors confirmed – once again – their full support for the strategy implemented as adopted by the Board: it makes TotalEnergies the company most committed to the energy transition among the majors, by developing, in a determined and structured manner, an Integrated Power activity. TotalEnergies is one of the major players in the renewable energy sector and the Integrated Power business has reached encouraging levels of profitability.

The non-executive directors expressed their satisfaction with the in-depth analysis carried out on the perception by the various stakeholders of the strategy implemented by TotalEnergies, and with the suggestions presented by the Chairman and Chief Executive Officer to improve the perception and understanding of this strategy.

Finally, the non-executive directors confirmed their unanimous support to the transformation of US ADRs, already listed on the New York Stock Exchange since 30 years, into ordinary shares. When the Board of Directors will take its decision, particular attention will be paid to communication on the technical nature of this transformation of financial instruments which has no impact on the Company's headquarter, nor on its listing in Paris since Paris will remain the TotalEnergies' share introduction market.

Relationship with directors

The Lead Independent Director is playing a key role in the search and selection process for directors.

He thus conducted the search and selection of new directors, and he interviewed several potential candidates as part of the work of the Governance and Ethics Committee having led this Committee to recommend to the Board of Directors the submission to the 2025 Shareholders' Meeting of the appointment of Ms. Helen Lee Bouygues and of Mr. Laurent Mignon as directors.

Leading the work on the Company's governance

In preparation for the renewal of the mandate of director of the Chairman and Chief Executive Officer at the end of the 2024 Shareholders' Meeting, the Lead Independent Director chaired, without the presence of the Chairman and Chief Executive Officer, the discussions and deliberations of the Governance and Ethics Committee and of the Board of Directors which unanimously reaffirmed the relevance of the unified governance in order to continue the transition strategy of the Company.

Moreover, the Board of Directors, under the chairmanship of the Lead Independent Directors and on the proposal of the Governance and Ethics Committee, unanimously decided, the Chairman and Chief Executive Officer not taking part in the vote, not to include on the agenda of the 2024 Shareholders' Meeting the draft advisory resolution submitted by a group of shareholders representing less than 0.9% of the share capital and that was aiming to request the Shareholders' Meeting to invite the Board of Directors, by means of an advisory vote, to decide that the Corporation's General Management will be assumed by a person other than the Chairman of the Board of Directors.

Relationships with shareholders

The Chairman and Chief Executive Officer and the Lead Independent Director are the privileged points of contact for shareholders concerning matters under the Board's responsibility. In accordance with the provisions of the Board's Rules of Procedure, when the Chairman and Chief Executive Officer is solicited by a shareholder in this area, he may consult the Lead Independent Director before responding.

When the Lead Independent Director is approached by a shareholder in relation to such issues, he must inform the Chairman and Chief Executive Officer, providing his opinion, so that the Chairman and Chief Executive Officer may respond appropriately to the request. The Chairman and Chief Executive Officer must inform the Lead Independent Director of the response given.

In 2024, the Lead Independent Director had an extensive dialogue ahead of the Shareholders' Meeting with shareholders representing a total of nearly a quarter of the Corporation's capital in order to prepare the vote on the resolutions. The Lead Independent Director also led the sustained dialogue with proxy advisors. This dialogue continued after the Shareholders' Meeting.

In this context, the Lead Independent Director explained the reasons that led the Board of Directors to reaffirm the relevance of unified governance in order to pursue the Company's transition strategy. The Lead Independent Director was also able to explain the position of the Board of Directors regarding advisory shareholder resolutions and recalled the possibility for shareholders to submit an item on the agenda (without voting) of the Shareholders' Meeting to open a debate on a particular subject.

The composition of the Board of Directors, its functioning and the role of the Lead Independent Director within the framework of the unified functions of Chairman and Chief Executive Officer were discussed during these dialogue meetings.

These meetings also made it possible to discuss the strategy and investments of TotalEnergies, particularly for the Integrated Power activities and Tilenga & EACOP projects, and the Company's strategy regarding climate and sustainability, described in the Sustainability & Climate – 2024 progress report.

Like every year in July, the Governance and Ethics Committee, under the chairmanship of the Lead Independent Director, and then the Board of Directors, reviewed the results of the votes of the resolutions at the Shareholders' Meeting and the lessons to be learned. This analysis was integrated into the following discussions between the Lead Independent Director and the shareholders.

Shareholders' Meeting on May 24, 2024

At the Annual Shareholders' Meeting, the Lead Independent Director presented the missions of the Lead Independent Director, the report on the Board's activity since the previous Shareholders' Meeting, the motivations of the Board on the mode of governance of the Company, the candidacies for director positions presented to the Shareholders' Meeting and the composition of the Board of Directors at the end of the Shareholders' Meeting as well as the topics of the dialogue he conducted with the main shareholders.

Visits to Company sites by the directors

Site visits contribute in a very concrete way to the training of Directors and allow them to deepen their knowledge of the specificities of the Company, its challenges in particular regarding sustainability, its businesses - including new businesses - and its teams. They are often the occasion for thematic presentations.

In this context, site visits were organized in 2024, by groups of directors accompanied by a member of the Executive Committee. The Lead Independent Director took part in the visits in Saudi Arabia (SATORP in Jubail, Amiral project, renewables), in Paris (Hutchinson & Belib) and in Uganda (Exploration & Production, Marketing & Services). Site visits were also organized for directors in Bordeaux and Nersac (Saft R&D center, ACC factory) and in Feluy in Belgium (R&D center, polymers). Furthermore, the members of the Audit Committee went to Le Havre (mobility, FSRU, Gonfreville Refinery).

Site visits are planned for 2025.

4.1.4 Assessment of the Board of Directors' practices

In accordance with point 3.4 of its Rules of Procedure, the Board of Directors conducts a formal assessment of its own functioning at regular intervals of up to three years. The evaluation is carried out under the supervision of the Lead Independent Director, if one has been appointed, or under the supervision of the Governance and Ethics Committee, with the assistance of an outside consultant. The Board of Directors also conducts an annual review of its practices. Furthermore, in accordance with point 7.2.4 of the Rules of Procedure of the Board of Directors, the Lead Independent Director manages the evaluation process relating to the functioning of the Board of Directors and reports on this evaluation to the Board of Directors.

The Lead Independent Director managed the formalized evaluation process relating to the functioning of the Board of Directors in 2024 with the assistance of an external consultant, in accordance with the above provisions.

The assessment was based on the consolidation of the Directors' answers to a written questionnaire as well as individual interviews between the consultant and the directors. It was structured around 5 axes: the Board style and culture, the efficiency of the Board and committees, its relevance, the adequacy of governance as well as the resilience and agility of the Board. The effective contribution of each director to the Board work was also assessed and will be subject to individual restitution by the Lead Independent Director.

The Lead Independent Director reported on this evaluation to the Governance and Ethics Committee at its meeting on February 4, 2025 and then to the Board of Directors, which discussed its operating conditions, at its meeting on the same day.

Furthermore, in accordance with point 7.2.6 of the Rules of Procedure of the Board of Directors which states that the Lead Independent Director may hold meetings of directors who do not hold executive or salaried positions on the Board of Directors, such a meeting was held on December 11, 2024, at the initiative of the Lead Independent Director.

This evaluation revealed a positive assessment of the functioning of the Board of Directors and its committees and results significantly superior to the benchmark used by the consultant.

In particular, the following points were noted:

- the exceptional leadership of the Chairman and Chief Executive Officer who respects, informs, involves and listens his Board in a productive and collaborative dynamic where all key topics are addressed;
- an efficient interaction between the Chairman and the Lead Independent Director whose role is appreciated by all directors, particularly in the animation of the executive session;
- the adequacy of the form of governance (combination of offices of Chairman and Chief Executive Officer) to meet the challenge of the energy transition initiated by the Company;
- the balanced and coherent composition of the Board with the transition strategy of the Company and its global footprint;
- the information provided to the Board and Committees is of quality, the presentations are well adapted and the debates are usefully supplemented by the Board lunch;
- the content of the strategic seminar is appreciated and its conclusions are reflected in the budget and in the business plan;
- good information and the involvement of the Board in the monitoring of the litigation.

It was pointed out that the suggestions for improving the functioning of the Board identified by the Board of directors at the meeting on February 6, 2024 have been implemented, namely:

- continue the regular examination of the different business models and profitability levers in electricity and renewable energies;
- continue to carry out comparative analyzes of the situation and developments of the main competitors;

- remain attentive to communication issues so that the in-depth work undertaken by the Company in the energy transition and its leadership in the area compared to its Oil & Gas peers are fully recognized by stakeholders;
- continue to carry out the specific examination in the Board of some of the main risks, in addition to the work of the Audit Committee;
- continue organizing site visits and, more generally, the opportunities for directors to interact with members of the Executive Committee and local teams in order to best understand the operational, human resources, operating or other issues linked to the reality on the ground and the challenges of the Company;
- assess and support the training needs of directors resulting from the entry into force of new regulations, particularly in the area of sustainability;
- continue to develop the use of external speakers on specific topics, particularly within the framework of the strategic seminar of the Board.

The main actions to deploy in 2025 or identified suggestions of improvement likely to contribute to improving the functioning of the Board are as follows:

- implement the *onboarding* program of directors by adapting it to the profile of new members;
- continue to reserve a significant amount of time for the work of the Board to examine the Company's strategy;
- continue to deepen the analysis of some risks during the Committee and the Board and examine disruptive scenarios;
- continue to develop opportunities where directors can meet members of the Executive Committee;
- examine the impact of the artificial intelligence on the businesses of the Company.

4.1.5 General Management

4.1.5.1 Unified Management Form

COMBINATION OF THE MANAGEMENT POSITIONS

Management of the Corporation is assumed either by the Chairperson of the Board of Directors (who then holds the title of Chairman and Chief Executive Officer), or by another person appointed by the Board of Directors with the title of Chief Executive Officer. It is the responsibility of the Board of Directors to choose between these two forms of management under the majority rules described above.

At its meeting on December 16, 2015, the Board of Directors decided to reunify the positions of Chairperson and Chief Executive Officer of the Corporation as from December 19, 2015. Since that date, Mr. Pouyanné has held the position of Chairman and Chief Executive Officer of TotalEnergies SE.

After his term of office as director was renewed at the Shareholders' Meeting on May 28, 2021, and then at that on May 24, 2024, for a three-year period the Board of Directors reappointed Mr. Pouyanné as Chairman and Chief Executive Officer for the same period, expiring at the end of the 2027 Shareholders' Meeting called to approve the financial statements for fiscal year 2026.

The Board of Directors, at its meeting held on September 21, 2023, after reaffirming its support to the quality and the relevance of the strategy implemented, considered that it is highly desirable that Mr. Patrick Pouyanné, Chairman and Chief Executive Officer, continues to drive this strategy's deployment at the helm of the Company. On the proposal of the Governance and Ethics Committee, it has therefore been unanimously decided to propose the renewal of the mandate of Mr. Patrick Pouyanné to the Shareholders' Meeting to be held on May 24, 2024. In the frame of the balanced governance implemented since 2015, it also unanimously decided to propose the renewal of the mandate of Mr. Jacques Aschenbroich, who has held the position of Lead Independent Director since May 2023.

Unified management form

The discussions held with the Governance and Ethics Committee in the best interests of the Corporation had led to a firm proposal to continue to combine the functions of Chairman and Chief Executive Officer. Indeed, this management form of the Corporation is considered to be the most appropriate for dealing with the challenges and specificities of the energy sector, which is facing major transformations. More than ever, this context requires agility of movement, which the unity of command reinforces, by giving the Chairman and Chief Executive Officer the power to act and increased representation of the Corporation in its strategic negotiations with States and partners of the Company.

Balance of power

The Lead Independent Director also recalled that the unity of the power to manage and represent the Corporation is also particularly well regulated by the Corporation's governance.

The balance of power is established through the quality, complementarity and independence of the members of the Board of Directors and its four Committees, as well as through the Articles of Association and the Board's Rules of procedure, which define the means and prerogatives of the Lead Independent Director, notably:

- in his relations with the Chairman and Chief Executive Officer: contribution to the agenda of Board meetings or the possibility of requesting a meeting of the Board of Directors and sharing opinions on major issues;
- in his contribution to the work of the Board of Directors: chairing meetings in the absence of the Chairman and Chief Executive Officer, or when the examination of a subject requires his abstention, evaluation and monitoring of the functioning of the Board, prevention of conflicts of interest, and dialogue with the directors and Committee Chairpersons;
- in his relations with shareholders: the possibility, with the approval of the Chairman and Chief Executive Officer, of meeting with them on corporate governance issues, a practice that has already been used on several occasions.

The balance of power within the governance bodies, in addition to the independence of its members, is further strengthened by the full involvement of the directors, whose participation in the work of the Board and its Committees is exemplary. The diversity of their skills and expertise also enables the Chairman and Chief Executive Officer to benefit from a wide range of contributions.

In addition, the Board's Rules of procedure provide that any investment or divestment transactions contemplated by the Company involving amounts in excess of 3% of shareholders' equity must be approved by the Board, which is also kept informed of all significant events concerning the Corporation's operations, in particular investments and divestments in excess of 1% of shareholders' equity.

Lastly, the Corporation's Articles of Association provide the necessary guarantees of compliance with good governance practices in the context of a unified management structure. In particular, they provide that the Board may be convened by any means, including orally, or even at short notice depending on the urgency of the matter, by the Chairman or by one third of its members, including the Lead Independent Director, at any time and as often as the interests of the Corporation require.

LEAD INDEPENDENT DIRECTOR

Mr. Jacques Aschenbroich has been acting as Lead Independent Director since the end of the Shareholders' Meeting on May 26, 2023. This position was previously held by Ms. Marie-Christine Coisne-Roquette.

Pursuant to the provisions of the Rules of Procedure of the Board of Directors, the Lead Independent Director chairs the Governance and Ethics Committee.

The duties of the Lead Independent Director are described in detail in the Rules of Procedure of the Board of Directors, the full version of which is provided in point 4.1.2.1.

4.1.5.2 The Executive Committee and the Performance Management Committee of the Company

THE EXECUTIVE COMMITTEE

The Executive Committee, under the responsibility of the Chairman and Chief Executive Officer, is the decision-making body of the Company.

It implements the strategic vision defined by the Board of Directors and authorizes the corresponding capital expenditures, subject to the Board of Directors' approval for investments exceeding 3% of shareholders' equity and any significant transaction outside the scope of the company's stated strategy, and subject to the Board's review for investments involving amounts exceeding 1% of shareholders' equity.

The Executive Committee meets as often as necessary and generally on a fortnightly basis.

As of December 31, 2024, the members of Executive Committee were as follows:

- Patrick Pouyanné, Chairman and Chief Executive Officer and Chairman of the Executive Committee;
- Aurélien Hamelle, President for Strategy & Sustainability;
- Helle Kristoffersen, President, Asia;
- Stéphane Michel, President, Gas, Renewables & Power;
- Bernard Pinatel, President, Downstream and President, Marketing & Services;
- Jean-Pierre Sbraire, Chief Financial Officer;
- Namita Shah, President, OneTech;
- Vincent Stoquart, President, Refining & Chemicals;
- Nicolas Terraz, President, Exploration & Production.

The members of the Executive Committee as of December 31, 2024, informed TotalEnergies that they have not been convicted of fraud, have not been associated with bankruptcy, sequestration, receivership or court-ordered liquidation proceedings, and have not been subject to any incrimination, conviction or sanction pronounced by an administrative authority or professional body, prohibited from managing a company or disqualified from doing so over the last five years.

THE PERFORMANCE MANAGEMENT COMMITTEE OF THE COMPANY

The mission of the Performance Management Committee of the Company is to examine, analyze and monitor the HSE, financial and business results of the Company. It is chaired by the Chairman and Chief Executive Officer and meets monthly.

In addition to the members of the Executive Committee, this Committee is made up of the heads of the TotalEnergies' main business units, along with a limited number of the Senior Vice-Presidents of functions at the Company and each business branch levels.

BALANCED REPRESENTATION OF WOMEN AND MEN AND DIVERSITY RESULTS IN THE 10% OF POSITIONS AT THE CORPORATION WITH THE HIGHEST RESPONSIBILITIES

TotalEnergies is committed to respecting the principle of equality treatment between men and women, principle it promotes and it ensures that it is properly applied. The promotion of the equality between men and women is fostered Company-wide through a global policy of diversity, quantitative targets set by General Management, human resources procedures that take men and women concern into account, agreements aimed at promoting a better work-life balance and actions to raise awareness and train the workforce.

TotalEnergies' commitment to equality in the workplace and treatment between men and women begins at the recruitment stage and continues throughout a person's career, particularly in the process of identifying high-potential employees and appointing managers.

In order to ensure a better balance between men and women in its senior management, the Company has set itself the following targets for improvement by 2025 for the highest executive instances in the Company:

- 30% of women on the Executive Committee: women represented 22.2% in 2024;
- 30% of women in the G70[1]: women represented 33.3% in 2024.

The Company has set the same target for its other governing bodies and leadership positions, with women comprising:

- 30% of women among senior executives: 29.5% were women in 2024;
- 30% of women in senior management: 25.8% were women in 2024.

Moreover, TotalEnergies develops talent pools and regularly organizes campaigns to identify high-potential employees in the Company, in order to offer them a specific development program. At year-end 2024, women accounted for 40.8% of the pool of high-potential employees. Furthermore, there is a particular focus on attracting more women to technical and business careers (at year-end 2024, 25.5% of women were among managers on permanent contracts in technical or sales positions[2]).

At TotalEnergies SE's level, the Company's commitment has materialized by the entry of two women in the Executive Committee (8 people and 9 people since 2024) since 2016. With regard to diversity in the 10% of the highest management positions of the Corporation[3], the proportion of women equals 24.3%. At Company level, which is the most relevant perimeter in view of the Company's activities, that percentage stands at 26.6%[4].

(1) Senior executives with the most important responsibilities.
(2) Technical and sales functions, excluding support functions (e.g., human resources, legal affairs, purchasing, etc.).
(3) TotalEnergies SE, the Company's parent company, has more than 3,000 employees (full-time-equivalent employees present on December 31 of each fiscal year for the period in question).
(4) Proportion calculated on the basis of 98,625 employees.



Patrick Pouyanné

Chairman and Chief Executive Officer of TotalEnergies SE

Chairman of the Strategy & CSR Committee

Born on June 24, 1963 (French)

Business address: TotalEnergies SE, 2 place Jean Millier, La Défense 6, 92400 Courbevoie, France

Biography & Professional Experience

A graduate of École Polytechnique and a Chief Engineer of France's Corps des Mines, Mr. Pouyanné held, between 1989 and 1996, various administrative positions in the Ministry of Industry and of Environment and other cabinet positions (technical advisor to the Prime Minister – Édouard Balladur – in the fields of the Environment and Industry from 1993 to 1995, Chief of staff for the Minister for Information and Aerospace Technologies – François Fillon – from 1995 to 1996). In January 1997, he joined TotalEnergies' Exploration & Production division, first as Chief Administrative Officer in Angola, before becoming Company representative in Qatar and President of the Exploration and Production subsidiary in that country in 1999. In August 2002, he was appointed President, Finance, Economy and IT for Exploration & Production. In January 2006, he became Senior Vice President, Strategy, Business Development and R&D in Exploration & Production and was appointed a member of the Company's Management Committee in May 2006. In March 2011, Mr. Pouyanné was appointed Deputy General Manager, Chemicals, and Deputy General Manager, Petrochemicals. In January 2012, he became President, Refining & Chemicals and a member of the Company's Executive Committee.

On October 22, 2014, he became Chief Executive Officer of TOTAL S.A. and Chairman of the Company's Executive Committee. On May 29, 2015, he was appointed by the Annual Shareholders' Meeting as director for a three-year term. The Board of Directors appointed him as Chairman of the Board of Directors as of December 19, 2015. Mr. Pouyanné thus became the Chairman and Chief Executive Officer. Following the renewal of Mr. Pouyanné's directorship at the Shareholders' Meeting on June 1, 2018 and then on May 28, 2021 for a three-year period, the Board of Directors renewed Mr. Pouyanné's term of office as Chairman and Chief Executive Officer for a period equal to that of his directorship.

Mr. Pouyanné is thus the Chairman and Chief Executive Officer of TotalEnergies SE.

On June 1, 2022, Mr. Pouyanné was appointed Chairman of the French association, Entreprises pour l'Environnement (EpE). Mr. Pouyanné has also been the Chairman of the Alliance pour l'Education – United Way association from June 2018 to January 29, 2025, having accepted this office as Chairman and Chief Executive Officer of the Corporation. In addition, he has been a member of the Board of Directors of Capgemini (since May 2017), of the Board of Directors of École Polytechnique (since September 2018), of the Institut du Monde Arabe (since 2017) and of the foundation La France s'engage (since 2017). Mr. Pouyanné is an Officer of the Légion d'honneur.



Aurélien Hamelle

President for Strategy & Sustainability since January 8, 2024

Member of TotalEnergies' Executive Committee

Born on November 5, 1978 (French)

Member of TotalEnergies' Executive Committee since January 8, 2024

Business address: TotalEnergies SE, 2 place Jean Millier, La Défense 6, 92400 Courbevoie, France

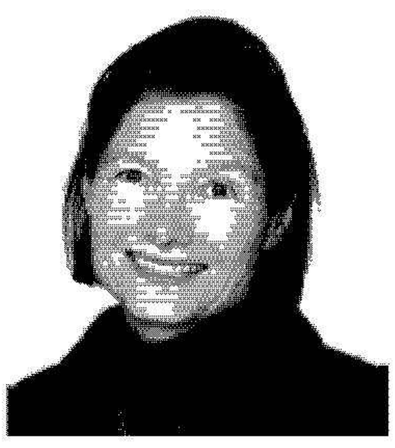
Biography & Professional Experience

Aurélien Hamelle has been President for Strategy & Sustainability and member of the Executive Committee of TotalEnergies, the French major integrated energy company, since January 2024. Before taking up this position, he was General Counsel and Senior Vice President for Acquisitions & Disposals of TotalEnergies. He started his career as a regulatory and dispute resolution lawyer with various firms, including Allen & Overy as a partner in their Paris office.

As President for Strategy & Sustainability, Aurélien Hamelle oversees several corporate divisions of the Company (strategy and markets, sustainability and climate, government affairs, HSE, internal control and audit, legal).

He is a member of various professional associations or academic bodies, such as the *Haut Comité Juridique de la place financière de Paris* (HCJP – High committee of the Paris financial place) and the *Club des Juristes*. He sits on the strategic committee of Sciences-Po Paris' law school (Paris Institute of Political Studies), where he has held teaching positions in *global governance* namely.

Aurélien Hamelle holds a Master's degree in political and international studies from Sciences-Po Paris and graduate degrees in law and management from the Universities Paris-Nanterre and Paris-Dauphine (PSL).



Helle Kristoffersen

President, Asia since February 1, 2024

Member of TotalEnergies' Executive Committee

Born on April 13, 1964 (French and Danish)
Member of TotalEnergies' Executive Committee since August 19, 2019

Business address: TotalEnergies SE, 2 place Jean Millier, La Défense 6, 92400 Courbevoie, France

Biography & Professional Experience

Helle Kristoffersen is President, Asia based in Tokyo, member of the Executive Committee.

She was President Strategy & Sustainability from 2021 to January 2024, President Strategy & Innovation from 2019 to 2021, SVP Strategy and Corporate Affairs in Gas Renewables & Power from 2016 to 2019 and SVP Strategy & Business Intelligence from January 2012 to September 2016, deputy SVP Strategy from 2011 to 2012, within the Company she joined in 2011. Between 1994 and 2011, she held a number of general management positions within the Alcatel group, which became Alcatel-Lucent, and then Nokia.

A dual Danish and French national, Helle Kristoffersen is a graduate of the Ecole Normale Supérieure (Ulm) and the Paris Graduate School of Economics, Statistics and Finance (ENSAE). She also holds a master's degree in econometrics from Université Paris Sorbonne. She is an alumna of the French Institute for Higher National Defense Studies (IHEDN) and a Knight of the French Legion of Honor.



Stéphane Michel

President, Gas, Renewables & Power

Member of TotalEnergies' Executive Committee

Born on February 17, 1973 (French)
Member of TotalEnergies' Executive Committee since March 1, 2021

Business address: TotalEnergies SE, 2 place Jean Millier, La Défense 6, 92400 Courbevoie, France

Biography & Professional Experience

A graduate of École Polytechnique (1994) and École des Mines in Paris (1997), Stéphane Michel is Chief Engineer of the France's Corps des Mines.

After serving as Energy Advisor to the French Finance Minister (2002-2004), Stéphane Michel joined the Company in 2005, working as Business Development Manager for the Downstream Asia division, based in Singapore.

In 2008, Stéphane Michel, is appointed TotalEnergies E&P Qatar JV Business Development Manager and in 2010 Managing Director of TotalEnergies E&P Libya. In 2011, he became TotalEnergies E&P Qatar Managing Director and on April 1, 2014, the E&P Senior Vice President Middle East/North Africa and a Member of the Management Committee of the Exploration & Production segment.

On March 1, 2021, Stéphane Michel is appointed President of Gas, Renewables & Power segment and a member of the Executive Committee.



Bernard Pinatel

President, Downstream and President, Marketing & Services since September 1, 2024

Member of TotalEnergies' Executive Committee

Born on June 5, 1962 (French)
Member of TotalEnergies' Executive Committee since September 1, 2016

Business address: TotalEnergies SE, 2 place Jean Millier, La Défense 6, 92400 Courbevoie, France

Biography & Professional Experience

Bernard Pinatel is a graduate of the École Polytechnique and the Institut d'Études Politiques (IEP) de Paris and has an MBA from the Institut Européen d'Administration des Affaires (INSEAD). He is also a statistician-economist (École Nationale de la Statistique et de l'Administration Économique – ENSAE).

He started his career at Booz Allen & Hamilton, before joining the company TotalEnergies in 1991, where he occupied various operational positions in the production plants and head offices of different subsidiaries, including Hutchinson and Coates Lorilleux. He became the CEO France, and then the CEO Europe of Bostik between 2000 and 2006, and the Chairman and Chief Executive Officer of Cray Valley, from 2006 to 2009. In 2010, he became the Chairman and Chief Executive Officer of Bostik. At TotalEnergies, he became a member of the Company's Management Committee in 2011 and was member of the Management Committee of Refining & Chemicals from 2011 to 2014.

When Arkema took over Bostik in February 2015, he was nominated as a member of the Executive Committee of Arkema, responsible for the High-Performance Materials activity.

He joined TotalEnergies on September 1, 2016, and was appointed President of the Refining & Chemicals segment and a member of the Executive Committee. Since September 1, 2024, he has been President, Downstream and President, Marketing & Services.



Jean-Pierre Sbraire

Chief Financial Officer

Member of TotalEnergies' Executive Committee

Born on October 28, 1965 (French)
Member of TotalEnergies' Executive Committee since August 1, 2019

Business address: TotalEnergies SE, 2 place Jean Millier, La Défense 6, 92400 Courbevoie, France

Biography & Professional Experience

Jean-Pierre Sbraire began his career at TotalEnergies in 1990 in the Trading & Shipping Division. In 1995, he joined Exploration & Production, holding various positions in Paris and Nigeria in finance, economics and business development.

In 2005, he was appointed General Secretary and Finance Manager for TotalEnergies in Venezuela. In 2009, within the Company's Financial Division, he became Senior Vice President, E&P Subsidiaries Financial Operations.

In 2012, he was appointed Vice President, Equity Crude Acquisitions in Trading & Shipping. From September 2016 to September 2017, he served as Company's Treasurer. He then accepted the position of Deputy Chief Financial Officer. In 2019, he was appointed Chief Financial Officer and Executive Committee member.

Jean-Pierre Sbraire is a graduate of ENSTA ParisTech engineering school and has a master's degree from IFP School.



Namita Shah

President, OneTech

Member of TotalEnergies' Executive Committee

Born on August 21, 1968 (French)
Member of TotalEnergies' Executive Committee since September 1, 2016

Business address: TotalEnergies SE, 2 place Jean Millier, La Défense 6, 92400 Courbevoie, France

Biography & Professional Experience

Namita Shah began her career as an Associate Attorney at Shearman & Sterling, a New York-based law firm, where she spent eight years providing advice and supervising transactions including those involving financings of pipeline and power plant companies.

She joined TotalEnergies in 2002 as a Legal Counsel in the E&P mergers and acquisitions team. In 2008, she joined the New Business team, where she was responsible for business development in Australia and Malaysia. She held this position until 2011 when she moved to Yangon as General Manager, TotalEnergies E&P Myanmar.

On July 1, 2014, she was appointed Senior Vice President, Corporate Affairs, Exploration & Production.

On September 1, 2016, Namita Shah was appointed President, People & Social Responsibility and a member of the Executive Committee.

On September 1, 2021, she was appointed President, OneTech and member of the Executive Committee. She continues to supervise the Company People & Social Engagement team, which reports to her.

Indian and French, Namita Shah is a graduate of Delhi University and the New York University of Law.



Vincent Stoquart

President, Refining & Chemicals since September 1, 2024

Member of TotalEnergies' Executive Committee

Born on May 15, 1974 (Belgian)

Member of TotalEnergies' Executive Committee since September 1, 2024

Business address: TotalEnergies SE, 2 place Jean Millier, La Défense 6, 92400 Courbevoie, France

Biography & Professional Experience

Vincent Stoquart began his career with TotalEnergies in 1998 as an engineering project manager at the Feluy Polymers Plant in Belgium, working as a production manager in various positions from 2002 to 2009 before being appointed as human resources and communications manager of the Feluy Plant in 2010.

From 2012 to 2017, he was Plant Manager of the Flanders site in Dunkirk, France, before joining TotalEnergies Global Services where he became President of TotalEnergies Learning Solutions.

From 2019 to 2021, he served as Senior Vice President Refining and Petrochemicals Americas. He was during this period also the country chair for TotalEnergies in the United States, based in Houston, Texas.

Prior to that, Mr. Stoquart was Senior Vice President Polymers of TotalEnergies Refining & Chemicals.

Vincent Stoquart was Senior Vice President Renewables at TotalEnergies SE since 2021.

Mr. Stoquart graduated as a Mechanical Engineer from the Catholic University of Louvain, Belgium. He also holds a Diploma Course in Aeronautics and Aerospace from the von Karman Institute for Fluid Dynamics.



Nicolas Terraz

President, Exploration & Production

Member of TotalEnergies' Executive Committee

Born on September 9, 1969 (French)
Member of TotalEnergies' Executive Committee since September 1, 2021

Business address: TotalEnergies SE, 2 place Jean Millier, La Défense 6, 92400 Courbevoie, France

Biography & Professional Experience

Nicolas Terraz started his career in the French Ministries of Industry (1994-1997) and Public Works and Transportation (1997-2001) and joined TotalEnergies in 2001.

After holding positions in France and in Qatar, Nicolas Terraz served as Managing Director of TotalEnergies E&P Myanmar (2008-2011), Managing Director of TotalEnergies E&P France (2011-2014), Vice President New Ventures for Exploration and Production (2014-2015) and Managing Director of TotalEnergies E&P Nigeria (2015-2019).

In 2019, Nicolas Terraz was appointed Senior Vice President Africa and a member of the management committee of the Exploration & Production segment of TotalEnergies.

Born in 1969, Nicolas Terraz is a graduate of the Ecole Polytechnique and the Ecole Nationale des Ponts et Chaussées and earned a Master of Science in Technology and Policy from the Massachusetts Institute of Technology.

4.1.6 Shares held by the administration and management bodies

As of December 31, 2024, based on statements by the persons concerned, registered shares ledger and the register of the FCPE fund units custodian, all of the members of the Board of Directors and the executive officers[1] of TotalEnergies held less than 0.5% of the share capital:

- members of the Board of Directors[2]: 511,971 TotalEnergies shares and 23,000.40 units of the FCPE (collective investment fund) invested in TotalEnergies shares;
- Chairman and Chief Executive Officer: 493,495 TotalEnergies shares and 13,876.37 units of the FCPE (collective investment fund) invested in TotalEnergies shares;
- executive officers: 1,172,302 TotalEnergies shares and 279,716.79 units of the FCPE invested in TotalEnergies shares.

By decision of the Board of Directors on February 7, 2023:

- Executive directors of the Corporation are required to hold a number of TotalEnergies shares equal in value to five years of the fixed portion of their annual compensation; and
- members of the Executive Committee are required to hold a number of TotalEnergies shares equal in value to four years of the fixed portion of their annual compensation.

Executive directors of the Corporation and members of the Executive Committee have a maximum period of five years from taking office to reach these holding levels.

Executive directors and members of the Executive Committee cannot sell the performance shares that were definitively awarded to them until they have reached the required level of ownership of TotalEnergies shares.

The number of TotalEnergies shares to be considered comprises TotalEnergies shares and units of FCPEs invested in TotalEnergies shares.

(1) As of December 31, 2024, the Company's executive officers are the members of the Executive Committee, i.e. nine people. During the fiscal year 2020, the Corporation, taking into account the definition used by the US regulations applicable to Executive Officers and in the interest of harmonization, has chosen to reduce the list of its Executive Officers to the members of the Executive Committee in order to align this list with the list of "Persons Discharging Managerial Responsibilities" (PDMR) within the meaning of Article 19.5 of Regulation (EU) No. 596/2014 on Market Abuse. For the purposes of this regulation, PDMRs are defined as the persons referred to in Article L. 621-18-2 (a) of the French Monetary and Financial Code ("the directors") and the persons referred to in Article L. 621-18-2 (b) of the same code that the Corporation has defined as the members of the TotalEnergies Executive Committee.

(2) Including the Chairman and Chief Executive Officer, the director representing employee shareholders and the directors representing employees.

SUMMARY OF TRANSACTIONS IN THE CORPORATION'S SECURITIES (ARTICLE L. 621-18-2 OF THE FRENCH MONETARY AND FINANCIAL CODE)

The following table presents transactions, of which the Corporation has been informed, in the Corporation's shares or related financial instruments carried out in 2024 by the individuals referred to in paragraphs a), b)[1] and c) of Article L. 621-18-2 of the French Monetary and Financial Code:

2024		Acquisition	Subscription[a]	Transfer	Exchange	Exercise of options
Patrick Pouyanné[b]	TotalEnergies shares	82,800	–	–	–	–
	Units in FCPE and other related financial instruments[c]	–	784.77	–	–	–
Jacques Aschenbroich[c,d]	TotalEnergies shares	–	–	–	–	–
	Units in FCPE and other related financial instruments[c]	–	–	–	–	–
Marie-Christine Coisne-Roquette[b]	TotalEnergies shares	800	–	–	–	–
	Units in FCPE and other related financial instruments[c]	–	–	–	–	–
Lise Croteau[b,c]	TotalEnergies shares	–	–	–	–	–
	Units in FCPE and other related financial instruments[c]	–	–	–	–	–
Mark Cutifani[c]	TotalEnergies shares	–	–	–	–	–
	Units in FCPE and other related financial instruments[c]	–	–	–	–	–
Marie-Ange Debon[b]	TotalEnergies shares	–	–	(90)	–	–
Director since May 24, 2024	Units in FCPE and other related financial instruments[c]	–	–	–	–	–
Dierk Paskert[b]	TotalEnergies shares	–	–	–	–	–
	Units in FCPE and other related financial instruments[c]	–	–	–	–	–
Romain Garcia-Ivaldi[c]	TotalEnergies shares	–	–	–	–	–
	Units in FCPE and other related financial instruments[c]	–	843.58	(193.57)	–	–
Maria van der Hoeven[b]	TotalEnergies shares	–	–	–	–	–
	Units in FCPE and other related financial instruments[c]	–	–	–	–	–
Glenn Hubbard[c]	TotalEnergies shares	–	–	–	–	–
	Units in FCPE and other related financial instruments[c]	–	–	–	–	–
Anne-Marie Idrac[c,d]	TotalEnergies shares	–	–	–	–	–
Director until May 24, 2024	Units in FCPE and other related financial instruments[c]	–	–	–	–	–
Emma de Jonge[c]	TotalEnergies shares	–	–	(183)	–	–
	Units in FCPE and other related financial instruments[c]	–	1,170.71	(349.56)	–	–
Anelise Lara[c]	TotalEnergies shares	–	–	–	–	–
	Units in FCPE and other related financial instruments[c]	–	–	–	–	–
Jean Lemierre[b]	TotalEnergies shares	–	–	–	–	–
	Units in FCPE and other related financial instruments[c]	–	–	–	–	–
Angel Pobo[b]	TotalEnergies shares	242	–	–	–	–
	Units in FCPE and other related financial instruments[c]	–	260.79	(34.42)	–	–
Aurélien Hamelle[c]	TotalEnergies shares	9,660	–	(2,000)	–	–
Member of the Executive Committee since January 8, 2024	Units in FCPE and other related financial instruments[c]	–	1,500.29	(1,506.44)	–	–
Helle Kristoffersen[c]	TotalEnergies shares	22,080	–	–	–	–
	Units in FCPE and other related financial instruments[c]	–	3,725.53	(748.90)	–	–
Stéphane Michel[b,d,c]	TotalEnergies shares	13,800	–	–	–	–
	Units in FCPE and other related financial instruments[c]	–	10,389.78	(6,772.32)	–	–
Thierry Pflimlin[b]	TotalEnergies shares	11,040	–	–	–	–
Member of the Executive Committee until August 31, 2024	Units in FCPE and other related financial instruments[c]	–	5,388.85	(6,572.59)	–	–
Bernard Pinatel[b,c]	TotalEnergies shares	27,600	–	–	–	–
	Units in FCPE and other related financial instruments[c]	–	12,592.78	(3,257.83)	–	–
Jean-Pierre Sbraire[b]	TotalEnergies shares	23,000	–	(1,000)	–	–
	Units in FCPE and other related financial instruments[c]	–	12,622.54	(3,080.88)	–	–
Namita Shah[b]	TotalEnergies shares	27,600	–	–	–	–
	Units in FCPE and other related financial instruments[c]	–	11,988.00	(2,981.64)	–	–
Vincent Stoquart[c]	TotalEnergies shares	–	–	–	–	–
Member of the Executive Committee since September 1, 2024	Units in FCPE and other related financial instruments[c]	–	5.23	–	–	–
Nicolas Terraz[c]	TotalEnergies shares	11,040	–	–	–	–
	Units in FCPE and other related financial instruments[c]	–	9,830.32	(2,584.71)	–	–

(a) Including FCPE share subscription through automatic dividend reinvestment.
(b) Including related parties within the meaning of the provisions of Article R. 621-43-1 of the French Monetary and Financial Code.
(c) FCPE primarily invested in TotalEnergies shares and following the categorisation carried out by the fund manager with the AMF (including in particular technical operations of the "fonds Relais" merger for the capital increase reserved for employees).
(d) Anne-Thérèse Michel, a person related to Stéphane Michel, acquired 317.03 FCPE shares and transferred 1,092.80 FCPE shares in 2024.

(1) The individuals referred to in paragraph b) of Article L. 621-18-2 of the French Monetary and Financial Code include the members of the Executive Committee.

4.2 Statement regarding corporate governance

For many years, TotalEnergies has taken an active approach to corporate governance and at its meeting on November 4, 2008, the Board of Directors decided to refer to the AFEP-MEDEF Code of Corporate Governance for publicly traded companies (available on the AFEP and MEDEF websites).

The Corporation follows all the recommendation made in the AFEP-MEDEF Code in its revised version dated December 2022 and reports on it in accordance with Article L. 22-10-10 of the French Commercial Code.

RECOMMENDATION NOT FOLLOWED	EXPLANATION - PRACTICE FOLLOWED BY TotalEnergies
None	**Not applicable**

4.3 Compensation for the administration and management bodies

4.3.1 Board members' compensation

4.3.1.1 Board members' compensation policy

AGGREGATE AMOUNT OF DIRECTORS' COMPENSATION DUE TO THEIR DIRECTORSHIPS

In accordance with the provisions of Article L. 22-10-14 of the French Commercial Code, the conditions applicable to Board members' compensation are defined by the Board of Directors on the proposal of the Governance and Ethics Committee, under the conditions provided for by Article L. 22-10-8 of the French Commercial Code and within the limit of an annual fixed amount determined by the Annual Shareholders' Meeting.

The maximum annual global envelope was last revised in 2023 to bring it from €1,750,000 to €1,950,000. The Board indicated that this cap could be reviewed every two to three years depending in particular on inflation. From this point of view, between January 1st, 2023 and January 1st, 2025, the salary increase envelope for the employees of the "*Socle social commun*" in France was around 8%.

The Board noted that the maximum global envelope of €1,950,000 is exceeded by €33,500 for directors' compensation in respect of 2024 due to a large number of Board and Committee meetings and the high attendance of directors, which led to a reduction in the compensation in respect of 2024 of 1.7% .

Furthermore, the annual compensation envelope for the directors of TotalEnergies ranks 5th among CAC40 companies that set a maximum envelope, and the average compensation of TotalEnergies directors for 2024 amounts to 150,000 euros, ranking 6th among CAC40 companies.

In addition, the Board noted the increase in regulatory obligations applicable to companies and their directors as well as the complexity of the environment in which the Company operates.

Given notably the above elements, the Board of Directors decided to propose to the Shareholders' Meeting on May 23, 2025 to revise the amount of the annual maximum envelope of the directors compensation by virtue of their directorships to bring it from €1,950,000 to €2,150,000. Such amount could then be reviewed every two to three years depending in particular on inflation.

RULES FOR ALLOCATING DIRECTORS' COMPENSATION DUE TO THEIR DIRECTORSHIPS

The allocation rules of the directors' compensation and their payment conditions applicable in respect of 2024 were defined by the Board at its meeting on July 26, 2017. The compensation due to directors by virtue of their directorships are allocated according to a formula comprised of fixed compensation and variable compensation based on fixed amounts per meeting, which makes it possible to take into account each director's actual attendance at the meetings of the Board of Directors and its Committees, subject to the following conditions:

- a fixed annual portion of €20,000 per director*;
- a fixed annual portion* of €30,000 for the Chairman of the Audit Committee**;
- a fixed annual portion* of €25,000 for the Audit Committee members**;
- a fixed annual portion* of €25,000 for the Chairman of the Governance and Ethics Committee and for the Chairman of the Compensation Committee**;
- an additional fixed annual portion* of €30,000 (on top of the amounts above) for the Lead Independent Director;
- an amount of €7,500 per director for each Board meeting actually attended;
- an amount of €3,500 per director for each Governance and Ethics Committee, Compensation Committee or Strategy & CSR Committee meeting actually attended;
- an amount of €7,000 per director for each Audit Committee meeting actually attended;
- a premium of €4,000 in respect of each actual travel from a country outside France to attend a Board or Committee meeting.

* Calculated on a pro rata basis, in the event of change in the course of the year.
** Substituting the €20,000 fixed annual portion per director. In case of accumulation of the functions of director and/or Audit Committee member and/or Chairman of a Committee (Audit, Governance and Ethics, Compensation), the difference between the fixed annual portion per director and the fixed annual portion of the other functions is added.

In 2025, the Board of Directors reviewed the directors' allocation rules, which had not been modified since 2017, and decided to increase by €500 the portions related to directors' attendance in Board and Committee meetings, the other allocation rules remaining unchanged.

Thus, from fiscal year 2025, the portion related to the attendance to Board meetings is brought from €7,500 to €8,000 per director for each Board meeting actually attended; the portion per committee meeting (excluding the Audit Committee) from €3,500 to €4,000 per director for each Governance and Ethics Committee, Compensation Committee or Strategy & CSR Committee meeting actually attended, and the portion per Audit Committee meeting from €7,000 to €7,500 per director for each Audit Committee meeting actually attended. The fixed portions will remain unchanged.

The Chairman and Chief Executive Officer does not receive directors' compensation for his work on the Board and Committees of the Corporation.

The total amount paid to each director is determined after taking into consideration the director's actual presence at each Board of Directors' or Committee's meeting and, if appropriate, since the decision by the Board of Directors on February 9, 2012, after prorating the amount set for each director such that the overall amount paid remains within the maximum limit set by the Shareholders' Meeting. Directors' compensation for each fiscal year is paid following a decision by the Board of Directors, on the proposal of the Governance and Ethics Committee, at the beginning of the following fiscal year.

The director representing employee shareholders and the directors representing employees receive directors' compensation according to the same terms and conditions as any other director.

Moreover, there is no service contract between a director and the Corporation or any of its controlled companies that provides for the grant of benefits under such a contract.

4.3.1.2 Compensation paid to directors during fiscal year 2024 or allocated during the same fiscal year

At its meeting on February 4, 2025, the Board of Directors, on the proposal of the Governance and Ethics Committee, set the aggregate amount of compensation (formerly fees) allocated to board members due to their directorships in TotalEnergies SE, for fiscal year 2024.

This amount was determined by applying the principles presented in the directors' compensation policy (point 4.3.1.1), and set for each director, after taking into account his/her actual attendance to each meeting of the Board or of the Committees (refer to point 4.1.2.2 – table of the directors' attendance at Board and Committees meetings).

Given the number of Board and Committee meetings held during fiscal year 2024, the amount of compensation determined for each director on the basis of the above allocation rules was set at €1,983,000, *i.e.*, an amount above the cap set by the Shareholders' Meeting on May 26, 2023. This amount was therefore subject to a pro rata, in application of the decision of the Board of Directors on February 9, 2012, such that the amount paid to the directors is at most equal to the amount of **€1.95 million** authorized by the Shareholders' Meeting.

The director representing employee shareholders and the directors representing employees benefited from their compensation by virtue of their directorships in the same conditions and under the same basis as the other directors. Mr. Pobo chose to pay, for the entire term of his directorship, all his directors' compensation to his trade union membership organization. Ms. de Jonge and Mr. Garcia-Ivaldi chose to pay all their director's compensation to charities of their choices. During the past two years, the directors currently in office have not received any compensation or in-kind benefits from the Corporation or from its controlled companies other than those mentioned in the table below.

No extraordinary compensation was allocated.

Ms. Emma de Jonge, director representing employee shareholders since May 25, 2022, Mr. Romain Garcia-Ivaldi, director representing employees since June 9, 2020, whose term of office renewed on February 28, 2023, as well as Mr. Angel Pobo, director representing employees since October 14, 2020, whose term of office was renewed on February 16, 2023, benefit from the internal defined contribution pension plan applicable to all TotalEnergies SE employees, called PERO (*Plan d'épargne retraite obligatoire* - mandatory retirement savings plan), governed by Article L. 242-1 of the French Social Security Code. The Corporation's commitment is limited to its share of the contribution paid to the insurance company that manages the plan. For fiscal year 2024 this pension plan represented an expense accounted for TotalEnergies SE in favor of Ms. de Jonge of €1,323, in favor of Mr. Garcia-Ivaldi of €509 and in favor of Mr. Pobo of €865.

The table below presents the total compensation paid to directors during fiscal year 2024 or allocated for the same fiscal year.

TABLE OF COMPENSATION ALLOCATED IN RESPECT OF DIRECTORSHIP AND OTHER COMPENSATION BY NON-EXECUTIVE DIRECTORS

Table 3 – Position-recommendation – DOC-2021-02 (Appendix 2)

Gross (€)		Amount allocated in respect of fiscal year 2023	Amount paid during fiscal year 2023	Amount allocated in respect of fiscal year 2024	Amount paid during fiscal year 2024
Patrick Pouyanné	Compensation by virtue of directorship	None	None	None	None
	Other compensation	[a]	[a]	[a]	[a]
Jacques Aschenbroich[b]	Compensation by virtue of directorship	147,000	99,904	165,654	147,000
	Other compensation	–	–	–	–
Patricia Barbizet[c]	Compensation by virtue of directorship	71,500	162,046	n/a	n/a
	Other compensation	–	–	n/a	n/a
Marie-Christine Coisne-Roquette	Compensation by virtue of directorship	167,500	146,749	166,637	167,500
	Other compensation	–	–	–	–
Jérôme Contamine[c]	Compensation by virtue of directorship	64,500	145,315	–	64,500
	Other compensation	–	–	–	–
Lise Croteau	Compensation by virtue of directorship	192,000	186,902	196,131	192,000
	Other compensation	–	–	–	–
Mark Cutifani	Compensation by virtue of directorship	141,000	130,975	156,315	141,000
	Other compensation	–	–	–	–
Marie-Ange Debon[d]	Compensation by virtue of directorship	n/a	n/a	62,995	–
	Other compensation	n/a	n/a	–	–
Romain Garcia-Ivaldi	Compensation by virtue of directorship[g]	152,000	148,662	156,806	152,000
	Other compensation	71,291	71,291	81,008	81,008
Maria van der Hoeven	Compensation by virtue of directorship	197,000	191,683	201,046	197,000
	Other compensation	–	–	–	–
Glenn Hubbard[b]	Compensation by virtue of directorship	157,000	116,157	188,266	157,000
	Other compensation	–	–	–	–
Anne-Marie Idrac	Compensation by virtue of directorship	119,000	107,075	57,928	119,000
	Other compensation	–	–	–	–
Emma de Jonge[e]	Compensation by virtue of directorship[g]	98,000	57,414	103,718	98,000
	Other compensation	134,293	134,293	132,103	132,103
Anelise Lara[f]	Compensation by virtue of directorship	65,000	–	135,178	65,000
	Other compensation	–	–	–	–
Jean Lemierre	Compensation by virtue of directorship	104,500	110,421	106,668	104,500
	Other compensation	–	–	–	–
Dierk Paskert[f]	Compensation by virtue of directorship	68,500	–	138,619	68,500
	Other compensation	–	–	–	–
Angel Pobo	Compensation by virtue of directorship[h]	108,500	100,382	114,041	108,500
	Other compensation	84,915	84,915	83,313	83,313
Total		2,143,499	1,994,184	2,246,426	2,077,924

(a) Refer to the summary tables presented in point 4.3.2.
(b) Director since May 28, 2021.
(c) Director until May 26, 2023.
(d) Director since May 24, 2024.
(e) Director since May 25, 2022.
(f) Director since May 26, 2023.
(g) Ms. de Jonge and Mr. Garcia-Ivaldi chose to pay all their director's compensation to charities of their choices, for the entire term of their directorship.
(h) Mr. Pobo chose to pay, for the entire term of his directorship as director representing employees, all his director's compensation to his trade union membership organization.

4.3.2 Chairman and Chief Executive Officer's compensation

Letter of the Chairman of the Compensation Committee

Dear Shareholders,

On behalf of the Board of Directors and the Compensation Committee, which I have the honour of chairing, I am pleased to present the Company's compensation report for the year ended 31 December 2024. The other members of the committee are Jacques Aschenbroich and Dierk Paskert, with Angel Pobo representing the employees.

The Compensation Committee met twice since the last Annual General Meeting and reviewed market trends and the Company's performance to ensure that current practices remain sufficiently competitive and are based on a clear alignment between compensation and performance.

The Committee noted that the two resolutions regarding the Chairman and CEO's compensation were overwhelmingly approved by shareholders at the Annual General Meeting of 24 May 2024, since the 2023 financial year compensation (say on pay ex post) received 92.7% of votes in favour, while the 2024 financial year compensation policy (say on pay ex ante) received 91.9% of votes in favour.

Furthermore, the Committee recalls that, in connection with the renewal of the Chairman and CEO's term of office at the Annual General Meeting of 24 May 2024 and the setting of the Chairman and CEO's compensation policy, your Board announced that the annual base salary (EUR 1,550,000) and the structure and amount of the annual variable portion applicable during the previous term of office would be **maintained unchanged** for the duration of the new term of office (2024 to 2026), along with the allocation of the amount of performance shares per year (140,000).

The annual base salary (fixed compensation) of the Chairman and CEO for 2025 will therefore be EUR 1,550,000 (unchanged since the beginning of 2022).

The annual variable portion for 2025 therefore retains the same structure (110% financial criteria, 30% quantifiable safety and GHG criteria, 40% personal portion) and the same amount (up to 180% of the base salary) as for 2024.

Within this unchanged structure, the Board has decided, on the recommendation of the Compensation Committee, to adjust the thresholds for ROE and organic gearing criteria. Regarding ROE, which accounts for 30% of variable compensation, in view of the performance achieved in 2023 and 2024, the Board has decided to be more demanding and to raise the level of ROE corresponding to 100% achievement of this criterion from 13% to 15%. With regard to organic gearing, which accounts for 20%, the Board noted the high sensitivity of the organic gearing criterion to oil and gas price environments and to share buyback levels. To take into account this sensitivity, the Board decided to maintain the gearing level at 10%, enabling a rate of 100% to be achieved, and to revise the limit of the criterion corresponding to a rate of 0%, raising it to 30% from 20% in 2024.

In addition, in view of the improved results achieved by the Company in 2024, the targets for the TRIR (Total Recordable Injury Rate) safety criteria and the evolution in the number of Tier 1 + Tier 2 incidents have been made more stringent for the 2025 annual variable portion.

Similarly, the target for the criterion related to Scope 1+2 greenhouse gas emissions from operated facilities has been revised downward for 2025 compared to the trajectory validated by the Board of Directors since 2020, in line with the new 2025 target announced by the Company (emission target of 37 Mt CO_2e for 2025 instead of 38 Mt CO_2e previously planned for 2025).

The allocation of 140,000 performance shares for 2025 is in line with the Chairman and CEO's compensation policy set by the Board of Directors for the entire duration of the new term of office (2024 to 2026). As announced with regard to the sharing of value and employee share ownership, your Board will ensure that the plans for the allocation of performance shares 2024, 2025 and 2026 to employees evolve, in terms of the volume of shares allocated and the number of beneficiaries, thereby contributing to increasing the alignment of the Company's employees' interests with those of its shareholders. In addition, your Board has decided, on the recommendation of the Compensation Committee, to allocate 100 TotalEnergies shares to the Company's 100,000 employees worldwide in 2024, subject to a five years presence condition after the allocation date.

Lastly, the Committee recalls that the corporate officer compensation policy incorporates best practices in terms of clawback policy for variable compensation and performance shares, as well as shareholding requirements for the Chairman and CEO (and the Executive Committee).

On behalf of the Compensation Committee, I would like to thank you for your support and feedback, which we will continue to seek as we review and refine our compensation practices to ensure that they remain aligned with the interests of our shareholders and fully comply with all legal and regulatory requirements.

Mark Cutifani

Chairman of the Compensation Committee

The Board of Directors pays the greatest importance to ensuring that the general principles governing the compensation of executive directors, detailed in point 4.3.2.2, lead to a measured and fair compensation, depending on the results obtained, the responsibility assumed and the market.

The general principles of the compensation policy of the executive directors are based on:

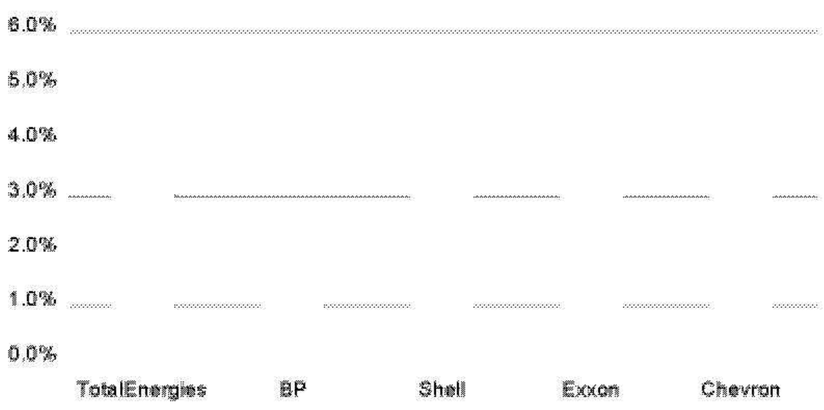
- the compensation of the performance
- the alignment with the interest of shareholders
- the competitiveness compared to a reference group of peers and industrial companies of comparable size.

Key points of the 2024 performance and changes in the compensation of the Chairman and Chief Executive Officer

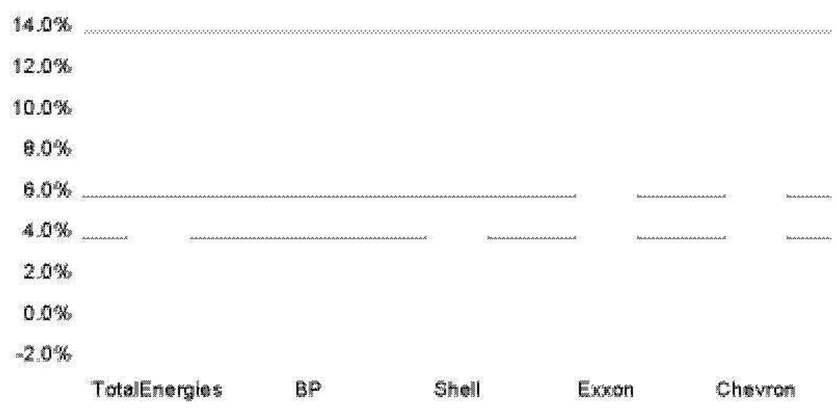
	TSR* (Total Shareholder Return)	Return on equity	Organic gearing	Pre-dividend organic cash breakeven	Return on average capital employed (ROACE), comparative	Reduction of GHG emissions from operated facilities (Scope 1+2)
2024	**-14.2%**	**15.8%**	**7.3%**	**$25.4/b**	**TotalEnergies: 14.8%**	**34 Mt CO_2e**
					Peers: 12%**	
					TotalEnergies: 18.9%	
2023	13.5%	20.4%	6.0%	$22.2/b	Peers**: 15.0%	35 Mt CO_2e

* The TSR is calculated from the ADR (New York) with the dividend reinvested at year-end.
** Panel average (ExxonMobil, Shell, BP and Chevron). 2023 data were restated taking into account a methodological change made by Shell.

10-year TSR

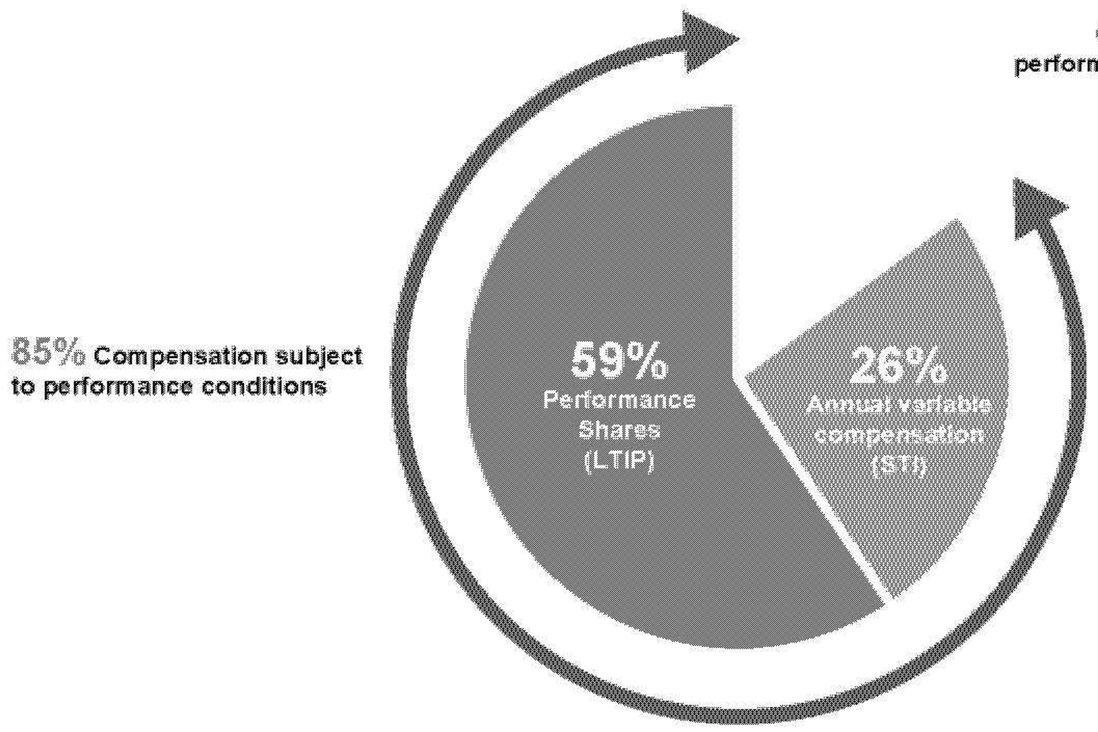


5-year TSR



STRUCTURE OF THE CHAIRMAN AND CHIEF EXECUTIVE OFFICER'S TOTAL COMPENSATION (EXCLUDING BENEFITS)

85% of the compensation is subject to performance conditions



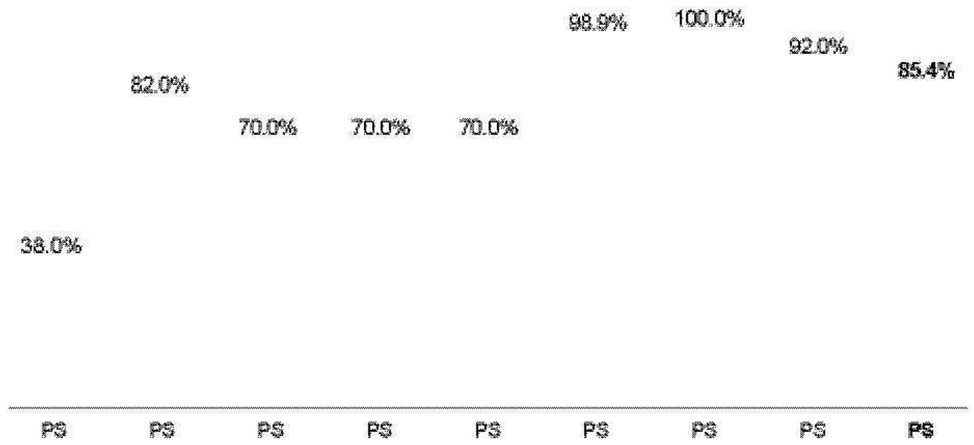
Annual variable compensation (STI) 2024 in % of the base salary

- HSE - GHG: 25.3%
- Financial parameters: 108.8%
- Personal contribution: 40%

Compensation Performance shares (LTIP) 2024 plan

- TSR vs. peers: 25%
- Annual variation in net cash flow per share vs. peers: 25%
- Pre-dividend organic cash breakeven: 20%
- Lifecycle carbon intensity of energy products sold to customers: 15%
- Change in methane emissions from operated facilities: 15%

History of the rate of achievement of performance criteria for performance share plans



* Note: As the performance criteria differ between the grants made to the executive director and those made to other beneficiaries, the respective achievement rates are 81% and 82%.

	2020 Plan	2021 Plan	2022 Plan
TSR	Achievement rate: 100%	Achievement rate: 70%	Achievement rate: 43.3%
Annual variation of the net cash flow per share	Achievement rate: 100%	Achievement rate: 100%	Achievement rate: 100%
Pre-dividend organic cash breakeven	Achievement rate: 100%	Achievement rate: 100%	Achievement rate: 100%
Change in the GHG from operated facilities (Scope 1+2)	Achievement rate: 100%	Achievement rate: 100%	Achievement rate: 100%
Change in GHG in Europe (Scope 3)	n/a	Achievement rate: 96.9%	Achievement rate: 96.9%
Achievement rate of the performance shares plan	100.0%	92.0%	85.4%
Performance shares acquired at the end of the vesting period by the Chairman and CEO	72,000 x 100% = 72,000	90,000 x 92% = 82,800	100,000 x 85.4% = 85,400

A compensation aligned with market practices and consistent with the two reference panels

Comparison groups

The Compensation Committee examines annually the relevance of the two panels of companies selected. These two panels allow us to compare our compensation practices with our peers in the energy sector, but also with companies in our employment pool that are leaders in their markets, in order to offer a competitive compensation program aimed at attracting and retaining the talents of today and tomorrow that are necessary for the development of our Company.

These two reference panels include French, European or American companies, selected from among groups similar in terms of:

- size (sales, capitalization);
- complexity and activities (energy sector);
- internalization of activities;
- long-term incentive compensation;
- and competitors in terms of recruiting talent on an international scale.

French comparison panel made up of CAC40 companies

Airbus	Dassault Systèmes	L'Oreal	Saint-Gobain	Stellantis
Air Liquide	EssilorLuxottica	LVMH	Sanofi	ST Microelectronics
Danone	Kering	Pernod-Ricard	Schneider Electric	Vinci

International comparison panel

Air Liquide	ENEL	Marathon Petroleum	Schlumberger
BASF	Engie	Mercedes-Benz Group	Siemens
Centrica	ENI	Philips 66	Stellantis
BP	ExxonMobil	Repsol	TechnipFMC
Chevron	General Electric	Shell	Valero Energy
E.ON	Iberdrola	RWE	Volkswagen

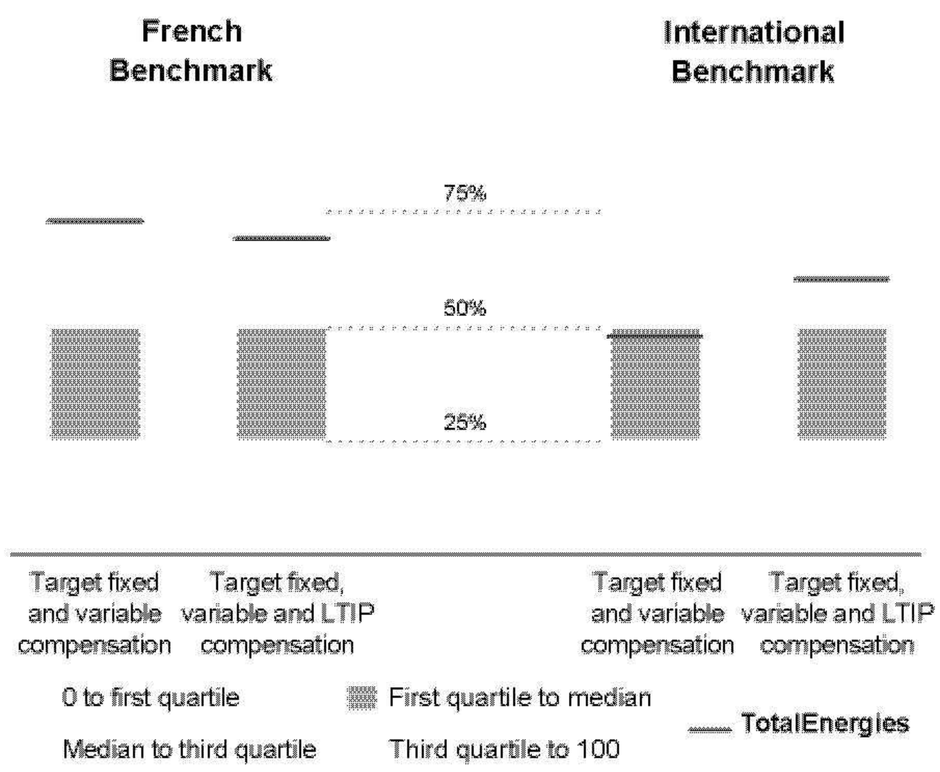
Positioning of the benchmarks

The Consultants (Mercer firm) assess the compensation of the executive director by reference to the two above-mentioned reference panels[1].

Compared to the French panel, Mr. Pouyanné's compensation ranks at the third quartile for the total "cash" compensation, and slightly below the third quartile for the total compensation including performance shares.

Compared to the international "Energies" panel, Mr. Pouyanné's compensation ranked at the median for his total "cash" compensation and between the median and the third quartile for the total compensation including performance shares.

Considering TotalEnergies' performances, the Compensation Committee considers the positioning to be appropriate.



Other components of the compensation policy

The compensation policy of the Chairman and Chief Executive Officer is decided by the Board of Directors, consistent with the AFEP-MEDEF's recommendations and on the proposal of the Compensation Committee and takes account of the comments of investors and proxy advisors.

The table below shows what the compensation policy of the Chairman and Chief Executive Officer provides, does not provide and takes into account from the advice of stakeholders:

What TotalEnergies does	What TotalEnergies does not do	Advice of the stakeholders that TotalEnergies takes into account
✓ A strong emphasis on compensation subject to performance conditions (approximately 80%-85% of total compensation)	✗ No accumulation of an employment contract and a directorship	✓ From 2022, taking into account for the calculation of the Chairman and CEO compensation ratios, of a population of employees in France representing more than 80% of the total French payroll in accordance with the AFEP recommendations
✓ A significant part corresponding to extra-financial targets thus representing 39% of the annual variable compensation	✗ No guaranteed variable compensation components	✓ New rule in 2023 for the obligation to hold TotalEnergies' shares: 5 years of base compensation for the Chairman and CEO and 4 years for the members of the Executive Committee within a maximum period of 5 years from taking office
✓ Taking into account for the objectives relating to the annual variable compensation and the performance share plan of financial criteria measured on a peer group in a "pay for performance" logic	✗ No upholding for the executive director of vesting rights to performance shares in case of dismissal or termination for serious or gross misconduct	✓ Deletion as of 2023 of the over-performance for each financial criterion of the annual variable portion of the executive director. Some proxy advisors had underlined that the taking into account of the potential over-performance for each of the 4 financial criteria with an overall cap at 110% of the financial criteria would allow an offsetting between criteria
✓ The granting of performance shares to the executive director is part of a broad plan of close to 8,800 employers (9% of the workforce of the Company)		✓ Clarification for extraordinary circumstances allowing the Board of Directors to adjust the variable compensation of the executive director
✓ Golden hellos capped to the value of opportunities lost in the previous employer		

(1) Methodological note: In order to compare our practice for short-term compensation practice with market practice, our consultants have retained a target bonus for the Chairman and Chief Executive Officer equal to 2/3 of the maximum bonus (average ratio observed between target and maximum bonus for the market). The performance shares (LTIP) were valued on the basis of the IFRS expense recognized for the shares granted in 2024.

4.3.2.1 Compensation of Mr. Patrick Pouyanné for fiscal year 2024

At its meeting on March 19, 2025, the Board of Directors set, on the proposal of the Compensation Committee, the Chairman and Chief Executive Officer's compensation in respect of fiscal year 2024, by applying the principles and criteria set in the compensation policy of the Chairman and Chief Executive Officer for fiscal year 2024 submitted by the Board of Directors to the Ordinary Shareholders' Meeting on May 24, 2024, and approved by the latter at 91.89% (resolution 13).

In accordance with Article L. 22-10-9 of the French Commercial Code, the information presented below reports on the total compensation and benefits of all kinds, paid to Mr. Patrick Pouyanné by virtue of his mandate as Chairman and Chief Executive Officer of TotalEnergies SE for fiscal year 2024 or allocated by virtue of this mandate in respect of the same fiscal year[1], as well as all the other information provided for in this Article L. 22-10-9.

It is reminded that the payment to the Chairman and Chief Executive Officer of the annual variable component for fiscal year 2024 is conditional upon the approval of the Ordinary Shareholders' Meeting on May 23, 2025, of the fixed, variable and extraordinary components of the total compensation and the benefits of all kinds paid during fiscal year 2024 to the Chairman and Chief Executive Officer or allocated to the latter during the same fiscal year, in accordance with Article L. 22-10-34 of the French Commercial Code.

The Ordinary Shareholders' Meeting to be held on May 23, 2025, will be convened to approve the total compensation and the benefits of all kinds paid during fiscal year 2024 or attributed to the Chairman and Chief Executive Officer for the same fiscal year, in accordance with Article L. 22-10-34 of the French Commercial Code.

TABLE SUMMARIZING THE COMPENSATION, OPTIONS AND SHARES ALLOCATED TO THE CHAIRMAN AND CHIEF EXECUTIVE OFFICER

SUMMARY OF THE COMPENSATION TO THE EXECUTIVE DIRECTOR

-0.9% on the allocated compensation in respect for the fiscal year 2024

Table 2 – AMF Position-recommendation – DOC-2021-02 (Appendix 2)

	Fiscal year 2023		Fiscal year 2024	
(€)	**Amount allocated for the fiscal year**	**Amount paid during the fiscal year[a]**	Amount allocated for the fiscal year	Amount paid during the fiscal year[a]
Patrick Pouyanné *Chairman and Chief Executive Officer*				
Fixed compensation	1,550,000	1,550,000	1,550,000	1,550,000
Annual variable compensation	2,741,950	2,731,875	2,698,550	2,741,950
Multi-year variable compensation	–	–	–	–
Extraordinary compensation	–	–	–	–
Compensation due to his directorship as a director	–	–	–	–
In-kind benefits[b]	75,457	75,457	78,514	78,514
Total	4,367,407	4,357,332	4,327,064	4,370,464
			-0.9%	

(a) Variable portion paid for the prior fiscal year.
(b) Company car and life insurance and health expense reimbursement plans paid for by the Corporation.

Number of performance shares (140,000)

The increase in the number of performance shares allocated to the Chairman and Chief Executive Officer in 2024 follows the decision validated by the Shareholders' Meeting on May 24, 2024 to increase the number of performance shares to be allocated to the Chairman and Chief Executive Officer during fiscal years 2024, 2025 and 2026 to 140,000 shares to be more in line with the levels practiced by the markets and to increase the alignment of interests between the Chairman and Chief Executive Officer and the shareholders of the Company.

Table of allocated compensation in constant IFRS valuation[2]

(in €, except the number of shares)	**Fiscal year 2023**	Fiscal year 2024	Variation
Patrick Pouyanné *Chairman and Chief Executive Officer*			
Compensation allocated in respect of the fiscal year (detailed in table 2)	4,367,407	4,327,064	-0.9%
Number of performance shares granted during the financial year	110,000	140,000	+27.3%
Valuation of the performance shares allocated with constant IFRS value	*4,069,120*	*5,178,880*	*+27.3%*
Compensation allocated in respect for the financial year with constant IFRS valuation	8,436,527	9,505,944	+12.7%

The evolution of the compensation presented in the table below includes the evolution of the TotalEnergies share price taken into account for the valuation of the performance shares from €46.24 to €55.83 between 2023 and 2024, which gives a value of the granted shares higher, whereas, at constant value, with an evolution of the compensation of 12.7% as shown in the table above. Performance shares valuations correspond to a valuation made in accordance with IFRS 2 standard (refer to Note 9 of the Consolidated Financial Statements) and not to a compensation actually received during the financial year. The benefit of the performance shares is subject to the achievement of performance conditions assessed over a three-year period.

(1) Including attributions in the form of stock, securities or rights giving access to the company's share capital or rights to the attribution of securities of the Corporation or of the companies mentioned in Articles L. 228-13 and L. 228-93 of the French Commercial Code.
(2) By retaining the fair value of the share in 2023, *i.e.*, €46.24.

Table 1 – AMF Position-recommendation – DOC-2021-02 (Appendix 2)

(€, except the number of shares)	**Fiscal year 2023**	Fiscal year 2024
Patrick Pouyanné *Chairman and Chief Executive Officer*		
Compensation allocated in respect of the fiscal year (detailed in table 2)	4,367,407	4,327,064
Valuation of multi-year variable compensation allocated during the fiscal year	–	–
Valuation of stock options granted during the fiscal year (detailed in table 4)	–	–
Valuation of performance shares granted during the financial year (detailed in table 6)	4,069,120	6,252,960
Number of performance shares granted during the financial year	*110,000*	*140,000*
Valuation of the other long-term compensation plans	–	–
Total	8,436,527	10,580,024

Note: The valuations of the options and performance shares correspond to a valuation performed in accordance with IFRS 2 (refer to Note 9 to the Consolidated Financial Statements) and not to any compensation actually received during the fiscal year. Entitlement to performance shares is subject to the fulfillment of performance conditions assessed over a three-year period.

SUMMARY OF THE MULTI-ANNUAL VARIABLE COMPENSATION PAID TO THE EXECUTIVE OFFICER

Table 10 – AFEP-MEDEF Code

Patrick Pouyanné *Chairman and Chief Executive Officer*	None

Table 11 – AMF Position-recommendation – DOC-2021-02 (Appendix 2)

Executive directors	Employment contract	Supplementary pension plan	Payments or benefits due or likely to be due upon termination or change in duties	Benefits related to a non-compete agreement
Patrick Pouyanné *Chairman and Chief Executive Officer* Start of term of office: December 19, 2015 End of term of office: 2027 Shareholders' Meeting	NO	YES Internal supplementary defined benefit pension plan and defined contribution pension plan	YES[a] Severance benefit and retirement benefit	NO

(a) Payment subject to performance conditions. Details of these commitments are provided below. The retirement benefit cannot be combined with the severance benefit.

SUMMARY TABLE OF THE COMPONENTS OF THE COMPENSATION FOR MR. PATRICK POUYANNÉ, CHAIRMAN AND CHIEF EXECUTIVE OFFICER OF TotalEnergies SE, PAID DURING FISCAL YEAR 2024 OR ALLOCATED IN RESPECT OF THE SAME FISCAL YEAR

Components of compensation submitted for vote	Amount paid during fiscal year 2024	Amount allocated in respect of fiscal year 2024 or accounting valuation	Presentation
Fixed compensation	€1,550,000	€1,550,000 (amount paid in 2024)	Mr. Pouyanné's annual fixed compensation in his capacity as Chairman and Chief Executive Officer has been set by the Board of Directors at €1,550,000 (base salary) for fiscal year 2024. This fixed compensation represents 36% of the total cash compensation allocated in respect of fiscal year 2024 (*i.e.*, excluding performance shares and benefit in kind).
Annual variable compensation	€2,741,950 (amount allocated in respect of fiscal year 2023 and paid in 2024)	€2,698,550 (amount allocated in respect of fiscal year 2024 and to be paid in 2025)	The variable portion of Mr. Pouyanné's compensation allocated in respect of fiscal year 2024 by virtue of his duties as Chairman and Chief Executive Officer has been set at €2,698,550. This corresponds to 174.1% (of a maximum of 180%) of his base salary, taking into account the results of the economic parameters and the evaluation of the personal contribution of the Chairman and Chief Executive Officer. This annual variable compensation corresponds to 64% of the total cash compensation allocated in respect of fiscal year 2024 (*i.e.*, excluding performance shares and benefit in kind).
Multi-year variable compensation	n/a	n/a	The Board of Directors has not granted any multi-year or deferred variable compensation.
Compensation by virtue of directorship	n/a	n/a	Mr. Pouyanné does not receive compensation due to his directorship in TotalEnergies SE. Mr. Pouyanné does not receive compensation from companies TotalEnergies SE controls.

Components of compensation submitted for vote	Amount paid during fiscal year 2024	Amount allocated in respect of fiscal year 2024 or accounting valuation	Presentation
Stock options (SO), performance shares (PS) or all other forms of long-term compensation		SO: none PS: €6,252,960[1] (accounting valuation)	On May 24, 2024, Mr. Pouyanné was granted 140,000 existing shares of the Corporation pursuant to the authorization of the Corporation's Extraordinary Shareholders' Meeting on May 24, 2024 (twenty-third resolution) subject to the conditions set out below. These shares were granted under a broader share plan approved by the Board of Directors on May 24, 2024, in favor of close to 8,800 beneficiaries.
Payment for assuming a position	n/a	n/a	Mr. Pouyanné was not granted any payment for assuming his position.
In-kind benefits	–	€78,514 (accounting valuation)	The Chairman and Chief Executive Officer is entitled to a company vehicle. He is covered by the following life insurance plans provided by various life insurance companies: – An "incapacity, disability, death" insurance policy applicable to all employees, partly paid for by the Corporation; – a second "disability and life insurance" plan, fully paid by the Corporation, applicable to executive officers and senior executives whose annual gross compensation is more than 16 times the PASS. The Chairman and Chief Executive Officer also benefits from the health expense reimbursement plan applicable to all employees.
Severance benefit	**None**	None	The Chairman and Chief Executive Officer is entitled to a benefit equal to two years of his gross compensation in the event of a forced departure related to a change of control or strategy. The calculation is based on the gross compensation (fixed and variable) of the 12 months preceding the date of termination or non-renewal of his term of office. The severance benefit will only be paid in the event of a forced departure related to a change of control or strategy and subject to performance conditions.
Retirement benefit	**None**	None	The Chairman and Chief Executive Officer is entitled to a retirement benefit equal to those available to eligible members of the Company under the French National Collective Bargaining Agreement for the Petroleum Industry. This benefit is equal to 25% of the fixed and variable annual compensation received during the 12 months preceding retirement. Entitlement to retirement benefits is subject to conditions related to the performance of the beneficiary. The retirement benefit cannot be combined with the severance benefit described above.
Non-compete compensation	n/a		Mr. Pouyanné has not received any non-compete compensation.
Supplementary pension plan	None		The Chairman and Chief Executive Officer benefits from the legal AGIRC-ARRCO scheme, as well as from the internal supplementary defined contribution scheme applicable to all employees of TotalEnergies SE, referred to in Article L. 242-1 of the French Social Security Code, and from the supplementary defined benefit pension scheme, referred to in Article L. 137-11 of the French Social Security Code.
Approval by the Shareholders' Meeting			The commitments made to the Chairman and Chief Executive Officer regarding the pension and insurance plans, the retirement benefit and the severance benefit (in the event of forced departure related to a change of control or strategy) were authorized by the Board of Directors on March 14, 2018, and approved by the Shareholders' Meeting on June 1, 2018.

(1) In accordance with the accounting of the performance shares for fiscal year 2024 in accordance with IFRS 2 which takes into account an award rate hypothesis of 80% at the end of the vesting period, this amount corresponds to the 140,000 shares granted in 2024, valued on the basis of a unit fair value of €55.83. This fair value was calculated in accordance with IFRS 2 on the grant date of the plan, *i.e.*, on May 24, 2024, on the basis of the closing price of the TotalEnergies share on that date of €65.99.

A. Details of the assessment of the performance criteria for the determination of the annual variable compensation for fiscal year 2024

For the setting of the variable portion of Mr. Pouyanné's compensation allocated in respect of fiscal year 2024 due to his duties as Chairman and Chief Executive Officer, the Board of Directors reviewed, at its meeting on March 19, 2025, the level of achievement of the economic parameters based on the quantifiable targets set by the Board of Directors at its meeting on February 6, 2024. The Board of Directors also assessed the Chairman and Chief Executive Officer's personal contribution on the basis of the target criteria set during its meeting on February 6, 2024, to qualitatively assess his management.

The payment to the Chairman and Chief Executive Officer of the annual variable component for fiscal year 2024 is conditional upon the approval of the Ordinary Shareholders' Meeting on May 23, 2025, of the fixed, variable and extraordinary components of the total compensation and the benefits of all kinds paid during fiscal year 2024 to the Chairman and Chief Executive Officer or allocated to the latter during the same fiscal year, in accordance with Article L. 22-10-34 of the French Commercial Code.

It is reminded that the variable portion of Mr. Pouyanné's compensation allocated in respect of fiscal year 2023 by virtue of his duties as Chairman and Chief Executive Officer and paid in 2024 (after the approval by the Ordinary Shareholders' Meeting on May 24, 2024, of the fixed, variable and extraordinary components of the total compensation and the benefit-in-kind paid in respect of fiscal year 2023) was set at €2,741,950 corresponding to 176.9% (of a maximum of 180%) of his fixed annual compensation based on results of the economic parameters and the evaluation of his personal contribution.

Annual variable compensation allocated in respect of fiscal year 2024 (expressed as a percentage of the base salary)

	% targets	% allocated
Summary of the quantifiable targets		
A. Safety and greenhouse gas (GHG) emissions		
a) Safety	20%	15.3%
– TRIR	*6%*	*6%*
– FIR	*6%*	*1.3%*
– Evolution of the number of Tier 1 + Tier 2 incidents	*8%*	*8%*
b) Evolution of GHG emissions (Scope 1+2)	10%	10%
Maximum percentage that may be allocated in respect of Safety and greenhouse gas (GHG) emissions criteria	**30%**	**25.3%**
B. Financial parameters		
– Return on equity (RoE)	30%	30%
– Organic gearing	20%	20%
– Integrated Power cash flow (CFFO)	10%	10%
– Pre-dividend organic cash breakeven	30%	28.8%
– Return on average capital employed (ROACE), comparative	20%	20%
Maximum percentage that may be allocated in respect of financial parameters	**110%**	**108.8%**
Maximum percentage that may be allocated in respect of quantifiable targets	**140%**	**134.1%**
Personal contribution (qualitative criteria)		
– Steering of the Corporation's strategy of moving towards carbon neutrality, in line with the 2020/2030 targets announced to investors, in particular the increase of gas and power production, as well as the evolution of its sales mix	15%	15%
– Profitable growth in renewables and electricity	10%	10%
– Corporate Social Responsibility (CSR) performance, notably the integration of climate issues in the Company's Strategy, the Company's commitment and ratings regarding CSR, as well as the diversity policy	15%	15%
Maximum percentage that may be allocated in respect of the personal contribution	**40%**	**40%**
Total	180%	174.1%

Safety and Greenhouse gas emissions criteria

The Board of Directors assessed achievement of the targets set for the Safety and Greenhouse gas emissions criteria as follows:

The **safety evolution** was assessed for a maximum of 20% of the base salary through (i) the achievement of the annual TRIR (Total Recordable Incident Rate) target, (ii) the number of accidental deaths per million hours worked, FIR (Fatality Incident Rate), as well as (iii) through change in the Tier 1 + Tier 2 indicator(1). These three sub-criteria were assessed based on the elements set out in the 2024 compensation policy for the Chairman and Chief Executive Officer, as approved by the Shareholders' Meeting on May 24, 2024.

Concerning the 2024 fiscal year, the following elements were noted:

- the **TRIR** was 0.55, which is below the target of 0.62. The result of this criterion was thus set at its maximum of 6%;
- the FIR was set at 0.25, slightly below the average of the FIR rates of the panel of majors. The result of the benchmarked FIR sub-criterion was thus set at 1.3%, below its maximum of 3%. The Company suffered one fatality in 2024, so the zero fatality sub-criterion was not achieved. The overall result for the two sub-criteria relating to the FIR was therefore set at 1.3%, against a maximum of 6%;
- the number of **Tier 1 + Tier 2** incidents was 39, which is below the level of 45 allowing to achieve the target. The result of this criterion was set at its maximum of 8%.

The result of the criterion related to the safety evolution was thus set at 15.3%.

(1) Tier 1 and Tier 2: indicator of the number of loss of primary containment events, with more or less significant consequences, as defined by the API 754 (for downstream) and IOGP 456 (for upstream) standards. Excluding acts of sabotage and theft.

The **evolution of the greenhouse gas (GHG) emissions on operated facilities** was assessed for a maximum weighting of 10% of the base salary, through the achievement of a GHG (Scope 1+2) reduction emission target from 46 Mt CO_2e in 2015 to 38 Mt CO_2e in 2025, corresponding to a reduction of 800 kt CO_2e/y, *i.e.*, a target of 38.8 Mt CO_2e for 2024. This criterion was assessed based on the elements set out in the 2024 compensation policy for the Chairman and Chief Executive Officer, as approved by the Shareholders' Meeting on May 24, 2024. The Board noted that the GHG Scope 1+2 emissions from operated facilities amounted to 34.3 Mt CO_2e in 2024. The result of this criterion was thus set at its maximum of 10%.

Financial parameters

- **The return on equity (ROE)**, as published by the Company on the basis of its balance sheet and consolidated statement of income was assessed for a maximum of 30% of the base salary, based on the elements set out in the 2024 compensation policy of the Chairman and Chief Executive Officer. The Board noted that the ROE for fiscal year 2024 was 15.8%, *i.e.*, above the target. The result of this criterion was thus set at its maximum, *i.e.*, 30%.
- The **organic gearing** was assessed for a maximum of 20% of the base salary, based on the elements set out in the compensation policy of the Chairman and Chief Executive Officer for 2024. The Board thus noted that the organic gearing for financial year 2024 was set at 7.3%, *i.e.*, a 100% achievement rate. The result of this criterion was thus set at its maximum, *i.e.*, 20%.
- The **Integrated Power cash flow (CFFO)** was assessed for a maximum of 10% of the base salary, based on the elements set out in the compensation policy of the Chairman and Chief Executive Officer for 2024. The Board thus noted that Integrated Power cash flow (CFFO) for financial year 2024 was set at $2.6 billion, *i.e.*, a 100% achievement rate. The result of this criterion was thus set at its maximum, *i.e.*, 10%.
- The **pre-dividend organic cash breakeven criterion** was assessed at a maximum of 30% of the base salary according to components set in the compensation policy of the Chairman and Chief Executive Officer for 2024. The ability of the Company to resist to the variations of the Brent barrel price is measured by this parameter. Regarding fiscal year 2024, the Board noted that the pre-dividend organic cash breakeven set at $25.4/b, *i.e.*, at a level slightly above the target. The result of this criterion was thus set at 28.8%.
- The **return on average capital employed (ROACE) criterion, by comparison,** was assessed as a maximum weighting of 20% of the base salary. TotalEnergies' ROACE, as published from the consolidated balance sheet and the income statement, was compared to the ROACE average of each of the four peers (ExxonMobil, Shell, BP and Chevron). This criterion was assessed based on the elements set out in the 2024 compensation policy for the Chairman and Chief Executive Officer. For fiscal year 2024, the Board noted that TotalEnergies' ROACE was more than 2 points higher than the average of the ROACEs of the four peers, *i.e.*, above the target set. The result of this criterion was thus set at its maximum, *i.e.*, 20%.

The result of the financial criteria was set at 108.8% of the base salary, for a maximum of 110%.

Personal contribution

The personal contribution of the Chairman and Chief Executive Officer was assessed at its maximum of 40% of the base salary based on the three criteria set in the compensation policy of the Chairman and Chief Executive Officer for 2024:

- steering of the Corporation's strategy of moving towards carbon neutrality, in line with the 2020/2030 targets announced to investors, in particular the increase of gas and power production, as well as the evolution of its sales mix, for up to 15%;
- profitable growth in renewables and electricity, for up to 10%;
- Corporate Social Responsibility (CSR) performance, notably the integration of climate issues in the Company's Strategy, the Company's commitment and ratings regarding CSR, as well as the diversity policy, for up to 15%.

The Board of Directors set the results of each of these criteria at their maximum, because of the following components which were observed during the past fiscal year:

- **Criterion 1: Steering of the Corporation's strategy of moving towards carbon neutrality,** in line with the 2020/2030 targets announced to investors, in particular the increase of gas and power production, as well as the evolution of its sales mix.

  During fiscal year 2024, the Board observed that the Chairman and Chief Executive Officer achieved the following:

  In 2024, TotalEnergies confirms the continuation of its transition strategy based on two pillars: oil and gas, particularly LNG, and electricity.

  - TotalEnergies retains its status as the Oil & Gas major that is most advanced in the energy transition, being the one that devotes the largest CAPEX budgets to low-carbon energies.
  - The sales mix at the end of 2024 was 50% oil, 43% gas and 7% electrons and low-carbon molecules, on a trajectory in line with the Company's 2030 target of a mix of 40% oil, 40% gas and 20% electrons and low-carbon molecules.
  - The ratio of the Company's hydrocarbon production is balanced at 50:50 between oil and gas. The Company is pursuing low-cost projects with low emissions while confirming its ability to grow profitably across the electricity value chain.

  Oil

  - Launch of several projects which support the 3%/year growth objective of Upstream production and growing underlying cash-flow: Kaminho in Angola, Sepia 2 and Atapu 2 in Brazil, GranMorgu in Suriname for oil projects. These projects meet the financial and emissions criteria set by the Company for its investments. As an illustration, the GranMorgu project is an offshore production unit (FPSO) which will be equipped with instruments for the continuous detection of methane emissions to contribute to the goal of moving towards almost zero methane emissions by 2030.
  - Agreements for the divestment of mature Upstream assets in Nigeria (JV SPDC), Congo (Nkossa), the United Kingdom (West of Shetland gas assets) and in Brunei (sale of the EP subsidiary to Hibiscus Petroleum Berhad).
  - In Marketing, sale of the fuel network activities, in Pakistan and Brazil.

  LNG

  - TotalEnergies is the third largest LNG player in the world with 40 Mt sold in 2024 thanks to its interests in liquefaction plants in all geographical areas.
  - Launch of the Marsa LNG projects in Oman (100% electric LNG plant with a carbon intensity of less than 3 kg CO_2e/boe, i.e. 10 times less than the average intensity of LNG plants) and Ubeta in Nigeria to supply the Nigeria LNG plant.
  - Strengthened integration in the LNG chain, particularly in the American and Asian markets: acquisition of Lewis Energy Group's upstream assets in production in the United States (Eagle Ford in Texas), signing of LNG sales contracts in Singapore, India, South Korea, China and also in Turkey.
  - Acquisition of SapuraOMV (100%), a gas producer and operator in Malaysia.

Integrated Power

- In the electricity and renewable energy sector, the Company continues to build a competitive portfolio of renewable (solar, onshore and offshore wind) and flexible (CCGT, storage) assets to supply its customers by investing 4 billion dollars per year.
- 1.5 GW PPAs signed with 600 industrial and commercial customers worldwide.
- Agreements for the development of 300 MW with 3 renewable projects in the Sultanate of Oman (North Solar, Riyah-1 and Riyah-2). These solar and wind projects will generate more than 1.4 TWh of renewable electricity per year from 2026.
- Signing of a 25-year electricity sales contract with Saudi Power Procurement Company for the 300 MW Rabigh 2 solar project.
- Acquisition of several flexible assets to leverage the value of renewable assets in Texas and in the United Kingdom.
- In Germany, implementation of the Integrated Power strategy: acquisition of a renewable energy aggregator (Quadra) and batteries (Kyon Energy). Obtaining a concession to develop a 1.5 GW offshore wind farm in Germany. Acquisition from RWE of a 50% stake in two 2 GW offshore wind projects. Signing for the acquisition of the renewable developer VSB.
- Agreement with Scatec for the acquisition of interests in hydroelectric projects in Africa, particularly in Uganda.

Low-carbon molecules

- In 2024, the Company accelerated its commitment to develop the production and marketing of sustainable aviation fuels (SAF), entering into strategic partnerships with Airbus for the supply of SAF for more than half of its needs in Europe and the implementation of a Research and Innovation program aimed at developing 100% sustainable fuels, with Air France-KLM for the supply of 1.5 million tonnes of SAF over 10 years, with SINOPEC to jointly develop a SAF production unit in China and with Aramco and Saudi Investment Recycling Company for developing a SAF production unit in the Kingdom of Saudi Arabia.
- Acquisition of 50% of a 795 MW offshore wind farm in the Netherlands, to produce green hydrogen to decarbonize TotalEnergies' European refineries.
- Creation of a joint-venture with Vanguard Renewables, a BlackRock subsidiary, to develop biomethane production in the United States.
- Acquisition of carbon storage projects from Talos Low Carbon Solutions, in the United States.
- Participation, with BP and Equinor, in a CCS project in the United Kingdom (Northern Endurance Partnership) to develop the storage and transport of nearly 4 million tons of CO_2 per year in the North Sea.
- Agreement with Anew Climate and Aurora Sustainable Lands for deployment of sustainable preservation of natural carbon sink projects.
- Investment in the "Japan Hydrogen Fund", dedicated to developing the low-carbon hydrogen value chain.

Financial analysts' assessment of the transition process

Analysts and investors underlined the consistency of TotalEnergies' strategy with the construction of a portfolio providing growth opportunities and acknowledging the expected accretive contribution of the Integrated Power sector to the Free Cash-Flow (analyses published after the presentation by the Chairman & Chief Executive Officer and Executive Committee of the Company's Strategy and Outlook in New York, in October 2024).

The quality of the portfolio is reflected in the expected growth in its energy production over the next decade, according to the Wood Mackenzie study of October 24, 2024, significantly above its peers.

This is also true in the field of low-carbon power generation, where TotalEnergies' production growth far exceeds that of its peers by 2030.

In September 2024, according to Goldman Sachs, TotalEnergies is once again the leader in low-carbon investments, particularly in renewable electricity.

In 2024, Goldman Sachs again points out that TotalEnergies continues to invest more than its peers in its low-carbon activities.

- **Criterion 2: Profitable growth in renewables and electricity**

  During fiscal year 2024, the Board observed that the Chairman and Chief Executive Officer fully achieved the following;

  The figures published by the new Integrated Power business confirm the profitable growth of the renewables and electricity activities in 2024.

  - Growth in electricity generation and generation capacity in 2024:
    - Net electricity generation at 41.1 TWh of which 26 TWh from renewable sources (+38% year-on-year)
    - Net generation capacity up 24% year-on-year to 21.5 GW of which 15.1 GW form renewable sources (+16% year-on-year)
  - Gross installed renewable generation capacity up 16% year-on-year to 26 GW.

    An increase of results in 2024:

    - Adjusted net operating profit at 2.2 B$ (+17% year-on-year)
    - CFFO of 2.6 B$ (+19% year-on-year)
    - The Integrated Power segment achieved a ROACE of 10% in 2024
  - TotalEnergies continued to implement its Integrated Power strategy in three key geographies: the United States, Germany and the United Kingdom.
    - In the United States, with the acquisition of 1.5 GW of flexible gas-fired power generation capacity (CCGT) in Texas, the development and farm-down of a 2 GW portfolio.
    - In Germany, with the conclusion of the acquisition of a renewable energy aggregator (Quadra), a battery developer (Kyon Energy) and an onshore wind developer (VSB), in addition to the consolidation of the offshore wind portfolio in the North Sea (acquisition of a concession at auction and entry into two RWE concessions).
    - In the United Kingdom, with the acquisition of 50% of a 1.3 GW combined cycle gas-fired power plant (CCGT).
- **Criterion 3: Corporate Social Responsibility (CSR) performance**, measured according to three axes: the integration of climate issues in the Company's strategy, the Company's commitment and ratings regarding CSR, as well as the diversity policy.

  During fiscal year 2024, the Board observed that the Chairman and Chief Executive Officer achieved in particular the following.

Rating agencies rank

TotalEnergies at the top of the rankings for ESG commitments and achievements, with scores increasing since 2023.

As of February 2025, TotalEnergies has received the following ratings:

	MSCI	Sustainalytics	ISS-ESG	S&P Global CSA
CSR Note		Medium Risk		
	AA	29.9	B-	54 /100
Ranking against our peers[a]	2nd	1st ex-aequo	1st ex-aequo	1st

(a) ExxonMobil, Shell, BP, Chevron, ENI, Equinor.

In its enhanced Implied Temperature Rise (ITR) model aimed at aligning with the best practices of the Glasgow Financial Alliance for Net Zero (GFANZ), MSCI assesses as of February 2025 that TotalEnergies, with an ITR of 1.9°C, is in line with the Paris Agreement objective of limiting the global average temperature to well below 2°C.

TotalEnergies is among the companies best evaluated by the Net Zero Company Benchmark of Climate Action 100+. The Company is the one that, among the majors, satisfies the greatest number of the 51 criteria measuring the credibility of the 2050 net zero ambition, GHG emissions targets, decarbonization strategy, capital allocation, adherence to climate ambition, climate governance, just transition, climate-related transparency and history of GHG emissions reductions. CA100+ also recognized TotalEnergies' leadership in the energy transition, placing the Company far ahead of the Net Zero Standard for Oil & Gas (52% positive scores versus 19% on average for the 10 companies evaluated).

TotalEnergies remains in 2nd place in the Carbon Tracker Absolute Impact 2024 ranking, which assesses the emissions targets of the 27 largest Oil & Gas companies.

Also noteworthy:

- TotalEnergies' rating on the theme of mental health at work in the CCLA Corporate Mental Health Benchmark Global + has improved (from "Tier 3" to "Tier 2" on a scale of 1 to 5), placing the Company in the top 5 of the 119 largest listed companies (>$60B Market Cap), with more than 10,000 employees, studied in this benchmark. TotalEnergies is the company that has improved its rating the most between 2022 and 2024.
- TotalEnergies has become the number 1 in employee shareholding in Europe in terms of value held by employees. Its policy of developing employee shareholding was rewarded with the 2024 Grand Prize from the French Federation of Employee Shareholding (FAS).

Achievements 2024

- Publication of the Sustainability & Climate – 2024 Progress Report presenting progress on TotalEnergies' transition strategy and climate ambition.
- Continued reduction in greenhouse gas emissions:
  - scope 1+2 emissions at TotalEnergies' operated sites reduced by 25% compared with 2015, with a 36% reduction at operated oil and gas production, refining and processing sites;
  - reduction in methane emissions from TotalEnergies' operated sites by 53% compared with 2020, enabling the Company to reach its 50% emissions reduction target one year ahead of schedule. TotalEnergies is a leader in the detection and reduction of methane emissions in the Oil & Gas industry. The company is taking the necessary steps to meet its target of reducing methane emissions by 80% by 2030, by installing continuous real-time leak detection equipment on all its upstream assets. The aim is for this plan to be fully deployed by the end of 2025. It will make use of 13,000 IoT sensors, infrared cameras, flow meters and predictive monitoring systems;
  - 17% reduction in the lifecycle carbon intensity of energy products sold to the customers of the Company and maintenance of Scope 3 emissions from 342 Mt CO_2e to below 400 Mt CO_2e, reflecting the lower carbon content of energy sold and the Company's progress in implementing its transition strategy.
- Launch of "Our 5 Levers for a Sustainable Change". In TotalEnergies' operations and projects: minimizing energy consumption, promoting the use of renewable energies and low-carbon technologies to reduce emissions, minimizing pollution and discharges into the environment. Knowing and dialoguing with communities and stakeholders. Promote a collective culture in which everyone pays attention to others and is able to spot signs of ill-being and take action.
- In the area of energy savings, implementation of a program to accelerate improvements in energy efficiency and reduce energy consumption at the Company's facilities, for a cumulative investment (2023-2025) of around 1 B$, enabling annual reductions in GHG emissions of over 2 Mt CO_2e.
- In the environmental field, continued action to reduce chronic discharges into the environment (hydrocarbon levels in aqueous discharges to 11.2 mg/l offshore and 2.0 mg/l onshore in 2024) and action to reduce water withdrawals in water-stressed areas, achieve 100% deployment of a Biodiversity Action Plan at all of the Company's environmentally material sites by the end of 2024, one year ahead of the target set under axis 3 of the Company's biodiversity ambition.
- Launch of the worldwide *Care Together by TotalEnergies* program, reflecting the Company's commitment to social responsibility towards its employees, based on 4 pillars: social protection, health, family sphere, working environment and ways of working.
- Announcement by the Company of its ambition to give 100 million people in Africa and India access to clean cooking by 2030 by investing over $400 million in the development of LPG (Liquefied Petroleum Gas) for cooking. By developing access to clean cooking in Africa and India, TotalEnergies aims to have a positive impact on the environment and people's health, while helping to reduce the inequalities suffered by women in these regions.
- On the occasion of its 100th anniversary, the Company also set up a free allocation plan of 100 shares to nearly 105,000 employees in more than 100 countries. This is the largest universal allocation in the Company's history.
- The Workforce Disclosure Initiative assesses the transparency of approximately 140 companies on their human resources management. TotalEnergies obtains a score of 89% in 2024 (+2 points compared to 2023), above the industry average (76%) and the ranking average (62%).
- In terms of feminization, the Company is pursuing its actions in line with the targets set for 2025 (30% of women among senior executives, 30% of women in senior management).
  - Increase in the proportion of women in senior executive management: 29.5% by the end of 2024 (compared with 28.3% at the end of 2023 and 27.5% at the end of 2022).
  - Increase in the proportion of women in senior management: 27.3% by the end of 2024 (compared with 25.1% at the end of 2023 and 23.8% at the end of 2022).

- In terms of internationalization, the Company is also pursuing actions in line with the targets it has set itself (45% international employees among senior executives, 40% international employees in senior management).
  - Increase in the proportion of international employees among senior executives: 38.6% at end 2024 (compared with 37.7% at end 2023 and 37.4% at end 2022).
  - Increase in the proportion of international employees in senior management: 36.4% by the end of 2024 (compared with 36.3% at the end of 2023 and 34.2% at the end of 2022).
- TotalEnergies has continued to take steps to maintain pay equity between men and women:
  - The results of the Leyre index (5 professional equality indicators, scored out of 100: pay gap, individual increase gap, promotion gap, % of female employees receiving an increase on their return from maternity leave, number of women in the 10 highest-paid positions) for the period 2023-2024 (reference period N-1/N: September 30 N-1 to September 30 N) are stable for UES AGSH and UES MS, 93/100 and 92/100 respectively (iso versus previous period, 2022-2023) and have improved for UES RP with a 100/100 score (versus 99/100 for 2022-2023).
  - The Company has carried out studies to analyze the pay gap between men and women at equivalent levels of responsibility, first in France and then progressively worldwide, enabling it to implement specific measures to prevent and compensate for any unjustified pay gaps.

All the set targets being considered as largely met, the personal contribution of the Chairman and Chief Executive Officer was determined at its maximum, *i.e.*, **40%** of the fixed compensation.

B. Details of the performance criteria applicable to performance shares (2024 Plan)

The definitive number of performance shares granted to the Chairman and Chief Executive Officer is subject to the beneficiary's continued presence in the Company during the vesting period and to performance conditions as described below.

Applicable performance conditions are the following:

- For 25% of the shares, the Corporation's ranking against its peers (ExxonMobil, Shell, BP and Chevron) each year during the three vesting years (2024, 2025 and 2026) based on the Total Shareholder Return (TSR) criterion of the last quarter of the year in question, the dividend being considered reinvested based on the closing price on the ex-dividend date.
- For 25% of the shares, the Corporation's ranking against its peers (ExxonMobil, Shell, BP and Chevron) each year during the three vesting years (2024, 2025 and 2026) using the annual variation in net cash flow per share expressed in dollars.

Based on the ranking, a grant rate will be determined each year for these two first criteria: 1st: 180% of the grant; 2nd: 130% of the grant; 3rd: 80% of the grant; 4th and 5th:0%, with a maximum of 100%.

- For 20% of the shares, the level reached by the pre-dividend organic cash breakeven each year during the three vesting years (2024, 2025 and 2026). The pre-dividend organic cash breakeven is defined as the Brent price for which the operating cash flow before working capital changes (MBA) covers the organic investments(1). The ability of the Company to resist to the variations of the Brent barrel price is measured by this parameter.
- For 15% of the shares, the criterion of the change in the methane emissions from operated facilities with regard to the achievement of the target to reduce methane emissions set for 2026 at 56% compared to the methane emissions of 2020.
- For 15% of the shares, the criterion of the lifecycle carbon intensity of energy products sold to the customers of the Company assessed with regard to the achievement of the target to reduce this carbon intensity set for 2026 at 17% compared to 2015.

In accordance with Article L. 225-197-1 of the French Commercial Code, Mr. Pouyanné will be required to hold in registered form 50% of the shares definitively granted to him at the end of the three-year vesting period as part of the 2024 plan until the end of his term of office.

In addition, the Board of Directors has noted that, pursuant to the Board's Rules of Procedure applicable to all directors, the Chairman and Chief Executive Officer is not allowed to hedge the shares of the Corporation or any related financial instruments and has taken note of Mr. Pouyanné's commitment to abstain from such hedging operations with regard to the performance shares granted.

Treatment of performance shares in the event of the Chairman and Chief Executive Officer leaving the Company

- In the event of the retirement or of a change of position within the Company, the Chairman and Chief Executive Officer upholds all vesting rights in the course of acquisition.
- In the event of forced departure, other than for serious or gross misconduct, the Board of Directors may decide that the Chairman and Chief Executive Officer upholds his vesting rights in the course of acquisition on a *pro rata* basis according to the length of time of his presence within the Company.
- In the event of resignation or termination of his function for serious or gross misconduct, his vesting rights in the course of acquisition will be lost in whole.

The upholding of existing vesting rights in the course of acquisition under the conditions of departure described above is accompanied by the upholding of the performance criteria set for the definitive grant of the shares.

In case of exceptional circumstances, the Board of Directors may decide to maintain stock options and performance share grants after the executive director left, the decision of the Board of Directors has to be duly motivated and taken in the corporate interest.

C. Details of the commitments made by the Corporation to the Chairman and Chief Executive Officer

Severance benefit

The Chairman and Chief Executive Officer is entitled to a benefit equal to two years of his gross compensation in the event of a forced departure related to a change of control or strategy. The calculation is based on the gross compensation (fixed and variable) of the 12 months preceding the date of termination or non-renewal of his term of office.

It will not be due in case of serious or gross misconduct or if the Chairman and Chief Executive Officer leaves the Corporation of his own volition, accepts new responsibilities within the Company or may claim full retirement benefits within a short time period.

Receipt of this severance benefit is contingent upon a performance-related condition applicable to the beneficiary, which is deemed to be fulfilled if at least two of the following criteria are met:

- the average return on equity (ROE) for the three years preceding the year in which the Chairman and Chief Executive Officer leaves is at least 10%;
- the average gearing ratio for the three years preceding the year in which the Chairman and Chief Executive Officer leaves is less than or equal to 30%; and
- the average pre-dividend organic cash breakeven of the three years preceding the year in which the Chairman and Chief Executive Officer retires is below or equal to $30/b.

(1) Refer to the glossary for the definition and further information on alternative performance measures (Non-GAAP measures) and to point 1.9 of chapter 1 for reconciliation tables.

Retirement benefit

The Chairman and Chief Executive Officer is entitled to a retirement benefit equal to those available to eligible members of the Company under the French National Collective Bargaining Agreement for the Petroleum Industry. This benefit is equal to 25% of the fixed and variable annual compensation received during the 12 months preceding retirement.

Receipt of this retirement benefit is contingent upon a performance-related condition applicable to the beneficiary, which is deemed to be fulfilled if at least two of the criteria defined below are met:

- the average return on equity (ROE) for the three years preceding the year in which the Chairman and Chief Executive Officer leaves is at least 10%;
- the average gearing ratio for the three years preceding the year in which the Chairman and Chief Executive Officer leaves is less than or equal to 30%; and
- the average pre-dividend organic cash breakeven of the three years preceding the year in which the Chairman and Chief Executive Officer retires is below or equal to $30/b.

Supplementary pension plans

Pursuant to applicable legislation, the Chairman and Chief Executive Officer is eligible for the basic French Social Security pension and for pension benefits under the AGIRC-ARRCO supplementary pension plan.

He also participates in the internal defined contribution pension plan applicable to all TotalEnergies SE employees, called PERO (*Plan d'épargne retraite obligatoire* - mandatory retirement savings plan), covered by Article L. 242-1 of the French Social Security Code. The Corporation's commitment is limited to its share of the contribution paid to the insurance company that manages the plan. For fiscal year 2024, this pension plan represented a booked expense to TotalEnergies SE in favor of the Chairman and Chief Executive Officer of €2,782.

The Chairman and Chief Executive Officer also participates in a supplementary defined-benefit pension plan, covered by Article L. 137-11 of the French Social Security Code, set up and financed by the Corporation and approved by the Board of Directors on March 13, 2001, for which management is outsourced to two insurance companies effective January 1, 2012. In accordance with the ordinance 2019-697 published on July 4, 2019, this plan is closed to any new participant as from July 4, 2019, and, for participants as of July 4, 2019, and retiring as from January 1, 2020, the amount of supplementary pension provided for in this plan is calculated on the basis of number of years of service as at December 31, 2019, and up to a maximum of 20 years.

This pension plan applies to all TotalEnergies SE employees whose reference compensation exceeded, as of July 4, 2019, an amount equal to 8 times the annual ceiling for calculating French Social Security contributions (PASS), set at €40,524 for 2019 (*i.e.*, €324,192), and above which there is no conventional pension plan.

To be eligible for this supplementary pension plan, participants must have served for at least five years, be at least 60 years old and exercised his or her rights to retirement from the French Social Security. The benefits under this plan are subject to a presence condition under which the beneficiary must still be employed at the time of retirement. However, the presence condition does not apply if a beneficiary aged 55 or older leaves the Corporation at the Corporation's initiative or in case of disability.

The length of service acquired by Mr. Pouyanné as a result of his previous salaried duties held at the Company since January 1, 1997, has been maintained for the benefit of this plan.

The compensation taken into account to calculate the supplementary pension is the average gross annual compensation (fixed and variable portion) over the last three years. This pension plan provides a pension for its beneficiaries equal to 1.8% of the portion of the compensation failing between 8 and 40 times the PASS and 1% for the portion of the compensation falling between 40 and 60 times the PASS, multiplied by the number of years as at December 31, 2019, of service up to a maximum of 20 years.

The sum of the annual supplementary pension plan benefits and other pension plan benefits (other than those set up individually and on a voluntary basis) may not exceed 45% of the average gross compensation (fixed and variable portion) over the last three years. In the event that this percentage is exceeded, the supplementary pension is reduced accordingly. The amount of the supplementary pension determined in this way is indexed to the AGIRC-ARRCO pension point.

The supplementary pension includes a clause whereby 60% of the amount will be paid to beneficiaries in the event of death after retirement.

The Board noted that Mr. Pouyanné can no longer acquire additional pension rights under this plan given the rules for determining pension rights set out in the plan and the 20 years of service of Mr. Pouyanné as of December 31, 2016.

The conditional rights granted to Mr. Patrick Pouyanné for the period from January 1, 1997, to December 31, 2016 (inclusive), are now equal to a reference rate of 36% for the portion of the base compensation falling between 8 and 40 times the PASS and 20% for the portion of the base compensation falling between 40 and 60 times the PASS.

Based on Mr. Pouyanné's years of service capped at 20 years on December 31, 2016, the commitments made by TotalEnergies SE to the Chairman and Chief Executive Officer in terms of supplementary defined benefits and similar pension plans represented, at December 31, 2024, a gross annual retirement pension estimated at €719,631. It corresponds to 16.9% of Mr. Pouyanné's gross annual compensation consisting of the annual fixed portion for 2024 (*i.e.*, €1,550,000) and the variable portion paid in 2025[1] for fiscal year 2024 (*i.e.*, €2,698,550).

Nearly the full amount of TotalEnergies SE's commitments under these supplementary and similar retirement plans (including the retirement benefit) is outsourced for all beneficiaries to insurance companies and the non-outsourced balance is evaluated annually and adjusted through a provision in the accounts. The amount of these commitments as of December 31, 2024, is €17.7 million for the Chairman and Chief Executive Officer (€17.9 million for the Chairman and Chief Executive Officer and the executive and non-executive directors covered by these plans). These amounts represent the gross value TotalEnergies SE's commitments to these beneficiaries based on the estimated gross annual pensions as of December 31, 2024, as well as the statistical life expectancy of the beneficiaries.

The total amount of all the pension plans in which Mr. Pouyanné participates represents, at December 31, 2024, a gross annual pension estimated at €876,260, corresponding to 20.62% of Mr. Pouyanné's gross annual compensation defined above (annual fixed portion for 2024 and variable portion paid in 2025 for fiscal year 2024).

In line with the principles for determining the compensation of the executive directors as set out in the AFEP-MEDEF Code which the Corporation uses as a reference, the Board of Directors took into account the benefit accruing from participation in the pension plans when determining the Chairman and Chief Executive Officer's compensation.

(1) Subject to approval by the Ordinary Shareholders' Meeting on May 23, 2025.

COMPENSATION RATIOS – ANNUAL TREND OF THE COMPENSATION, OF PERFORMANCE OF THE CORPORATION AND OF THE RATIOS

In accordance with Article L. 22-10-9, 6° and 7° of the French Commercial Code, below are indicated the ratios between the level of compensation of the Chairman and Chief Executive Officer and the average and median compensation of TotalEnergies SE employees, as well as the annual trend of the compensation, of performance of the TotalEnergies SE[(1)], of the average compensation of the Corporation's employees and of the ratios during the last five fiscal years.

Also presented are the ratios between the level of compensation of the Chairman and Chief Executive Officer of TotalEnergies SE and the average and median compensation of employees within a scope extended to all Corporation employees in France more than representing more than 80% of the payroll according to the Afep guidelines.

The elements included in the calculation of the compensation ratios relate to all elements of compensation paid during fiscal year N whether in the numerator **for the executive directors** or in the denominator for **employees** (fixed compensation, variable component paid during fiscal year N in respect of fiscal year N-1, extraordinary or deferred compensation, incentive and profit-sharing compensation paid during fiscal year N in respect of N-1, employers' social charges and contributions...) as well as the valuation of the performance shares granted during fiscal year N (excluding in-kind benefits) according to IFRS standards.

It should be mentioned that the employers' social charges and contributions are taking into account for executive directors and employees starting from 2022 in accordance with the Afep guidelines, as updated in February 2021. Data from 2020 to 2021 were thus restated as defined in 2022.

The employees included in the denominator are employees who have been present and active throughout the year in question, their compensation being taken on a full-time basis. Trainees, professional contracts, people on sabbatical or on long-term absence are therefore not included in the denominator.

Table of ratios pursuant to I. 6° and 7° of Article L. 22-10-9 of the French Commercial Code presented in accordance with Afep guidelines updated in February 2021

	2020	2021	2022	2023	2024
Change (%) in compensation paid to Mr. Patrick Pouyanné, Chairman and Chief Executive Officer of TotalEnergies SE (since December 19, 2015)	-20%[(2)]	24%	31%	18%	25%
Information relating to the scope of TotalEnergies SE: 3,199 present employees on permanent contracts (CDI) and in activity (9% of employees in France and 19% of the payroll France) as of December 31, 2024					
Change (%) in average compensation of employees	-7%[(3)]	2%	25%	10%	4%
Ratio compared to average compensation of employees	34	42	44	47	57
Change in ratio (%) relative to previous year	-14%	25%	5%	8%	21%
Ratio compared to median compensation of employees	42	51	54	61	72
Change in ratio (%) relative to previous year	-18%	25%	6%	12%	18%
Additional information on the enlarged scope representing at least 80% of the payroll of the employees France (20,261 employees) as of December 31, 2024					
Change (%) in average compensation of employees	-5%[(4)]	1%	16%	5%	8%
Ratio compared to average compensation of employees	49	61	68	79	91
Change in ratio (%) relative to previous year	-16%	25%	13%	15%	16%
Ratio compared to median compensation of employees	61	77	86	101*	118
Change in ratio (%) relative to previous year	-19%	27%	12%	18%	17%
Performance of TotalEnergies SE (on a consolidated basis)					
Change in net income IFRS	-164%	42%**	28%	4%	-26%
Change in operating cash flow before working capital changes***	-40%	86%	57%	-21%	-17%

* This ratio would have been 92 based on the same fair value of performance shares as in 2022.
** Versus 2019.
*** Refer to the glossary for the definition and further information on alternative performance measures (Non-GAAP measures) and to point 1.9 of chapter 1 for reconciliation tables.

4.3.2.2 Compensation policy of the Chairman and Chief Executive Officer

The compensation policy of the Chairman and Chief Executive Officer for fiscal year 2025 was set by the Board of Directors, at its meetings on March 19, 2025, in accordance with the provisions of Article L. 22-10-8 of the French Commercial Code, on the proposal of the Compensation Committee. It will be submitted to the Shareholders' Meeting on May 23, 2025. It is based on the general principles for determining the compensation of executive directors set out below.

(1) TotalEnergies SE, the parent company of the Company (full-time-equivalent employees present on December 31 of each fiscal year for the period in question).
(2) The reduction in compensation paid to Mr. Pouyanné between 2019 and 2020 is partly due to the Chairman and Chief Executive Officer's decision to temporarily cut his fixed compensation by 25% as from May 1, 2020, until December 31, 2020, due to the economic context, as well as the significant reduction in the IFRS valuation of performance shares granted in 2020 (fair value of €12.40 per share in 2020 compared to €40.11 in 2019). If the fixed compensation of Mr. Pouyanné had not been reduced by 25% as from May 1, 2020 until December 31, 2020, and if the performance shares granted had been valued on the basis of a unit fair value of €24.85 (fair value based on a calculation using identical parameters and the average of the closing prices for the TotalEnergies share during the year 2020 of €34.957), the compensation ratio of the Chairman and Chief Executive Officer compared to the average compensation of the TotalEnergies SE's employees between 2019 and 2020 would have been 40 (instead of 34), and the compensation ratio of the Chairman and Chief Executive Officer compared to the median compensation of the TotalEnergies SE's employees between 2019 and 2020 would have been 50 (instead of 42). Within the limits of the enlarged perimeter, the compensation ratio of the Chairman and Chief Executive Officer compared to the average compensation of the TotalEnergies SE's employees between 2019 and 2020 would have been 59 (instead of 49), and the compensation ratio of the Chairman and Chief Executive Officer compared to the median compensation of the TotalEnergies SE's employees between 2019 and 2020 would have been 73 (instead of 61).
(3) The reduction in compensation paid to the employees between 2019 and 2020 is partly due to the decrease of the incentive and profit-sharing compensation due to the economic context notably, as well as the significant reduction in the IFRS 2 valuation of performance shares granted in 2020 (fair value of €12.40 per share in 2020 compared to €40.11 in 2019).
(4) The reduction in compensation paid to the employees between 2019 and 2020 is partly due to the decrease of the incentive and profit-sharing compensation due to the economic context notably, as well as the significant reduction in the IFRS 2 valuation of performance shares granted in 2020 (fair value of €12.40 per share in 2020 compared to €40.11 in 2019).

GENERAL PRINCIPLES FOR DETERMINING THE COMPENSATION OF THE EXECUTIVE DIRECTORS

The general principles for determining the compensation and other benefits granted to the executive directors of TotalEnergies SE are as follows. They were approved by the Board of Directors and clarified at the Board meeting on March 16, 2022, on two specific points: one concerns the treatment of performance shares granted to the Chairman and Chief Executive Officer in the event of his leaving the Company, and the other concerns the possibility for the Board to approve a compensatory payment in the event of the recruitment of an executive director from outside the Company, where this recruitment results in the loss of deferred benefits *(buy-out award)*. These two clarifications were made in order to take into account certain remarks made by the proxy advisors and certain shareholders:

- Compensation as well as benefits for the executive directors are set by the Board of Directors on the proposal of the Compensation Committee. Such compensation must be reasonable and fair in a context of solidarity and motivation within the company. Compensation for the executive directors is based on the market, the work performed, the results obtained and the responsibilities assumed.
- Compensation for the executive directors includes a fixed portion and a variable portion. The fixed portion is reviewed at least every two years.
- The amount of the variable portion is reviewed each year and may not exceed a stated percentage of the fixed portion. Variable compensation is determined based on pre-defined quantifiable and qualitative criteria that are periodically reviewed by the Board of Directors. Quantifiable criteria are limited in number, objective, measurable and adapted to the Company's strategy.
- The variable portion rewards short-term performance and the progress made toward paving the way for medium-term development. It is determined in a manner consistent with the annual performance review of the executive directors and the Company's medium-term strategy.
- The Board of Directors monitors the change in the fixed and variable portions of the executive directors' compensation over several years in light of the Company's performance.
- There is no specific pension plan for the executive directors. They are eligible for retirement benefits and pension plans available to certain employee categories in the Company under conditions determined by the Board.
- In line with the principles for determining the compensation of the executive directors as set out in the AFEP-MEDEF Code which the Corporation uses as a reference, the Board of Directors takes into account the benefit accruing from participation in the pension plans when determining the compensation policy of the executive directors.
- Stock options and performance shares are designed to align the interests of the executive directors with those of the shareholders over the long term.

  The grant of options and performance shares to the executive directors is reviewed in light of all the components of compensation of the person in question. No discount is applied when stock options are granted.

  The exercise of options and the definitive grant of performance shares to which the executive directors are entitled are subject to conditions of presence in the Company and performance that must be met over several years.

  The Board of Directors determines the rules related to holding a portion of the shares resulting from the exercise of options as well as the performance shares definitively granted, which apply to the executive directors until the end of their term of office.

  The executive directors cannot be granted stock options or performance shares when they leave office.

  In the event of the retirement or a change of position within the Company, the Chairman and Chief Executive Officer upholds all vesting rights in the course of acquisition.

  In the event of forced departure, other than for serious or gross misconduct, the Board of Directors may decide that the Chairman and Chief Executive Officer upholds his vesting rights in the course of acquisition on a *pro rata basis* according to the length of time of his presence within the Company.

  In the event of resignation or termination of his function for serious or gross misconduct, all vesting rights in the course of acquisition will be lost in whole.

  The upholding of vesting rights in the course of acquisition under the conditions of departure described above is accompanied by the upholding of the performance criteria set for the definitive grant of the shares.

  In case of exceptional circumstances, the Board may decide to maintain stock options and performance share grant rights after the executive director left, the decision of the Board of Directors has to be duly motivated and taken in the corporate interest.
- After three years in office, the executive directors are required to hold at least the number of Corporation shares set by the Board.
- The components of compensation of the executive directors are made public after the Board of Directors' meeting at which they are approved.
- The executive directors do not take part in any discussions or deliberations of the corporate bodies regarding items on the agenda of Board of Directors' meetings related to the assessment of their performance or the determination of the components of their compensation.
- When a new executive director is nominated, the Board of Directors decides on his or her compensation as well as benefits, further to a proposal by the Compensation Committee, and in accordance with the above general principles for determining the compensation of the executive directors.

  The Board of Directors, on the proposal of the Compensation Committee, may approve a compensation payment in the event of the recruitment of an executive director from outside the Company, where this recruitment results in the loss of deferred benefits *(buy-out award)*. The Board will ensure that the amount thus granted does not exceed the loss of these benefits and may make its payment subject to performance conditions. Exceptional compensation or specific benefits when taking office are forbidden, unless the Board of Directors decides otherwise for particular reasons, in the corporate interest and within the limits of the exceptional circumstances.

  At its meeting on February 7, 2023, the Board of Directors adopted a clawback policy under which, in the event of a restatement of the financial statements, the Corporation will require, within the framework and limits of applicable law, the recovery within a reasonable period of time of the variable compensation (in cash and/or equity) paid or awarded to the executive officers, or otherwise vested in them, during the three financial years preceding the decision to make such a restatement in the amount of the portion of such compensation that should not have been paid, vested or awarded on the basis of the restated financial statements. A restatement is defined as any accounting restatement that gives rise to an obligation to make restitution in accordance with Section 10D-1 of the Securities Exchange Act of 1934, the New York Stock Exchange standards and the implementing measures issued thereunder.

COMPENSATION POLICY APPLICABLE TO THE CHAIRMAN AND CHIEF EXECUTIVE OFFICER FOR FISCAL YEAR 2025

As part of the renewal of the mandate of the Chairman and Chief Executive Officer at the Shareholders' Meeting on May 24, 2024 and of the setting of the compensation policy for 2024, the Board of Directors announced the continuation for the duration of the new mandate (2024 to 2026) of the annual base compensation (€1,550,000) and the structure and amount of the annual variable portion as well as a granting of 140,000 performance shares per year.

At its meetings on March 19, 2025, the Board of Directors, on the proposal of the Compensation Committee, approved the compensation policy applicable to the Chairman and Chief Executive Officer for the 2025 financial year, after ensuring that it was consistent with the external benchmarks that the Compensation Committee had commissioned and after taking into consideration the opinions expressed by the proxy advisors.

A. The Chairman and Chief Executive Officer's base salary (fixed compensation) for fiscal year 2025

Mr. Patrick Pouyanné's annual base salary (fixed compensation) in respect of his duties as Chairman and Chief Executive Officer for fiscal year 2025 is set at €1,550,000. Such fixed compensation has been unchanged since 2022, despite inflation.

B. Annual variable compensation due for fiscal year 2025 (expressed as a percentage of the base salary)

The maximum amount of the variable portion that could be paid to the Chairman and Chief Executive Officer for the fiscal year 2025 is maintained at **180%** of base salary (percentage unchanged compared to the variable portion allocated in respect of fiscal year 2024).

The formula for calculating the variable portion of the Chairman and Chief Executive Officer for fiscal year 2025, which may not exceed 180% of his base salary, includes, as in 2024, quantifiable targets reflecting the Company's performance, up to a maximum of 140% of the fixed portion, and the personal contribution of the Chairman and Chief Executive Officer allowing for qualitative assessment of his management, up to a maximum of 40% of the fixed portion. The total variable portion may thus reach a maximum of 180% of the fixed portion of the Chairman and Chief Executive Officer's compensation.

The economic parameters (quantifiable targets) are based on three themes: Safety for 20%, GHG emissions (Scope 1+2) for 10%, financial for 110%.

Within this unchanged structure, the Board decided, on the recommendation of the Compensation Committee, to adjust the thresholds for ROE and organic gearing criteria. Regarding ROE, which accounts for 30% of variable compensation, in view of the performance achieved in 2023 and 2024, the Board decided to be more demanding and to raise the level of ROE corresponding to 100% achievement of this criterion from 13% to 15%. With regard to organic gearing, which accounts for 20%, the Board noted the high sensitivity of the organic gearing criterion to oil and gas price environments and to share buyback levels. To take into account this sensitivity, the Board decided to maintain the gearing level at 10%, enabling a rate of 100% to be achieved, and to revise the limit of the criterion corresponding to a rate of 0%, raising it to 30% from 20% in 2024.

In addition, in view of the improved results achieved by the Company in 2024, the targets for the TRIR (Total Recordable Injury Rate) safety criteria and the evolution in the number of Tier 1 + Tier 2 incidents were made more stringent for the 2025 annual variable portion.

Similarly, the target for the criterion related to Scope 1+2 greenhouse gas emissions from operated facilities were revised downward for 2025 compared to the trajectory validated by the Board of Directors since 2020, in line with the new 2025 target announced by the Company (emission target of 37 Mt CO_2e for 2025 instead of 38 Mt CO_2e previously planned for 2025).

The other criteria were renewed identically, the weightings of all the criteria remaining otherwise unchanged.

Annual variable compensation due for fiscal year 2025 (expressed as a percentage of the base salary)

		% targets
Summary of the quantifiable targets		
A. Safety and greenhouse gas (GHG) emissions		
a) Safety	20%	
– TRIR	6%	
– FIR	6%	
– Evolution of the number of Tier 1 + Tier 2 incidents	8%	
b) Evolution of GHG emissions (Scope 1+2)	10%	
Maximum percentage that may be allocated in respect of Safety and greenhouse gas (GHG) emissions criteria		**30%**
B. Financial parameters		
– Return on equity (ROE)	30%	
– Organic Gearing	20%	
– Integrated Power cash flow (CFFO)	10%	
– Pre-dividend organic cash breakeven	30%	
– Return on average capital employed (ROACE), comparative	20%	
Maximum percentage that may be allocated in respect of financial parameters		**110%**
Maximum percentage that may be allocated in respect of quantifiable targets		**140%**
Personal contribution (qualitative criteria)		
– Steering of the Corporation's transition strategy, in line with the 2020/2030 targets announced to investors, in particular the increase of gas and power production, as well as the evolution of its sales mix	15%	
– Profitable growth in renewables and electricity	10%	
– Corporate Social Responsibility (CSR) performance, notably the integration of climate issues in the Company's Strategy, the Company's commitment and ratings regarding CSR, as well as the diversity policy (feminization and internationalization)	15%	
Maximum percentage that may be allocated in respect of the personal contribution		**40%**
Total		180%

Safety and Greenhouse gas emissions criteria

The Safety and Greenhouse gas emissions criteria are assessed on the basis of the quantifiable targets set out below for a maximum of 30% of the Chairman and Chief Executive Officer's fixed salary.

The change in safety will be assessed, for a maximum of 20%, through the achievement of an annual TRIR (Total Recordable Incident Rate) target and the number of accidental deaths per million hours worked, FIR (Fatality Incident Rate), as well as through changes in the Tier 1 + Tier 2 indicator(1):

- The maximum weighting of the **TRIR criterion** is 6% of the base salary (as in 2024).
  - The maximum weighting will be reached if the TRIR is below 0.60 (0.62 in 2024).
  - The weighting of the criterion will be zero if the TRIR is above or equal to 0.96 (0.97 in 2024).
  - The interpolations are linear between these points of reference;
- The maximum weighting of the **FIR criterion** will be 6% of the base salary (as in 2024).
  - up to 50%: the maximum weighting of this sub-criterion will be reached if there is no accidental death and is zero from at least one accidental death,
  - up to 50%: the maximum weighting of this sub-criterion assessed by comparison with that of the four major competing oil companies (ExxonMobil, Shell, BP et Chevron), will be reached if TotalEnergies' FIR is the best of the panel of majors and will be zero if the FIR is the worst of the panel. The weighting of the criterion is calculated based on TotalEnergies' FIR by linear interpolation between these two points of reference.
- the maximum weighting of the changes in the number of **Tier 1 + Tier 2 incidents** is 8% of the base salary (as in 2024).
  - The maximum weighting will be reached if the number of Tier 1 + Tier 2 incidents is equal to or below 40 (45 in 2024).
  - The weighting of the parameter will be zero if the number of Tier 1 + Tier 2 incidents is equal to or higher than 72 (80 in 2024).
  - The interpolations are linear between these two points of reference.

The change in greenhouse gas (GHG) emissions from operated facilities will be assessed, for a maximum of 10% of the Chairman and Chief Executive Officer's fixed portion, through the achievement of a GHG (Scope 1+2) reduction emission target from 46 Mt CO_2e in 2015 to 37 Mt CO_2e in 2025, corresponding to a reduction of 800 kt CO_2e/y revised downwards in 2025, *i.e.*, a target of 37 Mt CO_2e for 2025 instead of 38 Mt CO_2e previously planned for 2025. The maximum weighting of the GHG criterion is 10% of the base salary:

- the maximum weighting of the criterion, i.e. 10% of the base salary, will be obtained if the GHG emissions (Scope 1+2) from operated facilities reaches the target set at 37 Mt CO_2e in 2025 (compared to 38.8 Mt CO_2e in 2024);
- the weighting of the criterion will be zero if the emissions are 2 Mt CO_2e above the target set;
- the interpolations are linear between these points of reference.

Details on the financial parameters

The four financial criteria are assessed on the basis of the quantifiable objectives set out below for a maximum of 110% of the Chairman and Chief Executive Officer's fixed portion:

- the **return on equity (ROE)**, as published by the Company on the basis of its balance sheet and consolidated statement of income, will be assessed as follows. The maximum weighting of the ROE criterion will be 30% of the base salary:
  - the maximum weighting of the criterion will be reached, *i.e.*, 30% of the base salary, if the ROE is higher than or equal to 15%;
  - the weighting of the criterion will be zero if the ROE is lower than or equal to 6%;
  - the interpolations are linear between these two points of reference.
- the **organic gearing** will be assessed as follow. The maximum weighting of the criterion will be 20% of the base salary:
  - the maximum weighting of the criterion, *i.e.*, 20% of the base salary, will be reached if the organic gearing is below or equal to 10%;
  - the weighting of the criterion will be zero if the organic gearing is above or equal to 30%;
  - the interpolations are linear between these two points of reference.
- the **Integrated Power cash flow (CFFO)** will be assessed as follow. The maximum weighting of the criterion will be 10% of the base salary:
  - the maximum weighting of the criterion, *i.e.*, 10% of the base salary, will be reached if the Integrated Power cash flow (CFFO) is above or equal to $2.5 billion;
  - the weighting of the criterion will be zero if the Integrated Power cash flow (CFFO) is below $1.5 billion;
  - the interpolations are linear between these two points of reference.
- the **pre-dividend organic cash breakeven** will be assessed as follows. The maximum weighting of this criterion will be 30% of the base salary:
  - the maximum weighting of the criterion will be reached, *i.e.*, 30% of the base salary, if the breakeven is below or equal to $25/b,
  - the weighting of the criterion will be zero if the breakeven is above or equal to $35/b,
  - the interpolations are linear between these two points of reference;

  The ability of the Company to resist to the variations of the Brent barrel price is measured by the pre-dividend organic cash breakeven.
- the **return on average capital employed (ROACE)**, by comparison, will be assessed as follows. The maximum weighting of the ROACE criterion will be 20% of the base salary. TotalEnergies' ROACE, as published from the consolidated balance sheet and the income statement, will be compared to the ROACE average of each of the four peers (ExxonMobil, Shell, BP and Chevron). The ROACE is equal to the net adjusted operating income divided by the average of the capital employed (at replacement costs, net of deferred income tax and non-current liabilities) of the start and end of the fiscal year:
  - the maximum weighting of the criterion will be reached, *i.e.*, 20% of the base salary, if TotalEnergies' ROACE is 2% above the average of the 4 peers' ROACE,
  - the weighting of the criterion will be zero if TotalEnergies' ROACE is under 2% or more compared to the average of the 4 peers' ROACE,
  - the interpolations will be linear between these two points of reference.

Personal contribution

The criteria for assessing the personal contribution of the Chairman and Chief Executive Officer, up to a maximum of 40% of his fixed portion, are as follows:

- steering **the Corporation's transition strategy**, in line with the 2020/2030 targets announced to investors, in particular the increase of gas and power production, as well as the evolution of its sales mix, for up to **15%**;
- profitable growth in **renewables and electricity**, for up to **10%**;
- **Corporate Social Responsibility (CSR) performance**, including the integration of climate issues in the Company's strategy, the Company's commitment and ratings regarding CSR, as well as the diversity policy (feminization and internationalization), for up to **15%**.

(1) Tier 1 and Tier 2: indicator of the number of loss of primary containment events, with more or less significant consequences, as defined by the API 754 (for downstream) and IOGP 456 (for upstream) standards. Excluding acts of sabotage and theft.

Powers of the Board under special circumstances

In the event of a significant change affecting the calculation of the economic parameters for the Company (change in accounting standard, change in the policy of rating agencies, significant patrimonial transaction approved by the Board of Directors, etc.), the Board reserves the right to calculate the parameters mutatis mutandis with justification of the changes *i.e.*, excluding exogenous extraordinary elements.

In addition, the Board of Directors may exercise its discretionary powers regarding the determination of the compensation of the Chairman and Chief Executive Officer, in accordance with Articles L. 22-10-16, paragraph 1 and L. 22-10-17, paragraph 3 of the French Commercial Code, and pursuant to Articles L. 22-10-8 and L. 22-10-34 of the French Commercial Code, in the event of particular circumstances (significant change in the perimeter, completion of a transformation transaction or unexpected changes in the competitive environment...) that could justify that the Board of Directors adjusts, exceptionally and both on the upside and the downside, one or more of the criteria that make up his compensation to ensure that the results of the application of the criteria described above reflect both the performance of the Chairman and Chief Executive Officer and the performance of the Company either in absolute terms or relative to the four peers of the Company, for the economic criteria measured in comparison with these four peers.

This adjustment would be made to the variable compensation of the Chairman and Chief Executive Officer by the Board of Directors on the proposal of the Compensation Committee, within the limit of the variable compensation cap of 180% of the fixed compensation, after the Board of Directors ensured that the interests of the Corporation and of its shareholders are aligned with those of the executive director.

Pursuant to Article L. 22-10-34 of French Commercial Code, the payment of this annual variable portion is subject to the approval of the Shareholders' Meeting to be called in 2025 to approve 2024 financial statements.

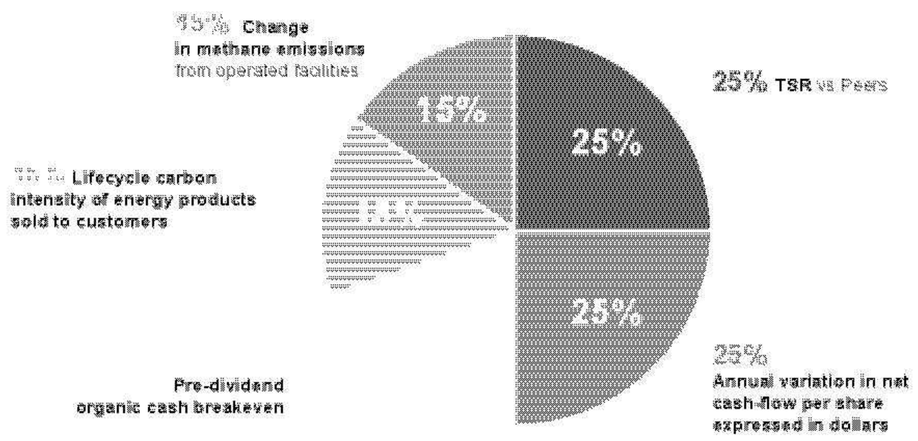
C. Performance shares

The granting of performance shares to the Chairman and Chief Executive Officer corresponds to the long-term component of his global compensation. Performance shares are definitively granted at the end of a three-year vesting period. The definitive grant of shares is subject to a presence condition and performance conditions assessed at the end of this three-year vesting period.

As part of the renewal of the Chairman and Chief Executive Officer's directorship at the Shareholders' Meeting on May 24, 2024, the Board of Directors increased the number of performance shares to 140,000 shares per year for the duration of the new term of office (2024 to 2026). The compensation policy for fiscal year 2025 includes the granting of **140,000 performance shares** to the Chairman and Chief Executive Officer as part of a 2025 plan that will not be specific to him.

As it announced regarding value sharing and employee shareholding, the Board of Directors ensures that the grant performance shares to employees evolves, in volume of shares allocated and in number of beneficiaries, helping to increase the alignment of the interests of the Company's employees with those of the shareholders.

Performance conditions



The performance shares will be subject to the following performance conditions. The definitive number of granted shares will be based on: (i) the TSR (Total Shareholder Return) compared to its peers, (ii) the annual variation of the net cash flow by share in dollars compared to its peers, (iii) the pre-dividend organic cash breakeven, (iv) the change in methane emissions from operated facilities and (v) the change on lifecycle carbon intensity of energy products sold to the customers of the Company, and applied as follows:

- for **25%** of the shares, the Corporation will be ranked against its peers (ExxonMobil, Shell, BP and Chevron) each year during the three vesting years (2025, 2026 and 2027) based on the **TSR criterion** of the year in question, the dividend being considered reinvested;
- for **25%** of the shares, the Corporation will be ranked against its peers (ExxonMobil, Shell, BP and Chevron) each year during the three vesting years (2025, 2026 and 2027) using the **annual variation in net cash flow per share** criterion expressed in dollars.

Based on the ranking, a grant rate will be determined for each year for these two first criteria: 1st: 180% of the grant; 2nd: 130% of the grant; 3rd: 80% of the grant; 4th and 5th: 0%.

- For **20%** of the shares, the **pre-dividend organic cash breakeven criterion** will be assessed each year during the three vesting years (2025, 2026 and 2027) as follows:
  - the maximum grant rate will be achieved, *i.e.*, 100% for this criterion, if the breakeven is less than or equal to $25/b;
  - the grant rate will be zero if the breakeven is greater than or equal to $35/b;
  - the interpolations will be linear between these two points of reference.

  The pre-dividend organic cash breakeven is defined as the Brent price for which the operating cash flow before working capital changes covers the organic investments(1). The ability of the Company to resist to the variations of the Brent barrel price is measured by this parameter.

A grant rate will be determined each year for each of these above criteria. For each of the first three criteria, the average of the three grant rates obtained (for each of the three fiscal years for which the performance conditions are assessed) will be rounded to the nearest 0.1 whole percent (0.05% being rounded to 0.1%) and capped at 100%.

- For **15%** of the shares, the criterion of the **change in the methane emissions from operated facilities** will be assessed with regard to the achievement of the target to reduce methane emissions set for 2027 at 62% compared to the methane emissions of 2020.
  - the maximum grant rate, *i.e.*, 100% for this criterion, will be reached if the methane emissions in 2027 reach the target;
  - the grant rate will be zero if the methane emission reduction is below 52% compared to 2020;
  - the interpolations will be linear between these two points of reference.
- For **15%** of the shares, the criterion of the **lifecycle carbon intensity of energy products sold to the customers of the Company** will be assessed with regard to the achievement of the target to reduce this lifecycle carbon intensity set for 2027 at 19% compared to 2015:
  - the maximum grant rate, *i.e.*, 100% for this criterion, will be obtained if the lifecycle carbon intensity reach in 2027 the target set;

(1) Organic investments: net investments excluding acquisitions, asset sales and other operations with non-controlling interests.

- the grant rate will be zero if the lifecycle carbon intensity reduction is below 15% in 2027 compared to 2015;
- the interpolations will be linear between these two points of reference.

The definitive grant rate will be rounded to the nearest 0.1 whole percent (0.05% being rounded to 0.1%).

The number of shares definitively granted after determination of performance conditions will be determined according to the weighting of each of the five criteria and rounded up to the next whole number of shares.

In accordance with Article L. 225-197-1 of the French Commercial Code, at the end of the three-year vesting period, the executive director will be required to hold in registered form 50% of the shares definitively granted to him at the end of the vesting period until the end of his term of office.

Treatment of performance shares in the event of the Chairman and Chief Executive Officer leaving the Company

The Board paid particular attention to the comments made by shareholders concerning the treatment of performance shares granted to the Chairman and Chief Executive Officer in the event of his leaving the Company and clarified the following points:

- in the event of the retirement or of a change of position within the Company, the Chairman and Chief Executive Officer upholds all vesting rights in the course of acquisition;
- in the event of forced departure, other than for serious or gross misconduct, the Board of Directors may decide that the Chairman and Chief Executive Officer upholds his vesting rights in the course of acquisition on a pro rata basis according to the length of time of his presence within the Company;
- in the event of resignation or termination of his function for serious or gross misconduct, his vesting rights in the course of acquisition will be lost in whole.

The upholding of existing vesting rights in the course of acquisition under the conditions of departure described above is accompanied by the upholding of the performance criteria set for the definitive grant of the shares.

In case of exceptional circumstances, the Board of Directors may decide to maintain stock options and performance share grants after the executive director left, the decision of the Board of Directors has to be duly motivated and taken in the corporate interest.

D. Commitments made by the Corporation to the Chairman and Chief Executive Officer

The commitments made by the Corporation to the Chairman and Chief Executive Officer relate to the pension plans, the retirement benefit and the severance benefit to be paid in the event of forced departure related to a change of control or strategy, as well as the life insurance and healthcare benefits. They were approved by the Board of Directors on March 14, 2018, and by the Annual Shareholders' Meeting on June 1, 2018, in accordance with the provisions of Article L. 225-42-1 of the French Commercial Code.

It should be noted that Mr. Pouyanné already benefited from all these provisions when he was an employee of the Corporation, except for the commitment to pay severance benefits in the event of forced departure related to a change of control or strategy. It should also be noted that Mr. Pouyanné, who joined the Company on January 1, 1997, ended the employment contract that he previously had with the Corporation through his resignation at the time of his appointment as Chief Executive Officer on October 22, 2014.

Pension plans

Pursuant to applicable legislation, the Chairman and Chief Executive Officer is eligible for the basic French Social Security pension and for pension benefits under the AGIRC-ARRCO supplementary pension plan.

He also participates in the internal defined contribution pension plan applicable to all TotalEnergies SE employees, called PERO (*Plan d'épargne retraite obligatoire* - mandatory retirement savings plan), covered by Article L. 242-1 of the French Social Security Code. The Corporation's commitment is limited to its share of the contribution paid to the insurance company that manages the plan. For fiscal year 2024, this pension plan represented a booked expense to TotalEnergies SE in favor of the Chairman and Chief Executive Officer of €2,782.

The Chairman and Chief Executive Officer also participates in a supplementary defined-benefit pension plan, covered by Article L. 137-11 of the French Social Security Code, set up and financed by the Corporation and approved by the Board of Directors on March 13, 2001, for which management is outsourced to two insurance companies effective January 1, 2012. In accordance with the ordinance 2019-697 published on July 4, 2019, this plan is closed to any new participant as from July 4, 2019, and, for participants as of July 4, 2019, and retiring as from January 1, 2020, the amount of supplementary pension provided for in this plan is calculated on the basis of number of years of service as at December 31, 2019, and up to a maximum of 20 years.

This plan applies to all TotalEnergies SE employees whose reference compensation exceeded as of July 4, 2019 eight times the annual ceiling for calculating French Social Security contributions (PASS), set at €40,524 for 2019 (*i.e.*, €324,192), and above which there is no conventional pension plan.

To be eligible for this supplementary pension plan, participants must have served for at least five years, be at least 60 years old and exercised his or her rights to retirement from the French Social Security. The benefits under this plan are subject to a presence condition under which the beneficiary must still be employed at the time of retirement. However, the presence condition does not apply if a beneficiary aged 55 or older leaves the Corporation at the Corporation's initiative or in case of disability.

The length of service acquired by Mr. Pouyanné as a result of his previous salaried duties held at the Company since January 1, 1997, has been maintained for the benefit of this plan.

The compensation taken into account to calculate the supplementary pension is the average gross annual compensation (fixed and variable portion) over the last three years. The amount paid under this plan is equal to 1.8% of the compensation falling between 8 and 40 times the PASS and 1% for the portion of the compensation falling between 40 and 60 times this ceiling, multiplied by the number of years of service as of December 31, 2019, up to a maximum of 20 years.

The sum of the annual supplementary pension plan benefits and other pension plan benefits (other than those set up individually and on a voluntary basis) may not exceed 45% of the average gross compensation (fixed and variable portion) over the last three years. In the event that this percentage is exceeded, the supplementary pension is reduced accordingly. The amount of the supplementary pension determined in this way is indexed to the AGIRC-ARRCO pension point.

The supplementary pension includes a clause whereby 60% of the amount will be paid to beneficiaries in the event of death after retirement.

The Board noted that Mr. Pouyanné can no longer acquire additional pension rights under this plan given the rules for determining pension rights set out in the plan and the 20 years of service of Mr. Pouyanné as of December 31, 2016.

The conditional rights granted to Mr. Patrick Pouyanné for the period from January 1, 1997, to December 31, 2016 (inclusive), are now equal to a reference rate of 36% for the portion of the base compensation falling between 8 and 40 times the PASS and 20% for the portion of the base compensation falling between 40 and 60 times the PASS.

Based on Mr. Pouyanné's seniority capped at 20 years on December 31, 2016, the commitments made by TotalEnergies SE to the Chairman and Chief Executive Officer in terms of supplementary defined benefits and similar pension plans represented, at December 31, 2024, a gross annual retirement pension estimated at €719,631. It corresponds to 16.90% of Mr. Pouyanné's gross annual compensation consisting of the annual fixed portion for 2024 (*i.e.*, €1,550,000) and the variable portion paid in 2025[(1)] for fiscal year 2024 (*i.e.*, €2,698,550).

Nearly the full amount of TotalEnergies SE's commitments under these supplementary and similar retirement plans (including the retirement benefit) is outsourced for all beneficiaries to insurance companies and the non-outsourced balance is evaluated annually and adjusted through a provision in the accounts. The amount of these commitments as of December 31, 2024, is €17.7 million for the Chairman and Chief Executive Officer (€17.9 million for the Chairman and Chief Executive Officer and the executive and non-executive directors covered by these plans). These amounts represent the gross value of TotalEnergies' commitments to these beneficiaries based on the estimated gross annual pensions as of December 31, 2024, as well as the statistical life expectancy of the beneficiaries.

The total amount of all the pension plans in which Mr. Pouyanné participates represents, at December 31, 2024, a gross annual pension estimated at €876,260, corresponding to 20.62% of Mr. Pouyanné's gross annual compensation defined above (annual fixed portion for 2024 and variable portion paid in 2025 for fiscal year 2024).

Retirement benefit

The Chairman and Chief Executive Officer is entitled to a retirement benefit equal to those available to eligible members of the Company under the French National Collective Bargaining Agreement for the Petroleum Industry. This benefit is equal to 25% of the fixed and variable annual compensation received during the 12 months preceding retirement.

The receipt of this retirement benefit is subject to conditions related to the performance of the beneficiary.

Therefore, the conditions applicable to the beneficiary will be deemed to be fulfilled if at least two of the following criteria are met:

- the average return on equity (ROE) for the three years preceding the year in which the Chairman and Chief Executive Officer leaves is at least 10%;
- the average gearing ratio for the three years preceding the year in which the Chairman and Chief Executive Officer leaves is less than or equal to 30%; and
- the pre-dividend organic cash breakeven of the three years preceding the year in which the Chairman and Chief Executive Officer retires is below or equal to $30/b.

The retirement benefit cannot be combined with the severance benefit described below.

Severance benefit

The Chairman and Chief Executive Officer is entitled to a benefit equal to two years of his gross compensation in the event of a forced departure related to a change of control or strategy. The calculation is based on the gross compensation (fixed and variable) of the 12 months preceding the date of termination or non-renewal of his term of office.

The severance benefit will only be paid in the event of a forced departure related to a change of control or strategy. It will not be due in case of serious or gross misconduct or if the Chairman and Chief Executive Officer leaves the Corporation of his own volition, accepts new responsibilities within the Company or may claim full retirement benefits within a short time period.

The receipt of the severance benefit is subject to conditions linked to the beneficiary's performance.

Therefore, the conditions applicable to the beneficiary are deemed to be fulfilled if at least two of the following criteria are met:

- the average return on equity (ROE) for the three years preceding the year in which the Chairman and Chief Executive Officer leaves is at least 10%;
- the average gearing ratio for the three years preceding the year in which the Chairman and Chief Executive Officer leaves is less than or equal to 30%; and
- the pre-dividend organic cash breakeven of the three years preceding the year in which the Chairman and Chief Executive Officer retires is below or equal to $30/b.

Life insurance and health expense reimbursement plans

The Chairman and Chief Executive Officer is covered by the following life insurance plans provided by various life insurance companies:

- an "incapacity, disability, life insurance" plan applicable to all employees, partly paid for by the Corporation, that provides for two options in case of death of a married employee: either the payment of a lump sum equal to 5 times the annual compensation up to 16 times the PASS, corresponding to a maximum of €3,768,000 in 2025, plus an additional amount if there is a dependent child or children, or the payment of a lump sum equal to 3 times the annual compensation up to 16 times the PASS, plus a survivor's pension and education allowance;
- a second "disability and life insurance" plan, fully paid by the Corporation, applicable to executive officers and senior executives whose annual gross compensation is more than 16 times the PASS. This contract, signed on October 17, 2002, amended on January 28, 2015, December 11, 2015, July 4, 2017 and July 7, 2020, guarantees the beneficiary the payment of a lump sum, in case of death, equal to two years of compensation (defined as the gross annual fixed reference compensation (base France), which corresponds to 12 times the monthly gross base salary paid during the month prior to death or sick leave, to which is added the highest amount in absolute value of the variable portion received during one of the five previous years of activity), which is increased to three years in case of accidental death and, in case of accidental permanent disability, a lump sum proportional to the degree of disability. Death benefits are increased by 15% for each dependent child.

Payments due under this contract are made after the deduction of any amount paid under the above-mentioned plan applicable to all employees.

The Chairman and Chief Executive Officer also has the use of a company car and is covered by the health care plan available to all employees.

4.3.3 Executive officers' compensation

TotalEnergies' executive officers include the members of the Executive Committee. As of December 31, 2024, the list of the executive officers of TotalEnergies was as follows (nine people vs eight people, as of December 31, 2023):

- Patrick Pouyanné, Chairman and Chief Executive Officer and Chairman of the Executive Committee;
- Aurélien Hamelle, President, Strategy & Sustainability, member of the Executive Committee;
- Helle Kristoffersen, President, Asia, member of the Executive Committee;
- Stéphane Michel, President, Gas, Renewables & Power, member of the Executive Committee;

(1) Subject to approval by the Ordinary Shareholders' Meeting on May 23, 2025.

- Bernard Pinatel, President Downstream and President, Marketing & Services, member of the Executive Committee;
- Jean-Pierre Sbraire, Chief Financial Officer, member of the Executive Committee;
- Namita Shah, President, OneTech, member of the Executive Committee;
- Vincent Stoquart, President, Refining & Chemicals, member of the Executive Committee;
- Nicolas Terraz, President, Exploration & Production, member of the Executive Committee.

In 2024, the aggregate amount paid directly or indirectly by TotalEnergies' French and foreign companies as compensation to TotalEnergies' executive officers in office as of December 31, 2024 (9 people vs 8 people, as of December 31, 2023) was €14.62 million (compared to €12.53 million in 2023). The variable component (based on economic, Safety performance and personal contribution criteria) represented 50% of this global amount of €14.62 million.

4.3.4 Stock option and Corporation's shares grants

4.3.4.1 General policy

Grant of performance shares

In addition to its employee shareholding development policy, TotalEnergies SE has implemented a policy to involve employees and senior executives in its future performance which entails granting performance shares each year under selective plans based on a review of individual performance at the time of each grant.

The share plans offered by TotalEnergies SE concern only TotalEnergies shares and no shares of the TotalEnergies listed subsidiaries are granted by the Company.

All grants are approved by the Board of Directors, on the proposal of the Compensation Committee. For each plan, the Compensation Committee recommends a list of beneficiaries, the conditions as well as the number of shares granted to each beneficiary. The Board of Directors then gives final approval for this list and the grant conditions.

Grants of performance shares under selective plans become definitive only at the end of a three-year vesting period, subject to the fulfillment of applicable presence and performance conditions.[1]

2024 Worldwide plan

To mark its 100th anniversary, the Board of Directors decided to proceed with an exceptional grant of shares to the employees of the Company[2] worldwide. On May 23, 2024, the Board of Directors approved the grant of 100 free shares of the Corporation to each employee subject to the presence condition of five years from the grand date.

Stock options

Stock options were granted until 2011. Since the 2011 plan, the Board of Directors has not granted any new TotalEnergies stock options, and all the stock option plans have since expired. The last authorization from the Shareholders' Meeting to grant stock options expired in 2023 and has not been renewed since.

4.3.4.2 Monitoring of grants to the executive directors

STOCK OPTIONS

As of December 31, 2024, Mr. Pouyanné did not hold any TotalEnergies stock options.

Stock options granted in 2024 to each executive director by the issuer and by any TotalEnergies company - Table 4 – AMF position-recommendation – DOC-2021-02 (Appendix 2)

Executive directors	Plan N° and date	Nature of the options (purchase or subscription)	Valuation of options (€)[a]	Number of options granted during the fiscal year	Strike price	Exercise period
Patrick Pouyanné						
Chairman and Chief Executive Officer	–	–	–	–	–	–

(a) According to the method used for the Consolidated Financial Statements.

Stock options exercised in fiscal year 2024 by each executive director - Table 5 – AMF position-recommendation – DOC-2021-02 (Appendix 2)

	Plan N° and date	Number of options exercised during the fiscal year	Strike price
Patrick Pouyanné			
Chairman and Chief Executive Officer	–	–	–

GRANT OF COMPANY SHARES

Mr. Pouyanné is granted performance shares as part of the broader grant plans approved by the Board of Directors for certain Company employees. The performance shares granted to him are subject to the same requirements applicable to the other beneficiaries of the grant plans.

(1) For plans granted before 2022, beneficiaries had to hold the shares that were granted to them at the end of the vesting period, for a two-year holding period.
(2) TotalEnergies SE and the companies in which TotalEnergies SE holds more than 50% of the share capital and which are directly or indirectly controlled by TotalEnergies SE or under a joint control, with the exception of a limited number of companies co-managed with other oil players, as well as those registered or incorporated in a country under economic sanctions.

Shares granted to each director[a] in fiscal year 2024 by the issuer and by any TotalEnergies company - Table 6 – AMF position-recommendation – DOC-2021-02 (Appendix 2)

Executive and non-executive directors	Plan N° and date	Number of shares granted during the fiscal year	Valuation of the shares (€)[b]	Acquisition date	Date of transferability	Performance conditions
Patrick Pouyanné Chairman and Chief Executive Officer	2024 Plan 05/24/2024	140,000	6,252,960.00	05/24/2027	05/24/2027	– For 25% of the shares, the Company's ranking against its peers (ExxonMobil, Shell, BP and Chevron) based on the Total Shareholder Return (TSR) during the three vesting years (2024, 2025 and 2026). The TSR considered is that of the last quarter of the year, the dividend being considered reinvested based on the closing price on the ex-dividend date. – For 25% of the shares, the Company's ranking against its peers (ExxonMobil, Shell, BP and Chevron) based on the annual variation in net cash flow per share expressed in dollars during the three vesting years (2024, 2025 and 2026). – For 20% of the shares, the level reached by the pre-dividend organic cash breakeven with regard to the target set for the three vesting years (2024, 2025 and 2026). The pre-dividend organic cash breakeven is defined as the Brent price for which the operating cash flow before working capital changes (MBA) covers the organic investments[c]. The ability of the Company to resist to the variations of the Brent barrel price is measured by this parameter. – For 15% of the shares, the change in methane emissions from operated facilities with regard to the achievement of the target to reduce methane emissions set for 2026. – For 15% of the shares, the criterion of the lifecycle carbon intensity of energy products sold to the Company's customers with regard to the achievement of the target to reduce this intensity set for 2026.
Romain Garcia-Ivaldi Director representing employees since June 9, 2020	2024 Plan 05/24/2024	360	16,079.04	05/24/2027	05/24/2027	
	Worldwide Plan 05/23/2024	100	4,794.00	05/24/2029	05/24/2029	
Emma de Jonge Director representing employee shareholders since May 25, 2022	2024 Plan 05/24/2024	–	–	–	–	
	Worldwide Plan 05/23/2024	100	4,794.00	05/24/2029	05/24/2029	
Angel Pobo Director representing employees since October 14, 2020	2024 Plan 05/24/2024	360	16,079.04	05/24/2027	05/24/2027	
	Worldwide Plan 05/23/2024	100	4,794.00	05/24/2029	05/24/2029	
Total		141,020	6,299,500.08			

(a) List of executive and non-executive directors who had this status during fiscal year 2024.
(b) 2024 performance shares valuation in accordance with IFRS 2 and taking into account an award rate hypothesis of 80% at the end of the vesting period, this amount corresponds to the shares granted in 2024, valued on the basis of a unit fair value of 55.83 euros. This fair value was calculated in accordance with IFRS 2 on the grant date of the plan, *i.e.*, May 24, 2024, on the basis of a closing price of the TotalEnergies share on that date of 65.99 euros.
(c) Refer to the glossary for the definitions and further information on Non-GAAP measures (alternative performance measures) and to point 1.9 of chapter 1 for reconciliation tables.

Shares that have become transferable for each director[a] - Table 7 – AMF position-recommendation – DOC-2021-02 (Appendix 2)

Executive and non-executive directors	Plan N° and date	Number of shares that became transferable during fiscal year 2024	Vesting conditions
Patrick Pouyanné			The performance conditions are based for:
Chairman and Chief Executive Officer	2021 Plan 05/28/2021	82,800	– For 25% of the shares, the Corporation's ranking against its peers (ExxonMobil, Shell, BP and Chevron) based on the TSR criterion during the three vesting years (2021, 2022 and 2023). The TSR considered is that of the last quarter of the year, the dividend being considered reinvested based on the closing price on the ex-dividend date. – For 25% of the shares, the Corporation's ranking each year against its peers (ExxonMobil, Shell, BP and Chevron) using the annual variation in net cash flow per share criterion expressed in dollars during the three vesting years (2021, 2022 and 2023). – For 20% of the shares, the level reached by the pre-dividend organic cash breakeven with regard to the target set for the three vesting years (2021, 2022 and 2023). – For 15% of the shares, the change in the greenhouse gas (GHG) emissions from operated facilities (Scope 1+2) with regard to the achievement of the target to reduce the GHG emissions set for the three vesting years (2021, 2022 and 2023). – For 15% of the shares, the change in the greenhouse gas (GHG) emissions (Scope 3) with regard to the achievement of the target to reduce the GHG emissions set for the three vesting years (2021, 2022 and 2023).
Romain Garcia-Ivaldi			
Director representing employees since June 9, 2020	2021 Plan 05/28/2021	–	
Emma de Jonge			
Director representing employee shareholders since May 25, 2022	2021 Plan 05/28/2021	–	
Angel Pobo			
Director representing employees since October 14, 2020	2021 Plan 05/28/2021	242	

(a) List of executive and non-executive directors who had this status during fiscal year 2024.

For the 2021 plan, the vesting rate of shares granted, subject to performance conditions, linked to the TSR criterion, the annual change in net cash flow per share, the organic *cash* breakeven before dividends, the reduction in the greenhouse gas (Scope 1+2) and the reduction in the greenhouse (Scope 3) was 92%.

The breakdown of the vesting rate of shares granted by criterion is detailed as follows:

- TSR criterion: vesting rate of 70%;
- annual variation in net cash flow per share criterion: vesting rate of 100%;
- pre-dividend organic cash breakeven criterion: vesting rate of 100%;
- change in the greenhouse gas (GHG) emissions (Scope 1+2) criterion: vesting rate of 100%;
- change in the greenhouse gas (GHG) emissions (Scope 3) criterion: vesting rate of 96.9%.

4.3.4.3 Follow-up of TotalEnergies stock option plans as of December 31, 2024

Since the 2011 plan, the Board of Directors has not granted any new TotalEnergies stock options, and all the stock option plans have since expired.

History of TotalEnergies stock option grants – Information on stock options - Table 8 – AMF position - recommendation – DOC-2021-02 (Appendix 2)

	Plan
TotalEnergies stock option grants	none
Date of the Shareholders' Meeting	–
Date of Board meeting/grant date	–
Total number of options granted by the Board of Directors, including to:	–
Executive and non-executive directors[a]	–
– *P. Pouyanné*	none
– *R. Garcia Ivaldi*	none
– *E. de Jonge*	none
– *A. Pobo*	none
Date as of which the options may be exercised:	–
Expiry date	–
Subscription or purchase price *(€)*	–
Cumulative number of options exercised/subscribed as of December 31, 2024	–
Cumulative number of options canceled or expired as of December 31, 2024	–
Number of options remaining at the end of the year	–

(a) List of executive and non-executive directors who had this status during fiscal year 2024.

Stock options granted to the 10 employees (other than executive or non-executive directors) receiving the largest number of options/Stock options exercised by the 10 employees (other than executive or non-executive directors) exercising the largest number of options - Table 9 – AMF position-recommendation – DOC-2021-02 (Appendix 2)

	Total number of options granted/exercised	Weighted average strike price (€)	Plan
Options granted in fiscal year 2024 by TotalEnergies SE and its affiliates[a] to the 10 employees of TotalEnergies SE and its affiliates (other than executive or non-executive directors) receiving the largest number of options (aggregate – not individual information)	–	–	none
Options held on TotalEnergies SE and its affiliates[a] and exercised in fiscal year 2024 by the 10 employees of TotalEnergies SE and its affiliates (other than executive or non-executive directors at the date of the exercises) who purchased or subscribed for the largest number of shares (aggregate – not individual information)	–	–	none

(a) Pursuant to the conditions of Article L. 225-180 of the French Commercial Code.

4.3.4.4 Follow-up of TotalEnergies shares grants as of December 31, 2024

BREAKDOWN HISTORY OF TotalEnergies SHARE GRANTS BY CATEGORY OF BENEFICIARY

The following table gives a breakdown of TotalEnergies share grants by category of beneficiary (executive officers, other senior executives and other employees):

		Number of beneficiaries	Number of notified shares	Percentage	Average number of options per beneficiary
2020 Plan[a]	Executive officers[b]	13	303,700	4.5%	23,362
Decision of the Board of Directors of March 18, 2020	Senior executives	292	1,580,400	23.5%	5,412
	Other employees[c]	10,838	4,843,252	72.0%	447
	Total	11,143	6,727,352	100%	604
2021 Plan[a]	Executive officers[b]	8	272,000	4.0%	34,000
Decision of the Board of Directors of March 17, 2021, with effect from May 28, 2021	Senior executives	280	1,579,100	23.3%	5,640
	Other employees[c]	11,039	4,913,448	72.6%	445
	Total	11,327	6,764,548	100%	579
2022 Plan[a]	Executive officers[b]	8	284,000	4%	35,500
Decision of the Board of Directors of March 16, 2022	Senior executives	275	1,683,000	23%	6,120
	Other employees[c]	11,494	5,386,271	73%	469
	Total	11,777	7,353,271	100%	624
2023 Plan[d]	Executive officers[b]	8	337,500	4%	42,188
Decision of the Board of Directors of March 15, 2023, with effect from May 26, 2023	Senior executives[d]	270	1,746,300	22%	6,468
	Other employees[c]	12,008	5,901,403	74%	491
	Total	12,286	7,985,203	100%	650
2024 Plan	Executive officers[b]	9	407,000	5%	45,222
Decision of the Board of Directors of May 24, 2024	Senior executives[d]	263	1,740,200	22%	6,617
	Other employees[c]	8,462	5,628,522	73%	665
	Total	8,734	7,775,722	100%	890
2024 Worldwide plan					
Decision of the Board of Directors of May 23, 2024	Employees	106,669	10,666,900	100%	100
	Total	106,669	10,666,900	100%	100

(a) For the 2020 plan, the vesting rate of shares granted, subject to performance conditions, linked to the TSR criterion, the annual change in net cash flow per share, the organic *cash* breakeven and to greenhouse Gas (GHG) emissions from operated facilities (Scope 1+2), was 100%. For the 2021 plan, the vesting rate of granted shares, subject to performance conditions, linked to the TSR, the annual variation of the net cash flow per share, the organic cash breakeven point, to GHG emissions from operated facilities (Scope 1+2) and to GHG emissions (Scope 3), was 92%. For the 2022 plan, the vesting rate of granted shares, subject to performance conditions, linked to the TSR, the annual variation of the net cash flow per share, the organic cash breakeven point, to GHG emissions from operated facilities (Scope 1+2) and to GHG emissions (Scope 3), was 85.4%.

(b) The executive officers as of the date of the Board meeting authorizing the grant.

(c) Mr. Garcia-Ivaldi is a TotalEnergies Renewables employee and a TotalEnergies SE director representing employees since June 9, 2020, was granted 360 shares under the 2024 plan, 350 shares under the 2023 plan and none under the 2022 plan. Ms. de Jonge is a TotalEnergies SE employee and a TotalEnergies SE director representing employee shareholders since May 25, 2022, and was not granted any shares under the 2024 and 2023 plan. Mr. Pobo is a TotalEnergies SE employee and TotalEnergies SE director representing employees since October 14, 2020 and was granted 360 shares under the 2024 plan, 344 shares under the 2023 plan and none under the 2022 plan.

(d) Includes 37,000 performance shares granted to 4 executives recruited in 2023 under the Board of Directors' decision of December 13, 2023.

The breakdown of TotalEnergies share grants by category of beneficiary is as follows:

			Percentage of beneficiaries by category of beneficiaries		Average number of performance shares granted by beneficiary	
			Men	Women	Men	Women
2020 Plan		Senior management (JL 15+)[a]	83%	86%	1,444	1,453
		JL 10 to 14	24%	24%	299	279
		JL 9-	2%	2%	126	130
2021 Plan		Senior management (JL 15+)[a]	83%	87%	1,406	1,492
		JL 10 to 14	24%	25%	298	282
		JL 9-	2%	2%	127	127
2022 Plan		Senior management (JL 15+)[a]	82%	88%	1,524	1,656
		JL 10 to 14	26%	27%	328	309
		JL 9-	2%	2%	138	139
2023 Plan[b]		Senior management (JL 15+)[a]	80%	84%	1,596	1,689
		JL 10 to 14	26%	26%	340	321
		JL 9-	2%	2%	145	147
2024	Worldwide Plan	Employees and senior executives[c]	100%	100%	100	100
		Senior management (JL 15+)[a]	80%	82%	1,627	1,743
	2024 Plan	JL 13 to 14	46%	47%	454	444
		JL 12-	1%	1%	220	210

(a) Including senior executives.
(b) Includes 37,000 performance shares granted on December 13, 2023 to 4 executives recruited in 2023 in accordance with the decision of the Board of Directors on December 13, 2023.
(c) Excluding the Chairman and Chief Executive Officer of TotalEnergies SE.
JL: Job level of the position according to the Hay method (unique classification and job evaluation reference).

In 2024, the Board of Directors, at its meeting of May 24, 2024 granted a performance share plan to certain employees and executive directors of TotalEnergies SE or its subsidiaries. Shares granted to the Chairman and Chief Executive Officer under the 2024 Plan represent 0.006%[1] of the Corporation's share capital on the attribution date.

The performance shares, which were previously bought back by the Corporation on the market, will be definitively granted to their beneficiaries at the end of a three-year vesting period from the grant date.

The vesting of performance shares is subject to a presence condition and performance conditions.

For the 2024 grants, the applicable performance conditions are the following:

- for 25% of the shares, the Corporation's ranking against its peers (ExxonMobil, Shell, BP and Chevron) based on the Total Shareholder Return (TSR) during the three vesting years (2024, 2025 and 2026). The TSR in question is that of the last quarter of the year, the dividend being considered reinvested based on the closing price on the ex-dividend date;
- for 25% of the shares, the Corporation's ranking against its peers (ExxonMobil, Shell, BP and Chevron) based on the annual variation in net cash flow per share expressed in dollars during the three vesting years (2024, 2025 and 2026);
- for 20% of the shares, the level reached by the pre-dividend organic cash breakeven with regard to the target set for the three vesting years (2024, 2025 and 2026). The pre-dividend organic cash breakeven is defined as the Brent price for which the operating cash flow before working capital changes (MBA) covers the organic investments[2]. The ability of the Company to resist to the variations of the Brent barrel price is measured by this parameter;
- for 15% of the shares, the criterion of the change in methane emissions from operated facilities with regard to the achievement of the target to reduce these methane emissions set for 2026;
- for 15% of the shares, the criterion of the lifecycle carbon intensity of energy products sold to the Company's customers with regard to the achievement of the target to reduce this intensity set for 2026.

Moreover, in 2024, the Board of Directors, at its meeting on May 23, 2024, granted 100 free shares to each employee of the Company[3].

(1) On the basis of a share capital divided into 2,386,846,474 shares as at May 24, 2024.
(2) Refer to the glossary for the definitions and further information on Non-GAAP measures (alternative performance measures) and to point 1.9 of chapter 1 for reconciliation tables.
(3) TotalEnergies SE and the companies in which TotalEnergies SE holds more than 50% of the share capital and which are directly or indirectly controlled by TotalEnergies SE or under a joint control, with the exception of a limited number of companies co-managed with other oil players, as well as those registered or incorporated in a country under economic sanctions.

BREAKDOWN HISTORY OF TotalEnergies SHARES PLANS

History of TotalEnergies shares grants – Information on shares granted - Table 10 – AMF Position-recommendation – DOC-2021-02 (Appendix 2)

	2020 Plan	2021 Plan	2022 Plan	2023 Plan[a]	2024 Plan	2024 Worldwide Plan
Date of the Shareholders' Meeting	**06/01/2018**	**06/01/2018**	**05/28/2021**	**05/26/2023**	**05/24/2024**	**05/26/2023**
Date of Board meeting/grant date	**03/18/2020**	**05/28/2021**	**03/16/2022**	**05/26/2023**	**05/24/2024**	**05/23/2024**
Closing price on grant date	€21.795	€38.145	€45.540	€55.760	€65.990	€65.700
Average purchase price per share paid by the Company	€57.70	€59.91	n/a	n/a	n/a	n/a
Total number of performance shares granted, including to:	6,727,352	6,764,548	7,353,271	7,985,203	7,775,722	10,666,900
Executive and non-executive directors[b]	72,300[c]	90,250	100,000	110,694	140,720	300
— *P. Pouyanné*	*72,000*	*90,000*	*100,000*	*110,000*	*140,000*	*–*
— *R. Garcia-Ivaldi*	*n/a*	*–*	*–*	*350*	*360*	*100*
— *E. de Jonge*	*n/a*	*n/a*	*n/a*	*–*	*–*	*100*
— *A. Pobo*	*n/a*	*250*	*–*	*344*	*360*	*100*
Start of the vesting period	03/18/2020	05/28/2021	03/16/2022	05/26/2023	05/24/2024	05/23/2024
Definitive grant date, subject to the conditions set (end of the vesting period)	03/20/2023	05/29/2024	03/17/2025	05/27/2026	05/24/2027	05/24/2029
Vesting rate after determination of the performance conditions:						
Executive director	*100%*	*92.0%*	*85.4%*	*n/a*	*n/a*	*n/a*
— *Employees*	*100%*	*92.0%*	*85.4%*	n/a	*n/a*	n/a
Total number of performance shares definitively granted[d] at the end of the vesting period, including:	6,462,222	6,079,684	6,224,355	n/a	*n/a*	n/a
— *P. Pouyanné*	*72,000*	*82,800*	*85,400*	*n/a*	*n/a*	*n/a*
Disposal possible from (end of the lock-up period)	03/21/2025	05/30/2026	03/17/2025	05/27/2026	05/24/2027	05/24/2029
Number of performance shares granted:						
— *Outstanding as of January 1, 2024*	–	*6,558,039*	*7,228,245*	*7,942,973*	–	–
— *Notified in 2024*	–	–	–	–	*7,775,722*	*10,666,900*
— *Canceled in 2024*	–	*(498,045)*	*(77,209)*	*(61,731)*	*(12,871)*	*(337,500)*
— *Definitively granted in 2024*	–	*(6,059,994)*	*(2,811)*	*(3,134)*	–	–
Outstanding as of December 31, 2024	–	–	7,148,245	7,878,108	7,762,851	10,329,400

(a) Includes 37,000 performance shares granted on December 13, 2023 to 4 executives recruited in 2023 in accordance with the decision of the Board of Directors on December 13, 2023. For these performance shares, the vesting period begins on December 13, 2023 and the final grant date is December 14, 2026, subject to the conditions set (end of the vesting period). The closing share price on the grant date was €61.36.

(b) List of executive and non-executive directors who had this status during fiscal year 2024. Mr. Garcia-Ivaldi is a TotalEnergies Renewables employee and a TotalEnergies SE director representing employees since June 9, 2020. Ms. de Jonge is a TotalEnergies SE employee and a TotalEnergies SE director representing employee shareholders since May 25, 2022. Mr. Pobo is a TotalEnergies SE employee and a TotalEnergies SE director representing employees since October 14, 2020.

(c) The number of performance shares granted to executive and non-executive directors includes performance shares granted to executive and non-executive directors (directors representing employees or directors representing employee shareholders) who had this quality at the grant date.

(d) Shares definitively granted include early grants following the death of the beneficiaries of shares for the respective plan.

If all the performance shares outstanding at December 31, 2024, were definitively granted, they would represent 1.38%[1] of the Corporation's share capital on that date.

Performance shares granted to the 10 employees (other than executive and non-executive directors) receiving the largest number of performance shares granted (excluding the 2024 Worldwide plan)

	Number of performance shares notified/ definitively granted	Award date	Definitive grant date (end of the vesting period)	Date of transferability (end of the lock-up period)
Performance share granted in fiscal year 2024, to the 10 employees of TotalEnergies SE and its affiliates (other than executive or non-executive directors at the date of the exercises) who purchased or subscribed for the largest number of performance shares[a]	300,150	05/24/2024	05/24/2027	05/24/2027
Performance shares definitively granted in fiscal year 2024 to the 10 employees of TotalEnergies SE and its affiliates (other than executive and non-executive directors on the date of the decision) receiving the largest number of performance shares	182,620	05/28/2021	05/29/2024	05/30/2026

(a) These shares will be definitively granted to their beneficiaries at the end of a three-year vesting period, *i.e.*, on May 24, 2027, subject to five performance conditions being met.

(1) On the basis of a share capital divided into 2,397,679,661 shares as at December 31, 2024.

4.4 Additional information about corporate governance

4.4.1 Regulated agreements and undertakings and related party transactions

PROCEDURE IMPLEMENTED BY THE CORPORATION PURSUANT TO PARAGRAPH 2 OF ARTICLE L. 22-10-12 OF THE FRENCH COMMERCIAL CODE

The French Commercial Code introduced a control procedure of regulated agreements intended to prevent possible conflicts of interest between companies, their executive and non-executive directors or their shareholders with more than a 10% share of the voting rights. The legal framework is defined by Articles L. 225-38 et seq. of the French Commercial Code for limited liability companies. The regulation excludes intragroup agreements with a 100%-owned subsidiary, on the one hand, and ordinary agreements finalized under normal conditions, on the other, from the control procedure in Article L. 225-38 mentioned above.

In application of Article L. 22-10-12 of the French Commercial Code, amended by the PACTE Law n°2019-486 of May 22, 2019, at its meeting on February 5, 2020, and after examination by the Governance and Ethics Committee, the Board of Directors approved a procedure intended to specify the methodology and the applicable criteria for the qualification of these agreements and to regularly assess whether the agreements pertaining to ordinary transactions finalized under normal conditions by the Corporation properly meet these conditions.

The assessment procedure is based primarily on a declarative process. Once a year, every employee with a delegation of power completes and signs a declaration to certify and to confirm that all the agreements they have finalized or renewed in the name of and on the behalf of the Corporation in the past year, with one of the persons covered by the regulation, or a company, association, foundation or group, of which one of the said persons is a director, or with a company consolidated by global integration that is not 100%-owned by the Corporation, pertain to ordinary transactions and were finalized under normal conditions. All the declarations are collected and checked by the Audit & Internal Control Division.

Alongside this declarative process, the Audit & Internal Control Division conducts an annual examination of a sample of agreements selected from the entries in the accounts of the elapsed year, and on the basis of the declarations made by the holders of delegated powers, to make sure that the selected agreements actually pertain to ordinary transactions and were finalized under normal conditions.

This examination is made according to criteria defined in the procedure that, on the one hand, qualify an agreement as an ordinary agreement finalized under normal conditions and, on the other, qualify the policies and measures deployed in the Company to oversee the conclusion of agreements. In particular, these measures include the purchasing policy (compulsory calls for tender, whenever certain thresholds are exceeded), the anti-corruption measures, the declaratory measures to prevent conflicts of interest, the transfer pricing tax policy and the invoicing rules applicable to Company operations.

The Audit & Internal Control Division publishes a written report of this examination of their work.

The Audit Committee annually examines the results of the controls carried out and verifies the relevance of the criteria specified in the procedure that are used to qualify agreements as ordinary agreements finalized under normal conditions. It reports to the Board of Directors on their work.

Based on this information, every year, the Board of Directors checks that the agreements on current operations finalized under normal conditions actually meet these conditions. The directors who are directly or indirectly involved in one or more of these agreements do not take part in their assessment.

In fiscal year 2024, on the basis of declarations received by the Audit & Internal Control Division, it was able to confirm that all agreements entered into or renewed by signatories during the past fiscal year concerned ordinary transactions or were entered into under normal terms, or were duly authorized by the Corporation's Board of Directors prior to being entered into or renewed.

Furthermore, the review of selected agreements confirmed that these concerned ordinary transactions entered into under normal terms.

The implementation of the internal annual assessment procedure for agreements concerning ordinary transactions entered into under normal terms adopted by the Board of Directors on February 5, 2020, did not result in the identification of any regulated agreements.

REGULATED AGREEMENTS AND UNDERTAKING

The special report of the statutory auditors of TotalEnergies SE on regulated agreements and undertakings referred to in Article L. 225-38 et seq. of the French Commercial Code for fiscal year 2024 is provided in point 4.5.

In addition, to TotalEnergies' knowledge, there exists no agreement, other than the agreements related to its ordinary course of business and signed under normal conditions, engaged, directly or through an intermediary, between, on the one hand, any director or shareholder holding more than 10% of TotalEnergies SE's voting rights and, on the other hand, a company controlled by TotalEnergies SE within the meaning of Article L. 233-3 of the French Commercial Code.

RELATED-PARTY TRANSACTIONS

Details of related-party transactions as specified by the regulations adopted under EC regulation 1606/2002, entered into by TotalEnergies' companies during fiscal years 2022, 2023 or 2024, are provided in Note 8 of the notes to the Consolidated Financial Statements (refer to point 8.7 of chapter 8). These transactions primarily concern equity affiliates and non-consolidated companies.

4.4.2 Delegations of authority and powers granted to the Board of Directors with respect to capital increases and cancellation of shares of the Corporation currently in effect

Table compiled in accordance with Article L. 225-37-4, 3° of the French Commercial Code summarizing the use of delegations of authority and powers granted to the Board of Directors with respect to share capital increases currently in effect

Type		Cap on par value, or number of shares or expressed as % of share capital	Use in 2024 by value or number of shares	Available balance as of 12/31/2024 by value or number of shares[a]	Date of the delegation of authority or authorization by the Extraordinary Shareholders' Meeting	Expiry date and term of authorization granted to the Board of Directors
Maximum cap for the issuance of securities granting immediate or future rights to share capital	Securities representing debt securities giving rights to a portion of share capital	€10bn in securities	–	€10bn	May 24, 2024 (17th, 18th, 19th and 21st resolutions)	July 24, 2026 26 months
	Share capital par value	An overall cap of €2.5bn (i.e., a maximum of 1,000 million shares issued with a preemptive subscription right), from which can be deducted:	Capital increase with preemptive subscription right: – Overall cap: Maximum of 18 million shares	€2.455 bn (i.e., 982 million shares)	May 24, 2024 (17th resolution)	July 24, 2026 26 months
		1/ a specific cap of €575 million, i.e. a maximum of 230 million shares for issuances without a preferential subscription right (with potential use of an extension clause), including in compensation with securities contributed within the scope of a public exchange offer, provided that they meet the requirements of Article L. 22-10-54 of the French Commercial Code, from which can be deducted:	–	€575 million	May 24, 2024 (18th and 20th resolutions)	July 24, 2026 26 months
		1a/ a sub-cap of €575 million with a view to issuing, through an offer as set forth in Article L. 411-2-1 of the French Monetary and Financial Code, shares and securities resulting in a share capital increase, without a shareholders' preemptive subscription right	–	€575 million	May 24, 2024 (19th and 20th resolutions)	July 24, 2026 26 months
		1b/ a sub-cap of €575 million through in-kind contributions when the provisions of Article L. 22-10-54 of the French Commercial Code are not applicable	–	€575 million	May 24, 2024 (21st resolution)	July 24, 2026 26 months
		2/ a specific cap of 1.5% of the share capital on the date of the Board decision for share capital increases reserved for employees participating in a Company savings plan	Maximum of 18 million shares[b]	18.0 million shares	May 24, 2024 (22nd resolution)	July 24, 2026 26 months
Performance shares granted to Company employees and to executive directors		1% of share capital on the date of the Board decision to grant the shares	7.8 million shares	16.2 million shares[c]	May 24, 2024 (23rd resolution)	July 24, 2027 38 months

(a) Based on share capital as of December 31, 2024, divided into 2,397,679,661 shares.
(b) The meeting of the Board of Directors on October 30, 2024 decided to proceed with a share capital increase in 2025 with a cap of 18,000,000 shares (the capital increase is scheduled for the second quarter of 2025, subject to implementation by the Chairman and Chief Executive Officer).
(c) The shares granted pursuant to the presence and performance conditions to the Executive Directors under the 23rd resolution of the Extraordinary Shareholders' Meeting held on May 24, 2024, may not exceed 0.015% of the capital existing on the date of the Board meeting that decided on the grant, *i.e.*, 359,651 shares based on share capital as of December 31, 2024.

USE OF THE AUTHORIZATION TO CANCEL SHARES OF THE COMPANY DURING FISCAL YEAR 2024

Pursuant to the terms of the 23rd resolution of the Shareholders' Meeting held on May 25, 2022, the Board of Directors is authorized to cancel shares of the Corporation up to a maximum of 10% of the share capital of the Corporation existing as of the date of the operation within a 24-month period. This authorization, granted for five years, will expire in 2027.

In 2024, pursuant to this authorization, the Board of Directors decided to reduce the share capital of the Corporation:

- on February 6, 2024, with effect on February 12, 2024, by canceling 25,405,361 treasury shares.

Furthermore, the Board of Directors, at its meeting on February 4, 2025, used this authorization and decided to reduce the share capital of the Company by canceling 127,622,460 treasury shares with effect on February 10, 2025. On February 10, 2025, the share capital of the Corporation was therefore 5,675,143,002.50 euros, divided into 2,270,057,201 shares, each with a nominal value of 2.50 euros.

4.4.3 Provisions of the Articles of Association governing shareholders' participation in Shareholders' Meetings

The Corporation's Articles of Association amended as a result of the change of corporate name of the Corporation were approved by the Annual Shareholders' Meeting of May 28, 2021. The statutory provisions of TotalEnergies SE presented below are those resulting from the Articles of Association of TotalEnergies SE.

4.4.3.1 Calling of shareholders to Shareholders' Meetings

Shareholders' Meetings are convened and conducted under the conditions provided for by law.

The Board of Directors, the statutory auditor or a court-appointed representative can ask for a meeting to be convened, as well as one or more shareholders together holding at least 5% of the share capital.

The Ordinary Shareholders' Meeting is convened to take any decisions that do not modify the Corporation's Articles of Association. It is held at least once a year within six months of the closing date of each fiscal year to approve the financial statements of that year. It may only deliberate, at its first meeting, if the shareholders present, represented or participating by remote voting hold at least one fifth of the shares that confer voting rights. No quorum is required at its second meeting. In accordance with regulation (EC) 2157/2001 on the Statute for a European company (SE), the Ordinary Shareholders' Meeting rules by a majority of votes cast by the shareholders present or represented by proxy. The votes cast do not include those attached to shares in which the shareholder did not take part in the vote, abstained, or returned a blank or invalid vote.

Only the Extraordinary Shareholders' Meeting is authorized to modify the Articles of Association. It may not, however, increase shareholders' commitments. It may only deliberate, at its first meeting, if the shareholders present, represented or participating by remote voting hold at least one quarter, and, at the second meeting, one fifth of the shares that confer voting rights. In accordance with regulation (EC) 2157/2001 on the Statute for a European company (SE), the Extraordinary Shareholders' Meeting rules by a majority of two thirds of votes cast by the shareholders present or represented by proxy. The votes cast do not include those attached to shares in which the shareholder did not take part in the vote, abstained, or returned a blank or invalid vote.

One or more shareholders holding a certain percentage of the Corporation's share capital (calculated using a decreasing scale based on the share capital) may ask for items or draft resolutions to be added to the agenda of a Shareholders' Meeting under the terms and conditions and within the deadlines set forth by the French Commercial Code. Requests to add items or draft resolutions to the agenda must be sent no later than 20 days after the publication of the notice of meeting that the Corporation must publish in the French official journal of legal notices (*Bulletin des annonces légales obligatoires*, BALO). Any request to add an item to the agenda must be justified. Any request to add a draft resolution must be accompanied by the draft resolution text and brief summary of the grounds for this request. Requests made by shareholders must be accompanied by a proof of their share ownership as well as their ownership of the portion of capital as required by the regulations. Review of the item or draft resolution filed pursuant to regulatory conditions is subject to those making the request providing a new attestation justifying the shares being recorded in a book-entry form in the same accounts on the second business day preceding the date of the Meeting.

The Central Social and Economic Committee may also request the addition of draft resolutions to the meeting agendas under the terms and conditions and within the deadlines set by the French Labor Code. In particular, requests to add draft resolutions must be sent within 10 days following the date on which the notice of meeting was published.

4.4.3.2 Admission of shareholders to Shareholders' Meetings

Participation in any form in Shareholders' Meetings is subject to registration of the shares, either in the registered account maintained by the Corporation (or its securities agent) or recorded in bearer form in a securities account maintained by a financial intermediary. Proof of this registration is obtained under a certificate of participation (*attestation de participation*) delivered to the shareholder. Registration of the shares must be effective no later than midnight (Paris time) on the second business day preceding the date of the Shareholders' Meeting. If the shares are sold or transferred prior to this record date, the certificate of participation will be canceled, and the votes sent by mail and proxies sent to the Corporation will be canceled accordingly. If shares are sold or transferred after this record date, the certificate of participation will remain valid and votes cast or proxies granted will be taken into account.

4.4.4 Information regarding factors likely to have an impact in the event of a public takeover or exchange offer

In accordance with Article L. 22-10-11 of the French Commercial Code, information relating to factors likely to have an impact in the event of a public offering is provided below.

- **Structure of the share capital**

  The structure of the Corporation's share capital is presented in points 6.4.3 in chapter 6.

- **Restrictions on the exercise of voting rights and transfers of shares provided in the Articles of Association – Clauses of the agreements of which the Corporation has been informed in accordance with Article L. 233-11 of the French Commercial Code**

  The provisions of the Articles of Association relating to shareholders' voting rights are mentioned in point 7.2.4 of chapter 7. The Corporation has not been informed of any clauses as specified in paragraph 2 of Article L. 22-10-11 of the French Commercial Code.

- **Direct or indirect holdings in the share capital which the Corporation is aware pursuant to Articles L. 233-7 and L. 233-12 of the French Commercial Code**

  The direct and indirect holdings in the Corporation's capital of which TotalEnergies is aware of pursuant to Articles L. 233-7 and L. 233-12 of the French Commercial Code are indicated in points 6.4.1.2, 6.4.1.3 and 6.4.1.4 of chapter 6.

- **Holders of securities conferring special control rights**

  There are no securities conferring special control rights as specified in paragraph 4 of Article L. 22-10-11 of the French Commercial Code.

- **Control mechanisms provided for in an employee shareholding system**

  The rules relating to the exercise of voting rights within the Corporation collective investment funds are presented in point 6.4.2 of chapter 6.

- **Shareholder agreements of which the Corporation is aware and that could restrict share transfers and the exercise of voting rights**

  The Corporation is not aware of any agreements between shareholders as specified in paragraph 6 of Article L. 22-10-11 of the French Commercial Code which could result in restrictions on the transfer of shares and exercise of the voting rights of the Corporation.

- **Rules applicable to the appointment and replacement of members of the Corporation's Board of Directors and amendment of the Articles of Association**

  No provision of the Articles of Association or agreement made between the Corporation and a third party contains a specific provision relating to the appointment and/or replacement of the Corporation's directors that is likely to have an impact in the event of a public offering.

- **Powers of the Board of Directors in the event of a public offering**

  The delegations of authority or authorizations granted by the Shareholders' Meeting that are currently in effect limit the powers of the Board of Directors during public offering on the Corporation's shares.

- **Agreements to which the Corporation is party and which are amended or terminated in the event of a change of control of the Corporation – Agreements providing for the payment of compensation to members of the Board of Directors or employees in the event of their resignation or dismissal without real and serious grounds or if their employment were to be terminated as a result of a public offering**

  Although a number of agreements made by the Corporation contain a change in control clause, the Corporation believes that there are no agreements provided for in paragraph 9 of Article L. 22-10-11 of the French Commercial Code. The Corporation also believes that there are no agreements provided for in paragraph 10 of Article L. 22-10-11 of the French Commercial Code. For commitments made for the Chairman and Chief Executive Officer in the event of a forced departure owing to a change of control or strategy, refer to point 4.3.2.

4.4.5 Internal control and management risk systems of the Corporation as part of the financial reporting process

The description of the main characteristics of the internal control and risk management procedures relating to the preparation and processing of financial information referred to in 7° of Article L. 22-10-10 of the French Commercial Code is presented in point 3.3.4 of chapter 3.

4.4.6 Statutory auditors

4.4.6.1 Auditor's term of offices

ERNST & YOUNG Audit

1/2, place des Saisons, 92400 Courbevoie – Paris-La Défense, Cedex 1

Appointed: May 14, 2004
Last reappointment: May 25, 2022, for a six-fiscal year term

Yvon Salaün, Stéphane Pédron

PricewaterhouseCoopers Audit

63, rue de Villiers, 922008 Neuilly-sur-Seine

Appointed: May 25, 2022, for a six-fiscal year term

Cécile Saint-Martin, Olivier Lotz

French law (Article L. 823-3 of the French Commercial Code) provides that the auditors are appointed for renewable six-fiscal year terms. The terms of office of the statutory auditors and of the alternate auditors will expire at the end of the Shareholders' Meeting to be convened in 2028 to approve the financial statements for fiscal year 2027.

4.4.6.2 Fees received by the statutory auditors (including members of their networks)

	ERNST & YOUNG Audit				PricewaterhouseCoopers Audit			
	Amount in M$ (excluding VAT)		%		Amount in M$ (excluding VAT)		%	
	2023	2024	2023	2024	2023	2024	2023	2024
Audit								
Statutory auditors, certification, examination of the parent company and consolidated accounts	**24.6**	**25.4**	**78.7**	**80.8**	**22.2**	**22.9**	**87.4**	**81.5**
TotalEnergies SE	5.4	5.7	17.3	18.1	4.8	4.9	18.9	17.4
Fully consolidated subsidiaries	19.2	19.7	61.3	62.7	17.4	18.0	68.5	64.1
Services other than statutory audit – Audit-related services	**3.9**	**2.5**	**12.5**	**7.9**	**1.0**	**2.2**	**4.0**	**7.9**
TotalEnergies SE	0.3	0.2	0.9	0.6	0.1	0.3	0.5	1.1
Fully consolidated subsidiaries	3.6	2.3	11.5	7.3	0.9	1.9	3.5	6.8
Subtotal	**28.5**	**27.9**	**91.1**	**88.7**	**23.2**	**25.1**	**91.4**	**89.4**
Other services provided								
Legal, tax, labor law	2.1	**2.1**	6.8	6.5	1.3	1.2	5.0	**4.4**
Other	0.6	0.5	2.1	1.7	0.9	0.8	3.6	2.7
Subtotal	**2.8**	**2.6**	**8.9**	**8.2**	**2.2**	**2.0**	**8.6**	**7.1**
Certification of the Company's Sustainability reporting under the CSRD	–	1.0	–	3.1	–	1.0	–	3.5
Total	31.3	31.6	100	100	25.4	28.1	100	100

4.5 Statutory auditors' report on related party agreements

This is a free translation into English of the original report issued in French and is provided solely for the convenience of English-speaking readers. This report should be read in conjunction with, and construed in accordance with, professional guidelines applicable in France.

(General Meeting of Shareholders held to approve the financial statements for the year ended December 31, 2024)

To the Annual General Meeting of TotalEnergies SE,

As Statutory Auditors of your Company, we hereby present our report on related party agreements.

It is our responsibility to inform you, on the basis of the information provided to us, of the terms and conditions, the purpose, and the benefits to the Company of the agreements of which we were informed or became aware of during our engagement. It is not our role to determine whether they are beneficial or appropriate or to ascertain whether any other agreements exist. It is your responsibility, in accordance with Article R.225-31 of the French Commercial Code (*Code de commerce*), to assess the merit of these agreements with a view to approving them.

In addition, it is our responsibility to inform you, where appropriate, in accordance with Article R.225-31 of the French Commercial Code, of the agreements already approved at the General Meeting of Shareholders.

We performed the procedures that we deemed necessary in accordance with the professional guidance issued by the French Institute of Statutory Auditors (*Compagnie Nationale des Commissaires aux Comptes*) applicable to this engagement. Our work entailed verifying that the information provided is consistent with the documents from which it was derived.

AGREEMENTS SUBMITTED FOR APPROVAL AT THE GENERAL MEETING OF SHAREHOLDERS

Agreements authorized and signed during the period

We hereby inform you that, to our knowledge, no agreements authorized and signed during the period are to be submitted for approval at the General Meeting of Shareholders in accordance with the provisions of Article L. 225-38 of the French Commercial Code.

AGREEMENTS ALREADY APPROVED AT THE GENERAL MEETING OF SHAREHOLDERS

Agreement already approved in prior years which were applicable during the period

In accordance with Article R.225-30 of the French Commercial Code, we have been informed of the performance, during the period, of the following agreement, already approved at the General Meeting of Shareholders held on May 29, 2019 (5th resolution), addressed in the statutory auditors' report on related party agreements dated March 13, 2019.

With the not-for-profit organization Alliance pour l'Education - United Way (United Way - L'Alliance (UWA) formerly)

Director concerned

Mr Patrick Pouyanné, Chairman and Chief Executive Officer of TotalEnergies SE and Chairman of the not-for-profit organization Alliance pour l'Education – United Way, formerly United Way-L'Alliance, having accepted the latter position as Chairman and Chief Executive Officer of TotalEnergies SE.

Nature, purpose, terms and conditions

As a means of supporting the not-for-profit organization Alliance pour l'Education – United Way, TotalEnergies SE has provided free office space since October 31, 2018 located in Puteaux in the Tour Michelet, which it owns and occupies. Providing such office space is classified as corporate patronage through a contribution in kind and as such it is eligible under the tax and legal regime set out in Article 238 bis of the French Tax Code.

TotalEnergies SE and UWA (hereafter the "Parties") agreed to sign an "Agreement on the provision of free office space" (the "TSA/UWA Agreement" or the "Agreement") to formally document their agreement.

Under the TSA/UWA Agreement, TotalEnergies SE has agreed to provide UWA with free office space of 179 sq. m. in the Tour Michelet, building A, along with associated infrastructure and services (including mail, photocopy and printer services, access to the company's cantine with admission charges and cleaning services). Having taken effect on October 31, 2018 and ended on December 31, 2019, the TSA/UWA Agreement is automatically renewed for periods of one year, with the Parties having the option of terminating it with three months' formal notice.

The Board of Directors has approved the Agreement on the grounds that it is fully in line with TotalEnergies SE's policy on Corporate Social Responsibility and with its corporate patronage operations.

Neuilly-sur-Seine and Paris-La Défense, March 31, 2025

The Statutory Auditors
French original signed by

PricewaterhouseCoopers Audit		ERNST & YOUNG Audit	
Olivier Lotz	Cécile Saint-Martin	Yvon Salaün	Stéphane Pédron

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Sustainability reporting under the CSRD

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5.1 General information (ESRS 2)

5.1.1 Basis for preparation (BP1 and BP2)

5.1.1.1 General basis for the preparation of the Sustainability Report (BP1)

The consolidated sustainability reporting presented below under the CSRD constitutes the consolidated sustainability report of TotalEnergies SE (the "Sustainability Report") prepared in accordance with the European Sustainability Reporting Standards ("ESRS")[1] adopted by the European Commission and with Articles L. 232-6-3 and L. 233-28-4 of the French Commercial Code. Its purpose is to provide an understanding of the impact of the activity of the Company and the companies included in the scope of consolidation on sustainability issues, as defined in the aforementioned regulations, as well as the way in which these issues influence the development of its business, results and situation.

The Sustainability Report was prepared with the support of the Company's functional divisions, notably the Strategy & Sustainability division (which includes Legal, Sustainability & Climate, Audit & Internal Control, Health Safety and Environment) as well as People & Social Engagement and Finance divisions. It was reviewed by the Audit Committee before being approved by the Board of Directors.

The Sustainability Report covers the same scope of consolidation as that used for the financial statements excluding equity affiliates (refer to note 18 to the consolidated financial statements, chapter 8.7), as well as companies controlled by the Company that are not financially consolidated but are material from a sustainability point of view (**"ESRS perimeter"** hereinafter). Its preparation was based on a double materiality analysis carried out by the Company, covering the Company's own operations and its upstream value chain (including tier 1 suppliers), and downstream (where relevant and possible), on the basis of information available within the Company. Through this exercise, the Company has identified the impacts, risks and opportunities it considers material (refer to 5.1.3.3 (SBM-3)).

In its Sustainability Report, TotalEnergies presents the policies and action plans (whose scope may vary according to the areas concerned) developed or implemented to meet the sustainability challenges thus identified, as well as the targets and indicators that the Company has set itself.

The first year of application of the ESRS standards is characterized by uncertainties regarding the interpretation of texts, the absence of established practices or comparative data and data collection difficulties, particularly due to the perimeter to which the ESRS standards apply. TotalEnergies has endeavored to apply the normative requirements set by the ESRS, as applicable at the date of establishment of the Sustainability Report, based on available information within the deadlines for establishing the Sustainability Report. In some cases, difficulties in accessing certain data within the deadlines for establishing the Sustainability Report or the lack of reliability of the collected data have led the Company not to communicate, on certain data points or information that does not meet its quality assurance approach, especially in the context of the announcements by the European Commission on February 26, 2025 which aimed at simplifying and reducing the number of data points prescribed in the normative requirements set by the ESRS.

The reporting scopes and methodology concerning the Sustainability reporting under the CSRD in this chapter are presented hereinafter.

The data required for the disclosure of environmental indicators are collected on the basis of the "ESRS perimeter" defined above. This ESRS perimeter is extended to companies and/or assets over which the Company exercises operational control, regardless of their financial consolidation method, for the following indicators:

- Greenhouse gas emissions (ESRS E1-6 §44 to 46 and §50);
- Pollutants listed in Annex II to Regulation (EC) No. 166/2006 and microplastics generated or used by the Company (ESRS E2-4 §28/29);
- Biodiversity-sensitive sites (ESRS E4-1).

In addition to the ESRS perimeter, TotalEnergies also voluntarily publishes certain indicators for the "**operated perimeter**".

This perimeter covers the activities, sites and industrial assets of which TotalEnergies SE or one of its subsidiaries has operational control, i.e. has the responsibility of the conduct of operations on behalf of all its partners. For the operated perimeter, the environmental indicators are reported 100%, regardless of the Company's equity interest in the asset.

Data related to acquisitions are collected during the year, when they are material for an indicator, or at the latest from January 1 of the following year.

For any facility sold, data are collected until the date of divestment when they are material for an indicator.

In addition, it is specified that TotalEnergies has not made use of the option allowing it to omit particular classified or sensitive information referred to in ESRS 1, 7.7 (Classified and sensitive information, and specific pieces of information corresponding to intellectual property, know-how or the results of innovation).

It is additionally specified that TotalEnergies has not made use of the option offered by Article L. 233-28-4 of the French Commercial Code, allowing it to omit, in exceptional cases, specific information concerning imminent developments or business under negotiation when, in the duly reasoned opinion of the Board of Directors, disclosure would be seriously detrimental to the Company's commercial position.

5.1.1.2 Disclosure of information on special circumstances (BP-2)

TIME HORIZONS

TotalEnergies' time frames follow the processes put in place by the Company to manage its activities, in particular those dictated by the budget cycle and the five-year strategic plan. They are spread over the short term (2025), the medium term (2030) and beyond into the long term.

- short-term is defined as 1 year according to the budget cycle;
- medium term, corresponding to the period covered by the strategic plan, is defined as 5 years;
- long-term covers the period beyond 5 years.

ESTIMATES CONCERNING THE VALUE CHAIN AND SOURCES OF UNCERTAINTY ASSOCIATED WITH ESTIMATES AND RESULTS

The first year of application of the ESRS standards is characterized by uncertainties regarding the interpretation of texts, the absence of established practices or comparative data, and data collection difficulties, particularly within the value chain. In this context, TotalEnergies has endeavored to apply the normative requirements set by the ESRS, as applicable at the date of preparation of the Sustainability Report, based on available information within the establishment deadlines of the Sustainability Report.

(1) Commission Delegated Regulation (EU) 2023/2772 of July 31, 2023 supplementing Directive 2013/34/EU of the European Parliament and of the Council as regards sustainability reporting standards and its corrigendum 2024/90408 of July 26, 2024.

In some cases, difficulties in accessing certain data within the establishment deadlines of the Sustainability Report or the lack of reliability of the collected data have led the Company to resort, on a case-by-case basis, to estimates required by the ESRS standards, whenever possible or deemed relevant.

The estimates used by the Company for the publication of sustainability indicators are based, as far as possible, on recognized databases. However, these estimates may prove to be erroneous or inaccurate, as the underlying data are not always available. The nature and scope of the estimates implemented or limitations of the data collection perimeter applied on a case-by-case basis are explained by the methodological indications in the relevant sections. The Company continues to work on improving data collection and associated estimates for future exercises.

Transition strategy for climate change mitigation

Current trends indicate that the evolution of the global energy mix is not compatible with limiting global warming to 1.5°C and with the objective of achieving climate neutrality by 2050 (International Energy Agency's STEPS scenario). Similarly, there is currently no consensus on greenhouse gas (GHG) emission reduction targets or trajectories applicable at the scale of a company in a given sector and which would be compatible with a given global temperature target.

TotalEnergies' transition strategy for climate change mitigation (see section 5.2.1.1 A) should be seen in this context and includes an evolution in the business model and greenhouse gas emission reduction targets by 2030 which are put into perspective with the IEA scenarios.

Environmental and social data

For the greenhouse gas (GHG) of the non-operated assets, TotalEnergies relies on information provided by its partner operators and strives to obtain reliable data without, however, having the same level of assurance as for data from its own operations. When this information is not available, it is estimated based on past data.

For calculation of the different categories of scope 3 emissions as defined by the GHG protocol, TotalEnergies relies on information collected within the value chain and strives to obtain reliable data, however having the same level of assurance as for data from its own operations. The calculation method used are explained by methodological indications covering the main sources of estimation and uncertainty.

For the first year, environmental data excluding GHGs were collected from operated sites and requested from operating partners for non-operated sites. TotalEnergies strives to obtain reliable data following a quality assurance process. For missing data, data for which this quality assurance process has not yet been completed or data for which it was not possible to make estimates in the absence of an established scientific basis, and taking into account the announcements by the European Commission on February 26, 2025 aimed at simplifying and reducing the number of data points, the Company does not communicate missing data or data that does not meet its quality assurance approach. TotalEnergies will continue its work with its operated sites and the operators of the non-operated sites concerned to improve the collection rates of missing data and ensure their reliability.

Social data from the Remuneration survey, conducted in July 2024, are extrapolated to December 31, 2024 (refer to point 5.3.1).

Cautionary Note regarding forward-looking statements

The information presented in the Sustainability Report may additionally contain forward-looking statements (including forward-looking statements in the meaning of the Private Securities Litigation Reform Act of 1995), notably with respect to the financial condition, results of operations, activities and strategy of TotalEnergies. In particular it may contain indications of prospects, objectives, paths of progress and ambitions of TotalEnergies, including those relating to climate and more generally to sustainability. TotalEnergies has an ambition of carbon neutrality by 2050, together with society, it being specified that the means to be deployed do not solely rely on TotalEnergies.

These forward-looking statements may generally be identified by the use of the future or conditional tense or forward-looking words such as "will", "expected to", "could", "would", "may", "likely", "might", "envisions", "intends", "anticipates", "believes", "considers", "plans", "expects", "thinks" "targets", "aims" or similar terminology. Such forward-looking statements included in this document are based on economic data, estimates and assumptions prepared in a given economic, competitive and regulatory environment and considered to be reasonable by TotalEnergies as of the date of this document.

These forward-looking statements are not historical data and should not be interpreted as assurances that the perspectives, objectives or goals announced will be achieved. They may prove to be inaccurate in the future, and may evolve or be modified with a significant difference between the actual results and those initially estimated, due to the uncertainties notably related to the economic, financial, competitive and regulatory environment, or due to the occurrence of risk factors, such as, notably, the price fluctuations in crude oil and natural gas, the evolution of the demand and price of petroleum products, the changes in production results and reserves estimates, the ability to achieve cost reductions and operating efficiencies without unduly disrupting business operations, changes in laws and regulations including those related to the environment and climate, currency fluctuations, technological innovations, meteorological conditions and events, as well as socio-demographic, economic and political developments, changes in market conditions, loss of market share and changes in consumer preferences, or pandemics such as the COVID-19 pandemic. Additionally, certain financial information is based on estimates particularly in the assessment of the recoverable value of assets and potential impairments of assets relating thereto.

Readers are cautioned not to consider forward-looking statements as accurate, but as an expression of the Company's views only as of the date this document is disclosed.

TotalEnergies SE and its subsidiaries undertake to use their best efforts to update or revise, when necessary and in accordance with applicable legal and regulatory requirements, any and all forward-looking statements, information, trends or objectives contained in this document. Readers are expressly reminded that all information published in this document reflects the current state of knowledge and takes into account recent and evolving regulatory requirements and applicable best practices.

TotalEnergies assumes no responsibility for the accuracy, completeness or veracity of information and data provided by or sourced from third parties contained in this document or used for assumptions, estimates or more generally for forward-looking data published in this document. TotalEnergies shall not be liable for any errors, omissions or inaccuracies in the information and data provided by or sourced from third parties contained in this document or used for assumptions, estimates or, more generally, forward-looking statements published in this document. Users are advised to verify them independently before relying on them.

CHANGE IN THE PREPARATION OR PRESENTATION OFTHE SUSTAINABILITY REPORTING UNDER THE CSRD

Unless otherwise specified, historical data has been restated according to the ESRS perimeter to allow for comparison with the data for the year 2024.

INCORPORATION OF INFORMATION BY REFERENCE

The table below lists the disclosure requirements and specific data points incorporated by reference.

Standards	Disclosure requirements and data points	URD Chapter/Sections
ESRS -GOV-1	21 c (experience acquired by directors)	4.1.1.1 and 4.1.1.5
ESRS 2-GOV-3	29 a (key characteristics of the incentive schemes)	4.3
ESRS 2 SBM-1	42 (business model and value chain)	1.1.3
ESRS S1-16	97 b (the annual total remuneration ratio of the highest paid individual to the median annual total remuneration for all employees)	4.3.3
ESRS G1-3	21 c (training given to members of the administrative, management and supervisory bodies concerning corruption)	4.1.1.6

5.1.2 Governance (GOV-1 to GOV-5)

5.1.2.1 Role and composition of administration, management and supervisory bodies (GOV-1)

TotalEnergies SE's administrative, management and supervisory bodies consist of the Board of Directors and the Chairman and Chief Executive Officer (refer to point 4.1 of chapter 4).

The Board of Directors of TotalEnergies has committed the Company since 2020 to a transition strategy to transform it into an integrated multi-energy company.

The Company is committed to a balanced transition strategy for the benefit of the energy transition and has the ambition to contribute to the development of a more decarbonized energy system while at the same time maintaining the current energy system at a sufficient level to meet global demand and organize a fair, orderly and equitable transition of energy systems.

The Company affirms its purpose to provide as many people as possible with energy that is more affordable, more reliable and more sustainable, while at the same time placing sustainable development at the heart of its strategy, its projects and its operations.

The Board of Directors is committed to this ambition.

COMPOSITION OF THE BOARD OF DIRECTORS, REFLECTING THE DIVERSITY AND COMPLEMENTARITY OF ITS MEMBERS

With 14 directors, including 9 independent members, one director representing employee shareholders[1] and 2 directors representing employees[2], and 7 nationalities represented, the composition of the Board of Directors of TotalEnergies SE reflects the diversity and complementarity of experience, expertise, nationalities and cultures needed to understand all the issues facing the Company, including those relating to sustainability.

Board composition	Financial year 2024
Number of directors	**14**
of which executive members	1
of which non-executive members	13
of which the director representing employee shareholders.	1
of which the directors representing employees.	2
Number of directors excluding those representing employee shareholders and employees	11
Independence	
Number of independent directors	9
weighted average % of independent directors	64% (9/14)
% of independent directors calculated excluding director representing employee shareholders and directors representing employees (point 10.3 of the AFEP-MEDEF Code)	82% (9/11)
Diversity	
Weighted average ratio of women to men	43/57
Proportion of directors by sex	
Women	43% (6/14)
Men	57% (8/14)
Proportion of directors by sex, excluding director representing employee shareholders and directors representing employees (articles L. 225-27-1 and L. 225-23 of the French Commercial Code)	
Women	45.5% (5/11)
Men	54.5% (6/11)

(1) Director representing employee shareholders, elected on the proposal of the shareholders referred to in Article L. 225-102 of the French Commercial Code, in application of the provisions of Articles L. 225-23 and L. 22-10-5 of the French Commercial Code (hereinafter "Director representing employee shareholders").

(2) Directors representing employees appointed in accordance with the provisions of article L. 225-27-1 of the French Commercial Code and the Company's Articles of Association (the first appointed by the Central Social and Economic Works Council of the Amont Global Services Holding Economic & Social Unit and the second appointed by the SE Committee known as "TotalEnergies European Works Council").

Board composition	Financial year 2024
Diversity	
Number of nationalities represented within the Board	7
Proportion of directors by nationality	
French	50% (7/14)
Non-French	50% (7/14)

Details of the composition of the Board of Directors of TotalEnergies SE and of the way general management is exercised are provided in the Corporate Governance Report (point 4.1 of chapter 4).

EXPERTISE AND SKILLS OF THE BOARD OF DIRECTORS AS REGARDS SUSTAINABILITY

With the support of the Governance and Ethics Committee, the Board of Directors ensures that the Board of Directors as a whole has the skills and expertise required to oversee the sustainability issues associated with the Company's activities. More detailed information on the profiles, experience, expertise and skills of each director, as well as on the Board's diversity policy, is provided in points 4.1.1.1 and 4.1.1.5 of chapter 4.

In 2024, the members of the Audit Committee all took part in an external training course dedicated to CSRD issues, which most of the directors also attended. In addition, directors may ask to receive training in the specificities of the Company, its businesses and its business segment, as well as any training that may help them perform their duties as directors. An ongoing climate training program for directors has been approved in 2021. It includes various modules on the following topics "Energy, Climate Change and Environmental Risks", "Solutions for a low-carbon future", "The low-carbon energy transition" and "Climate Change: Financial risks and opportunities".

Moreover, directors representing employees or employee shareholders may submit requests for training under the specific rules applicable to them, as defined by the Board of Directors. In 2024, a director representing employees attended the "Climate Change: Economics and Governance" training program at the London School of Economics. In 2024, the director representing employee shareholders also attended the 4-day training module offered by HEC on integrating sustainable development into corporate strategy.

Directors are also invited to take part in Company site visits, which contribute in a very concrete way to their training and allow them to deepen their knowledge of the specificities of the Company, its challenges, particularly as regards sustainability, its businesses - including new businesses - and its teams. They are often the occasion for thematic presentations. Within this framework, site visits were organized in 2024, by groups of directors accompanied by a member of the Executive Committee, in Saudi Arabia (SATORP in Jubail, Admiral project, renewables), Paris (Hutchinson & Belib), Uganda (Exploration & Production, Marketing & Services), Bordeaux and Nersac (Saft R&D center, ACC plant) and Feluy, Belgium (R&D center, polymers). Additionally, Audit Committee members visited Le Havre (mobility, FSRU, Gonfreville refinery). Site visits are planned for 2025.

ROLES AND RESPONSIBILITIES FOR MONITORING RISKS, IMPACTS AND OPPORTUNITIES

Board of Directors

With the support of the Audit Committee, the Board of Directors ensures the taking into consideration of the sustainability issues on the basis of work prepared by General Management and the relevant operating divisions.

The Board of Directors endeavors to promote value creation by the company in the long term. It defines TotalEnergies' strategic orientations and ensures its implementation in accordance with the corporate interest of the Corporation, taking into consideration the social and environmental challenges of its business activities. It is informed of the main challenges facing the Company, including with regard to social and environmental responsibility. It regularly reviews, in relation with such strategic orientations, opportunities and risks such as financial, legal, operational, social and environmental risks as well as measures taken as a result. It monitors the management of both financial and extra-financial matters and ensures the quality of the information provided to shareholders and financial markets. It oversees the determination of the roadmaps and objectives proposed by General Management with regard to impacts, risks and opportunities, and monitors progress in achieving them.

It approves investments or divestments that exceed amounts greater than 3% of shareholders' equity and it is informed of those greater than 1%, taking into consideration the social and environmental stakes involved.

The Board of Directors is assisted by the four committees it has created: the Audit Committee, the Governance and Ethics Committee, the Compensation Committee, and the Strategy & CSR Committee. Without prejudice to the powers of the Board of Directors, each Committee of the Board of Directors is responsible for specific sustainability-related tasks.

The Audit Committee's mission is to ensure that the process for identifying and evaluating the Company's material impacts, risks and opportunities is implemented. To this end, it has reviewed the work carried out as part of the double materiality analysis. With regard to internal control and risk management procedures, the Audit Committee's mission is to monitor the effectiveness of internal control and risk management systems, as well as internal audit, in particular with regard to procedures relating to the preparation and processing of sustainability information, without prejudice to its independence, and in this context, its missions are notably to:

- ensure the existence of these systems, their deployment and the implementation of corrective actions in the event of identified weaknesses or anomalies;
- examine, notably on the basis of risk maps prepared by the Corporation, exposure to risks such as financial (including significant off-balance sheet commitments), legal, operational, social and environmental risks, and the measures taken as e result;
- annually examine the reports on the work of the TotalEnergies Risk Management Committee and the major issues for the Company;
- examine the annual work program of the internal auditors and being regularly informed of their work;
- review significant litigation at least once a year.

The Governance and Ethics Committee's mission is notably to supervise and monitor the implementation of the Corporation's approach with regard to ethics, compliance, the prevention and detection of corruption and influence peddling and, in this respect, ensure that the necessary procedures are in place, including those for updating the Company's Code of Conduct and ensuring that this Code is disseminated and applied.

The Governance and Ethics Committee examines the Company's Ethics and Compliance policy and the annual Ethics summary presented to it by the Chairman of the Ethics Committee (who reports to the Company's Chairman and Chief Executive Officer). The Ethics Committee assures compliance with the Code of Conduct and ensures its proper implementation.

The Compensation Committee's mission is to propose compensation structures to the Board of Directors that take into account the Company's strategic orientations, objectives and results, market practices as well as sustainability issues.

The Strategy & CSR Committee examines the Company's overall strategy as proposed by the Chairman and Chief Executive Officer, as well as matters relating to the Company's social and environmental responsibility and in particular those relating to the incorporation of Climate challenge in the Company's strategy. It also reviews transactions of exceptional strategic importance and reviews the competitive environment, the main challenges the Company faces, including with regard to social and environmental responsibility, as well as the resulting medium and long-term outlook for the Company.

More detailed information on the composition, role and work of the Board of Directors and its Committees is provided in point 4.1 of Chapter 4.

General management

The Executive Committee, chaired by the Chairman and Chief Executive Officer, ensures that climate-related issues are taken into account and built into operational roadmaps. The Executive Committee is responsible for identifying and analyzing risks that could affect the achievement of TotalEnergies' objectives.

The TotalEnergies Risk Management Committee (TRMC) assists the Executive Committee and ensures that the Company's risk mapping is updated on a regular basis and that its existing risk management systems are well adapted.

The Strategy & Sustainability Division coordinates the Company's activities through the entities in charge of strategy and markets analysis, sustainability and climate, as well as safety, health and environment, legal affairs, relations with public authorities and internal audit.

In terms of commitments, General management's control is exercised at operational level by the Executive Committee's approval of proposed capital investment commitments and expenditure exceeding defined thresholds. The Risk Committee (Corisk), chaired by the President Strategy & Sustainability, is tasked with reviewing these projects beforehand, and in particular with verifying the analysis of the various associated risks. The audit plan, based on an analysis of risks and the risk management systems, is submitted annually to the Executive Committee and to the Audit Committee (for internal control and risk management systems, please refer to point 5.1.2.5).

The Finance Division ensures an ongoing dialogue with investors, analysts and extra-financial rating agencies on climate challenges and on extra-financial issues more broadly. In all, more than 450 meetings were organized in France and abroad in 2024, as well as a field trip to Uganda; the latter included site visits to the Tilenga and EACOP projects as well as exchanges with several stakeholders.

5.1.2.2 Information provided to and sustainability matters addressed by the company's administrative, management and supervisory bodies (GOV-2)

Sustainable development in all its dimensions is at the heart of the Company's strategy and projects. Since 2021, every project presentation to the Executive Committee chaired by the Chairman and Chief Executive Officer includes a specific analysis of how sustainable development issues are taken into account. Project impacts and contributions are identified, focusing on the four axes around which the Company's commitment to contribute to the Sustainable Development Goals is structured: (i) climate and sustainable energy, (ii) caring for the environment, (iii) acting for the well-being of our employees, (iv) having a positive impact for stakeholders. In 2024, to make these commitments a reality, the Company has identified 5 "Levers for a Sustainable Change" to bring about collective change in our behaviors. Since January 2025, investment project files submitted to the Executive Committee have included a presentation on how the Levers "Energy Consumption", "Low-carbon operations", "Discharge in the environment", "Our Communities" and "Care" are taken into account in the projects examined by this body. The corresponding elements are reviewed by the Risk Committee, notably the measures taken to minimize consumption, emissions or discharges, the technologies or solutions studied and the choices made, as well as the mapping and engagement plan with stakeholders.

The Board of Directors and its specialized committees are informed of and deal with sustainability issues when examining the items on the agenda of their meetings, in accordance with legal and statutory provisions, internal regulations and the Afep-Medef Code (refer to point 4.1 of chapter 4).

The Chairman of the Board of Directors ensures that directors are provided with all relevant and critical information concerning the Company. In addition to the information provided in advance of Board meetings, directors may ask the General Management for any additional information they may require or find useful in the performance of their duties as directors.

In 2024, the Audit Committee notably reviewed the work involved in conducting the double materiality analysis, as well as all the material impacts, risks and opportunities that were identified in this context. The conclusions of this work were reported to the Board of Directors.

In addition, during fiscal year 2024, over and above the work involved in preparing the Sustainability Report, the Board of Directors, with the support of its specialized committees, took social and environmental issues into consideration in defining the strategic orientations of the Company and its business branches. It also takes into consideration the social and environmental challenges of investment and divestment transactions submitted for its information or approval at the time of their review.

The main activities of the Board of Directors and/or committees in relation to sustainability issues were as follows in 2024. Details of the work of the Board and its Committees are given in point 4.1.2.3 of chapter 4.

Risks/Audit	Strategy/Climate/Environment
CSRD training session	The Company's 5-year plan
Double materiality analysis: methodologies and IRO	Strategic outlook for Exploration &Production
Update on the Company's risk management system and the missions of the TotalEnergies Risk Management Committee (TRMC) - presentation of the work carried out by the TRMC	Strategic outlook for Gas, Renewables & Power activities
Presentation of the update to the Vigilance plan and the implementation report	Strategic outlook for Refining & Chemicals' activities
Update on the 2023 internal audit	Strategic outlook for Marketing & Services' activities
Presentation of the 2024 health, safety and environment audit plan and review of the fiscal year 2023	The Company's strategic environment: changes in energy markets (supply, demand) and benchmarking of majors' strategies
Review of cybersecurity audits carried out in 2023 and the first half of 2024	TotalEnergies' communication in France: current situation and action plan - make better recognized the Company's work in the energy transition and its leadership in the Oil & Gas sector
Update on the call for tenders for the selection of sustainability auditors and recommendation to the Board of Directors	Presentation of the Sustainability and Climate Strategy to investors
Climate litigation	Sustainability & Climate – Progress Report 2024, reporting on the progress made in the implementation of the Corporation's ambition with respect to sustainable development and energy transition and its related targets by 2030
	Investor Day 2024 presentation - Strategy & Outlook
	Major investments/divestments
	Approval of the Atapu 2 and Sépia 2 deep offshore oil projects in Brazil
	Approval of investment in Suriname (EP offshore)
	Update on EP project in Angola (block 20)
	Acquisition of gas assets in Malaysia
	Information on the acquisition of the VSB Group, a leading German renewable energy developer
	Answers to shareholders' written questions

Governance - Business conduct	Social issues and human resources
Assessment of the functioning of the Board of Directors	Review of equality policy between men and women in the workplace and in terms of pay
Report of the Lead Independent Director on his mandate	Review of the employee engagement survey (TotalEnergies Survey 2024) and lessons learnt
Feedback on the Lead Independent Director's roadshows	World plan for the allocation in 2024 of 100 free shares per eligible employee
Review of voting results at the Shareholders' Meeting on May 24, 2024, of the recommendations from main proxy advisors, votes cast by major shareholders and lessons learnt	2024 capital increase reserved for employees
Changes in the composition of the Board of Directors and its Committees	2024 grant performance share plan
Update on the succession plans	Setting of the compensation for the Chairman and Chief Executive Officer and directors for the 2023 fiscal year
Review of the Company's ethics and compliance policy	Compensation policy for the Chairman and Chief Executive Officer and directors for the 2024 fiscal year
Training of directors on the CSRD	
Information of the Audit Committee on compliance by relevant persons with the provisions of the Financial Code of Ethics	
Amendment of the Audit Committee's rules of procedure to include the new legal requirements resulting from the Ordinance of December 6, 2023 transposing the CSRD Directive into French law	
Approval of the URD chapter on corporate governance	
Market Abuse Regulation - Blackout periods	

5.1.2.3 Incentive mechanisms linked to sustainability performance (GOV-3)

In order to set a compensation aligned with the Company's performance, the variable portion of the Chairman and Chief Executive Officer's compensation takes into account both quantifiable targets (financial, Safety and GHG emission change parameters) and qualitative criteria (personal contribution).

Aware of the importance of climate challenges, the Board of Directors decided, starting in 2019, to change the criteria for determining the variable portion of the Chairman and Chief Executive Officer's compensation, in particular by including a quantifiable criterion related to the change in GHG emissions (Scope 1+2) from operated facilities, in addition to those introduced in 2016 so as to take more account of the achievement of the Company's CSR (corporate social responsibility) and HSE (health, safety and environment) objectives.

The extra-financial criteria for setting the annual variable compensation of the Chairman and Chief Executive Officer, as set out in the compensation policy for the 2024 financial year, account for 39% of the maximum variable portion.

In addition, since 2020, the criteria for awarding performance shares to the Chairman and Chief Executive Officer and to all the Company's employees have also included performance conditions related to climate targets.

For the 2024 grant performance share plan, award criteria linked to climate objectives account for 30% (15% of the award is linked to a life-cycle carbon intensity criterion for energy products sold to the Company's customers, and 15% to a criterion linked to changes in methane emissions).

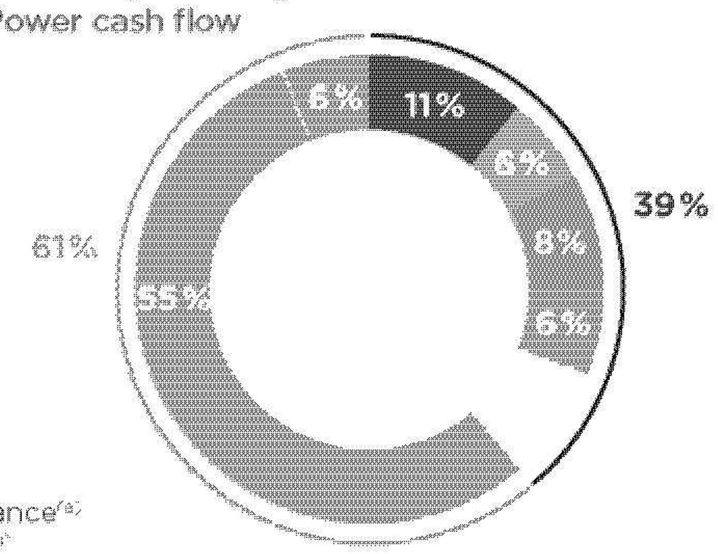
The Board of Directors has a proactive approach to this issue. The compensation policy for the Chairman and Chief Executive Officer is reviewed annually by the Board of Directors, on the recommendation of the Compensation Committee.

Details of compensation for fiscal year 2024 and the compensation policy for the Chairman and Chief Executive Officer for fiscal year 2025 are provided in point 4.3.2 of chapter 4. Directors' remuneration policy is described in point 4.3.1 of chapter 4.

Variable compensation aligned with the Company's strategic objectives

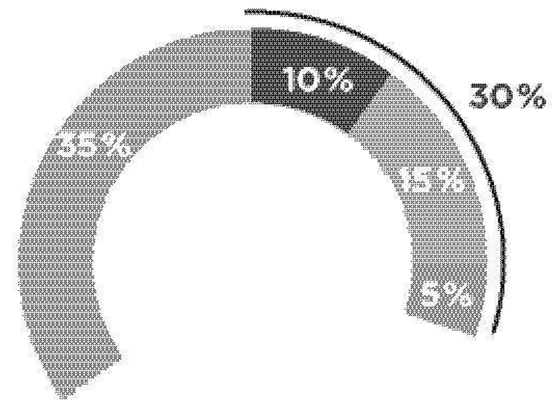
ANNUAL VARIABLE COMPENSATION

Chairman & CEO:
extra-financial criteria account for 39%;
financial criteria for 61%, including 6%
for Integrated Power cash flow



- Safety performance[a]
- GHG reduction[b]
- Supervision of the transition strategy[c]
- Profitability of renewables[c]
  CSR performance[b]
- Financial performance
  (Integrated Power cash flow included for 6%)[c]

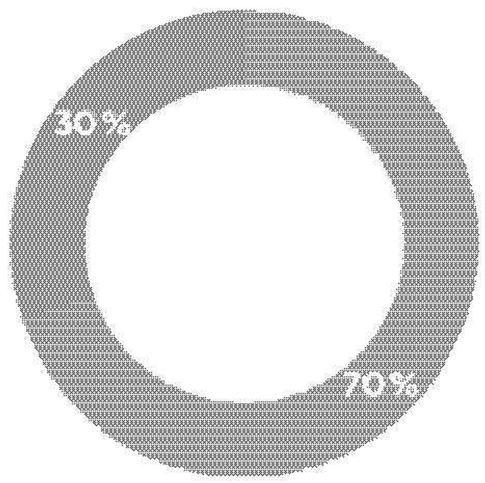
Senior Executives:
extra-financial criteria account for 30%



- Safety
- GHG reduction
  and carbon intensity
- Diversity
  Individual performance[b]
- Financial performance

PERFORMANCE SHARE PLAN

From the Chairman and CEO to all beneficiary employees[c]:
extra-financial criteria account for 30%



- Financial performance
- GHG reduction
  and carbon intensity

(a) Maximum percentage.
(b) According to the role.
(c) More than 12, 000 employees.

5.1.2.4 Statement on due diligence (GOV-4)

Essential elements of due diligence	Paragraphs in the Sustainability Report
a) Embedding due diligence in governance, strategy and business model	5.1.2.2 Information provided to and sustainability matters addressed by the company's administrative, management and supervisory bodies (GOV-2) 5.1.2.3 Incentive mechanisms linked to sustainability performance (GOV-3) 5.1.3.3 Material impacts, risks and opportunities and their interaction with strategy and business model (SBM-3)
b) Engaging with affected stakeholders in all key steps of the due diligence	5.1.2.2 Information provided to and sustainability matters addressed by the company's administrative, management and supervisory bodies (GOV-2) 5.1.3.2 Interests and views of stakeholders (SBM-2) 5.1.4.1 Description of the processes to identify and assess material impacts, risks and opportunities (IRO-1) 5.3.1.4 Social dialogue 5.3.2.2 Process for dialogue with value chain workers on impacts (S2-2) 5.3.3.2 Process of dialogue with affected communities 5.3.4 Consumers and end-users (S4) / Responsible business practices 5.4.1 Business conduct policy and corporate culture (G1-1)

Essential elements of due diligence	Paragraphs in the Sustainability Report
c) Identifying and assessing adverse impacts	5.1.4.1 Description of the processes to identify and assess material impacts, risks and opportunities (IRO-1) 5.1.3.3 Material impacts, risks and opportunities and their interaction with strategy and business model (SBM-3)
d) Taking action to address those adverse impacts	5.2.1.1 Strategy/ A. Transition strategy for climate change mitigation 5.2.1.2 Impact, risk and opportunity management/B. Actions and resources in relation to climate change policies (E1-3) 5.2.2.2 Targets, actions and resources related to pollution at operated sites (E2-2, E2-3) 5.2.3.4 Actions and resources (E3-2) 5.2.4.5 Actions and resources related to biodiversity and ecosystems (E4-3) 5.2.5.3 Actions relating to resource use and the circular economy (E5-2) 5.3.1 Company workforce (S1) 5.3.2.4 Description of actions concerning material impacts on value chain workers, approaches to managing material risks and seizing material opportunities concerning value chain workers, and effectiveness of these actions (S2-4) 5.3.3.3 Processes to remedy negative impacts and channels for affected communities to voice their concerns 5.3.4 Consumers and end-users (S4) 5.4 Corporate governance information
e) Tracking the effectiveness of these efforts and communicating	5.2.1.3 Metrics and targets 5.2.2.2 Targets, actions and resources related to pollution at operated sites (E2-2, E2-3) 5.2.2.3 Quantitative data on substance releases to water, air and soil (E2-4) 5.2.3.3 Voluntary targets related to water resources (E3-3) 5.2.3.5 Water indicators (E3-4) 5.2.4.4 Targets related to biodiversity and ecosystems (E4-4) 5.2.4.6 Impact indicators related to biodiversity and ecosystems change (E4-5) 5.2.5.2 Targets related to resource use and the circular economy (E5-3) 5.2.5.4 Raw materials used by TotalEnergies for its activities (E5-4) 5.2.5.5 TotalEnergies products from the circular economy and waste (E5-5) 5.3 Social information 5.3.2.5 Description of targets for managing material negative impacts, promoting positive impacts and managing material risks and opportunities (S2-5) 5.3.3.5 Targets for managing material negative impacts, promoting positive impacts and managing material risks and opportunities 5.3.4 Consumers and end-users (S4) 5.4 Corporate governance information

5.1.2.5 Risk management and internal control over sustainability reporting (GOV-5)

Main features of risk management and internal control processes relating to consolidated sustainability reporting

The internal control and risk management processes relating to consolidated sustainability reporting form part of the Company's overall internal control and risk management systems (refer to point 3.3 of chapter 3).

As regards sustainability, internal control covers the processes that feed sustainability reporting, and primarily the processes for producing and disclosing sustainability reports. The associated internal control system, based on the reference framework of the Committee of Sponsoring Organizations of the Treadway Commission (COSO), is designed to ensure compliance with regulations, the correct application of standards and methods for the preparation of sustainability information as well as the reliability of sustainability reporting by controlling the production of sustainability information and its consistency with the information used to prepare the dashboards at each relevant level of the organization.

The development and production of sustainability information is based on a system of accountability defined and formalized at all levels of the organization. The development, collection and consolidation of quantified sustainability indicators are based in particular on a reference framework of standards and integrated systems that enable data to be reported by business segments and operational entities in a timely fashion. The internal control of quantified sustainability indicators relies on:

- updating and controlling the scope of coverage;
- updating indicators and controlling calculation parameters;

- a consistency check on source data;
- data verification and consolidation at business segment level;
- consolidation checks at Company level.

Once produced, sustainability information is reviewed by General Management, then presented to the Audit Committee before being approved by the Board of Directors.

The main features of the risk management system for consolidated sustainability reporting are as follows:

- a set of calculation rules and methods formalized in industry guides;
- IT tools to automate data collection;
- validation of data consistency and reliability at each relevant level of the organization (entity, segment, functional line, holding company);
- monitoring of new sustainability standards in preparation as well as changes to the applicable in-house business line reference framework in order to assess and anticipate their impacts on the disclosing of sustainability information;
- framework notes specifying procedures and timetables for reporting.

Risk assessment

The assessment of the risks associated with the preparation and disclosure of sustainability information is based on an examination of:

- the characteristics of the information collected;
- the applicable management framework (rules, calculation methodologies);
- the perimeter, its evolution and the materiality of the various contributing entities;
- information reporting procedures, the applications that support these processes and the controls that govern their operation.

This examination identifies risks that could significantly affect data quality and integrity (completeness, accuracy, validation and security), taking into account their criticality.

The main risks in the process of compiling sustainability information and the associated controls relate to:

- data completeness (data sources not taken into account, incomplete scope of calculation and consolidation);
- their accuracy (input or calculation errors, incorrect application of measurement or conversion methods);
- data validation (insufficient or ineffective review);
- protection of data integrity (unauthorized access, accidental or malicious alteration or loss).

The risks and controls relating to the applications that support the production of sustainability information concern:

- assigning and updating IT access and other permissions;
- monitoring technical incidents and user anomalies;
- review of technical and functional developments;
- management of application outsourcing and internal control of solution providers.

Integration of risk assessment results and internal controls

The preparation and disclosure of consolidated sustainability information, like any TotalEnergies activity, process or management system, may be subject to internal audit by the Company's Audit & Internal Control department. The audit plan, which is based on an analysis of the risks and risk management systems, is submitted annually to the Executive Committee and the Audit Committee.

If areas of improvement are identified, this work is made the subject of action plans which are shared with operators and the implementation of which is closely monitored by the competent functional lines and entities and by the Audit & Internal Control Division. They may also contribute to the development of the reference framework applicable to the functional lines concerned.

Communication to administrative, management and supervisory bodies

The principles of control over sustainability reporting derive from the rules of corporate governance. These rules task the Board of Directors' Audit Committee with monitoring the effectiveness of the internal control and risk management systems and of the internal audit, particularly as regards the procedures for preparing and dealing with accounting, financial and extra-financial reporting. The assessment of the internal control and risk management system is mainly overseen by the Audit & Internal Control Division, which belongs to the Strategy & Sustainability Division. In addition, consolidated sustainability information is reviewed and on the basis of this work the statutory auditors issue an opinion of limited assurance or, for certain indicators, reasonable assurance.

The reports on the work performed by the Audit and Internal Control division on the one hand and the statutory auditors on the other take the form of annual summaries which are reported to the Audit Committee and, through o to the Board of Directors.

5.1.3 Strategy (SBM-1 to SBM-3)

5.1.3.1 Strategy, business model and value chain (SBM-1)

TotalEnergies is a global integrated multi-energy company producing and supplying energy: oil and biofuels, natural gas, biogas and low-carbon hydrogen, renewables and electricity. With more than 100,000 employees, TotalEnergies' mission is to provide more affordable, available and sustainable energy to as many people as possible. Present in some 120 countries, TotalEnergies places sustainable development at the heart of its strategy, projects and operations.

OUR STRATEGY

TotalEnergies continues to implement its integrated multi-energy strategy, which is balanced with the evolution of the oil, gas and electricity markets. Anchored on two pillars - hydrocarbons, in particular LNG, and electricity, the energy at the heart of the transition - the Company is deploying its balanced transition strategy while guaranteeing an attractive policy of return to shareholders.

To execute this strategy, TotalEnergies plans to invest $14 to $18 billion per year across cycles, including $4 to $5 billion per year in low-carbon energies. With its broad portfolio of assets, the Company can remain selective when it comes to external growth in *oil & gas*. Moreover, it retains the flexibility to arbitrate projects in response to market conditions should the need arise.

OUR AMBITION OF CARBON NEUTRALITY BY 2050, TOGETHER WITH SOCIETY

The energy transition is underway and the growth in renewable electricity production across the world is paving the way for the decarbonization of energy. However, energy demand trajectories are still a long way from the scenarios compatible with the Paris Agreement.

The energy transition requires the participation of all stakeholders, from regulators to end customers, and industrial players. TotalEnergies is deploying a strategy that supports this collective transition and will enable our Company to adapt to the different scenarios that may materialize, depending on developments in low-carbon technologies (adoption rate, cost reduction), geopolitical relations and international trade and consumer behavior. In a scenario where low-carbon electrification continues to grow, both in power generation and uses, and which would enable an affordable low-carbon molecules on a large scale, TotalEnergies shares a possible vision of what its own activities could be as part of its ambition of carbon neutrality by 2050, together with society.

By 2050, TotalEnergies would produce:

- about 50% of its energy in the form of electricity, including the corresponding storage capacity, totaling around 500 TWh/year, on the premise that TotalEnergies would develop about 400 GW of gross renewable capacity;
- about 25% of its energy, equivalent to 50 Mt/year of low-carbon energy molecules in the form of biogas, hydrogen, or synthetic liquid fuels from the circular reaction: H_2 + CO_2 -> *e-fuel*
- around 1 Mboe/day of Oil & Gas, primarily liquefied natural gas (about 0.7 Mboe/d, or 25-30 Mt/year) with very low-cost oil accounting for the rest. Most of that oil would be used in the petrochemicals industry to produce about 10 Mt/ year of polymers, of which two thirds would come from the circular economy.

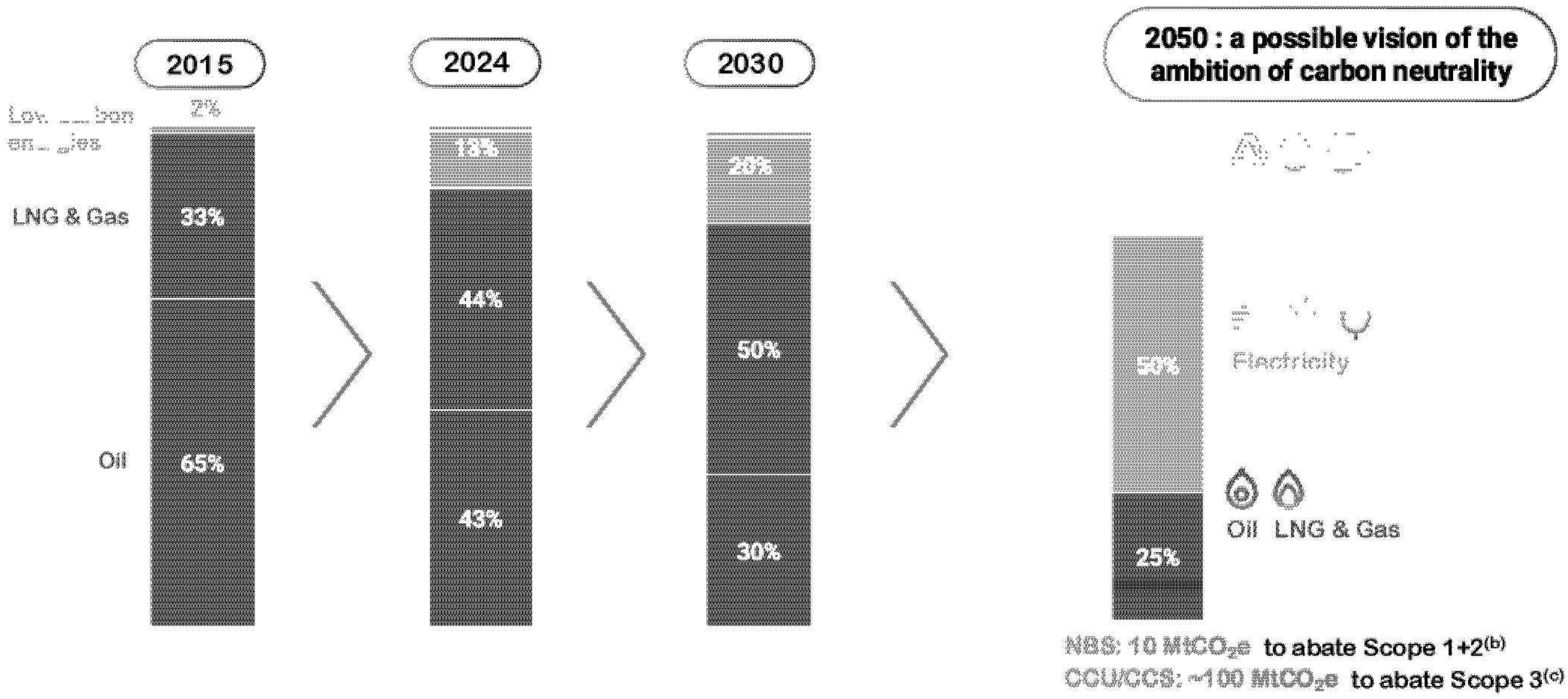
These hydrocarbons would represent:

- about 10 Mt CO_2e/year of Scope 1+2 residual emissions, including methane emissions aiming towards zero (below 0.1 Mt CO_2e/ year); those emissions would be fully offset by nature-based carbon sink projects.
- Scope 3 emissions[1] totaling about 100 Mt CO e/year. As part of its ambition of carbon neutrality by 2050, together with society, TotalEnergies would contribute to "eliminate" the equivalent of 100 Mt/ year of CO_2 generated by its customers by developing carbon utilization (CCU) and carbon capture and storage (CCS) solutions.

In 2050, our trading portfolio would be aligned with our productions and sales.

A possible vision of the ambition of carbon neutrality by 2050, together with society

TotalEnergies sales mix



(a) Biofuels, biogas, hydrogen and e-fuels/e-gas.
(b) From operated facilities.
(c) GHG Protocol – Category 11 – Refer to the glossary for the definition.

2030: OUR OBJECTIVES FOR MORE ENERGY AND LESS EMISSIONS

Over the decade 2020-2030, TotalEnergies' energy transition strategy based on two pillars is reflected in the production targets shown below.

TotalEnergies plans to **increase its energy production (oil, gas and electricity), overall by 4% per year between 2024 and 2030.**

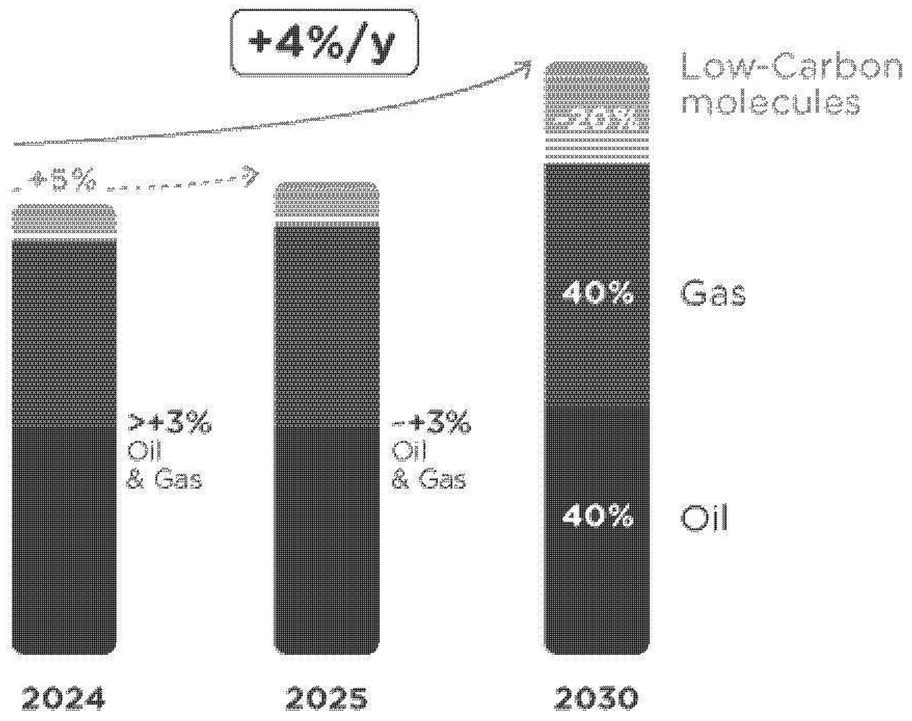
In 2025, the electricity production should account for 10% of its hydrocarbon production. By 2030, its objective is to increase it to nearly 20%.

At the same time, the Company is pursuing its trajectory of reducing its net emissions (Scope 1 + 2 CO_2 and methane) from its operated facilities, with the aim of cutting them by 40% by 2030 compared with 2015.

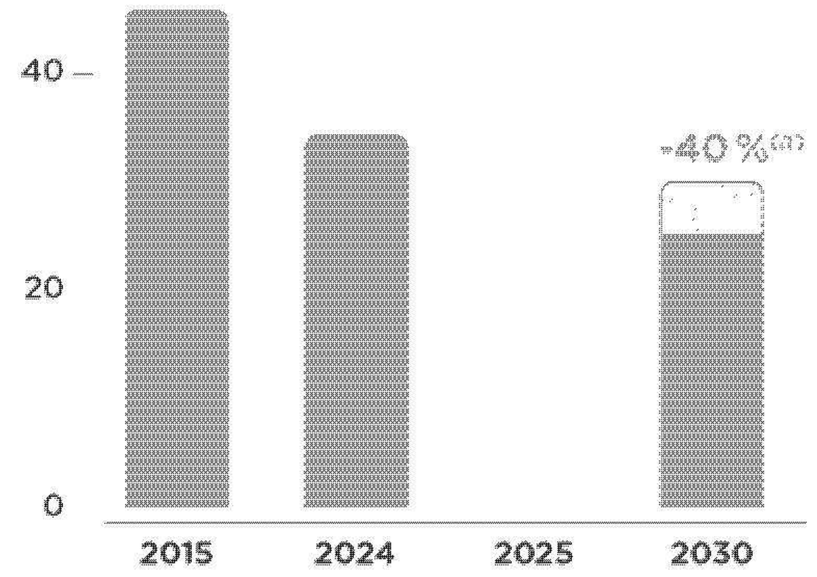
The growth of TotalEnergies electricity sales allows to target a 25% reduction in the lifecycle carbon intensity[2] of its sales by 2030 compared to 2015.

(1) GHG Protocol - Category 11.Report to Glossary for further details.
(2) Lifecycle carbon intensity of energy products sold (refer to the glossary).

Energy Production (in PJ/d)

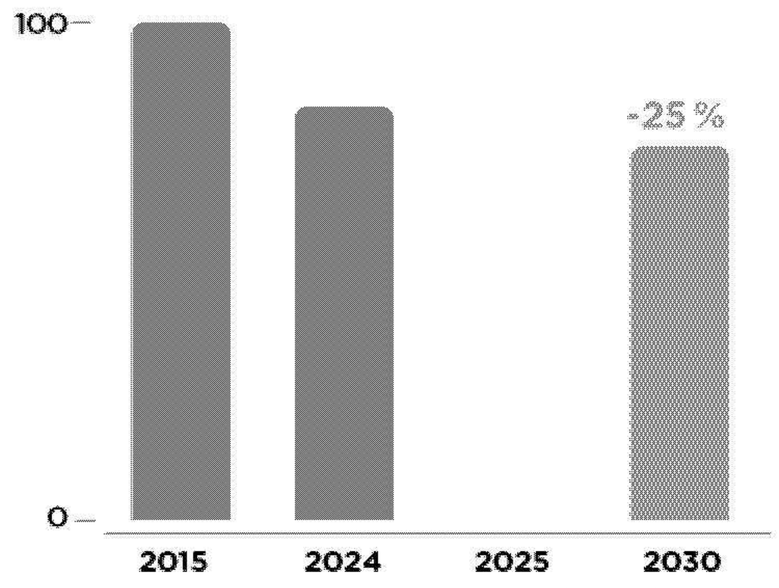


GHG Emissions, Scope 1+2 from operated facilities (Mt CO_2e)



(a) Net of nature based carbon sinks.

Lifecycle carbon intensity of sales(a) (Scope 1+2+3 base 100 in 2015)



(a) Lifecycle carbon intensity of energy products sold (refer to the glossary).

BUSINESS MODEL AND VALUE CHAINS

TotalEnergies' value-creation model is based on integration across the entire energy value chain (refer to point 1.1.3 of chapter 1): from oil and gas exploration and production, power generation, refining, natural gas liquefaction, petrochemicals, energy trading, transportation and storage, to energy distribution to end-users.

This integrated model enables the Company to take advantage of the synergies that exist between its various activities, while responding to the volatility of raw material prices. It expresses the complementary nature of the Company's Upstream activities, which are more dependent on oil prices, with those of its Downstream activities, which, when cycles are low, can benefit from added value that the Upstream would not otherwise enjoy. The integration of activities across the entire value chain makes it possible to resist better at the bottom of the cycle, while fully capturing margins across the entire value chain when the market is more favorable. This integrated model is also applied by TotalEnergies to the electricity and renewable energies businesses within Integrated Power, where the Company has positioned itself as the second pillar of its growth, alongside the pillar *oil & gas* . The Company provides them with the leverage of the know-how and resources of its business model: global brand and coverage, technical expertise in *offshore* and *trading*, and partnerships with governments and local authorities. Accelerating growth in electricity and renewable energies has diversified the Company's geographic risk profile.

The Company's strategy of balanced transition, in favor of the energy transition, strengthens the sustainability and resilience of its value creation model.

HYDROCARBONS VALUE CHAIN

Upstream oil & gas activities - A sustainable, low-cost, low-emissions portfolio

TotalEnergies' Upstream encompass oil and gas exploration and production. They are carried out in around 50 countries.

In 2024, production reached 2.4 Mboe/d, including 1.5 Mboe/d of oil and 1.1 Mboe/d of gas. The Middle East - North Africa zone accounts for 33% of production, Europe 23%, Africa 19%, the Americas 15% and Asia-Pacific 10%. It has 12.4 years of proven reserves and 18.5 years of proven and probable reserves.

In 2024, global demand for petroleum products reached 102.9 Mb/d, i.e. + 0.94 Mb/d (+~1%) compared with 2023, and should continue to grow over the decade (105.6 Mb/d in 2029 according to the IEA(1)). Beyond 2030, the trajectories of the various forecasters vary between moderate growth, a plateau and the start of a decline. These demand forecasts remain dependent in particular on demographic and economic growth, the rate of penetration of low-carbon technological innovations such as electric vehicles, and changes in behavior. In addition, demand is likely to evolve differently according to the energy transition roadmaps of the various countries. For example, oil demand could begin to decline between 2030 and 2040, but at a slower rate than the current natural rate of decline of existing fields (around 5% per year).

TotalEnergies therefore considers that new oil projects are needed to meet this demand and keep prices at an acceptable level, so as to create the conditions for a just transition that allows people time to adapt their energy use.

(1) Source: IEA, Oil 2024, June 2024.

The Company takes sustainability issues into account in its activities Upstream through a strategy that aims both to meet growing global demand over the decade (driven in particular by demographic growth in emerging countries) and to develop a sustainable portfolio with low costs and low GHG emissions.

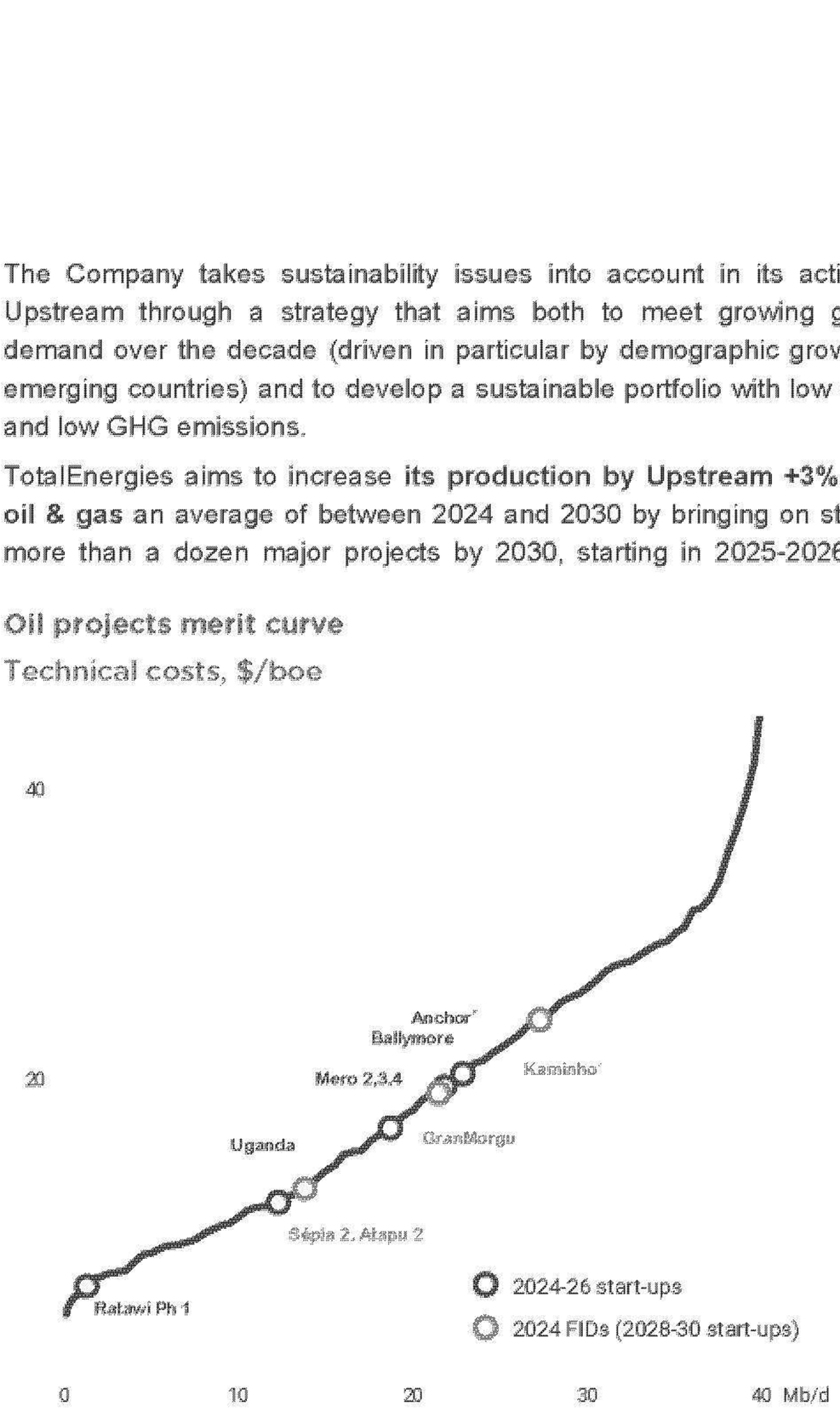
TotalEnergies aims to increase **its production by Upstream +3%/year oil & gas** an average of between 2024 and 2030 by bringing on stream more than a dozen major projects by 2030, starting in 2025-2026 (oil: Anchor, Ballymore in the United States, Mero 2-3-4 in Brazil, Ratawi Phase 1 in Iraq and Tilenga in Uganda and gas: Fenix in Argentina and Jerun in Malaysia).

In addition, the Company has sanctioned projects in 2024 to ensure its medium-term growth. The main oil projects are Kaminho in Angola, Sepia 2 and Atapu 2 in Brazil and GranMorgu in Suriname.

The projects developed are well positioned on the merit curve, enabling them to generate value for the Company even in a low-price scenario.

Oil projects merit curve

Technical costs, $/boe



* After tax breakeven ~25 $/b.

Sources: Merit curve: Rystad (projects starting up in 2024–2030), TotalEnergies projects: internal data, shareholder view.

Over the past 10 years, TotalEnergies has overhauled its upstream oil portfolio to refocus on the least expensive fields to develop, with a technical cost of less than $20/b or a breakeven point after taxes of $30/b and low emissions averaging **17 kg CO_2e/b in 2024**. Thus, in 2021, the Company withdrew from Venezuela and in 2023 sold its oil sands production activities in Canada. In 2024, TotalEnergies continued to review its portfolio and dispose of non-strategic assets. It finalized the sale of the EP subsidiary in Brunei to Hibiscus Petroleum Berhad in 2024 and the sale of a 53.5% interest in the Nkossa and Nsoko permits in Congo to Trident Energy in early 2025. In addition, it has signed agreements with The Prax Group to sell its interests in all its West of Shetland assets in the UK - and with Chappal Energies to sell its 10% interest in the production licenses of the SPDC joint-venture in Nigeria, while retaining a full economic interest in these licenses, which currently account for 40% of Nigeria LNG's gas supply.

Faced with uncertainties in assessing demand, TotalEnergies implements a disciplined and sustainable investment strategy on short-cycle projects, and maintains the competitiveness of its portfolio by activating various levers aimed at achieving a low breakeven point. The flexibility of its portfolio enables it to adjust its investments and production to the pace of the energy transition, notably through the natural decline of the fields in its portfolio.

Faced with the challenge of climate change, TotalEnergies is committed to promoting the use of natural gas, the lowest-emission fossil fuel, which emits half as much greenhouse gas as coal when used to generate electricity[1] . In 2015, TotalEnergies ceased its coal production activities with the sale of Total Coal South Africa.

Liquefied Natural Gas activities

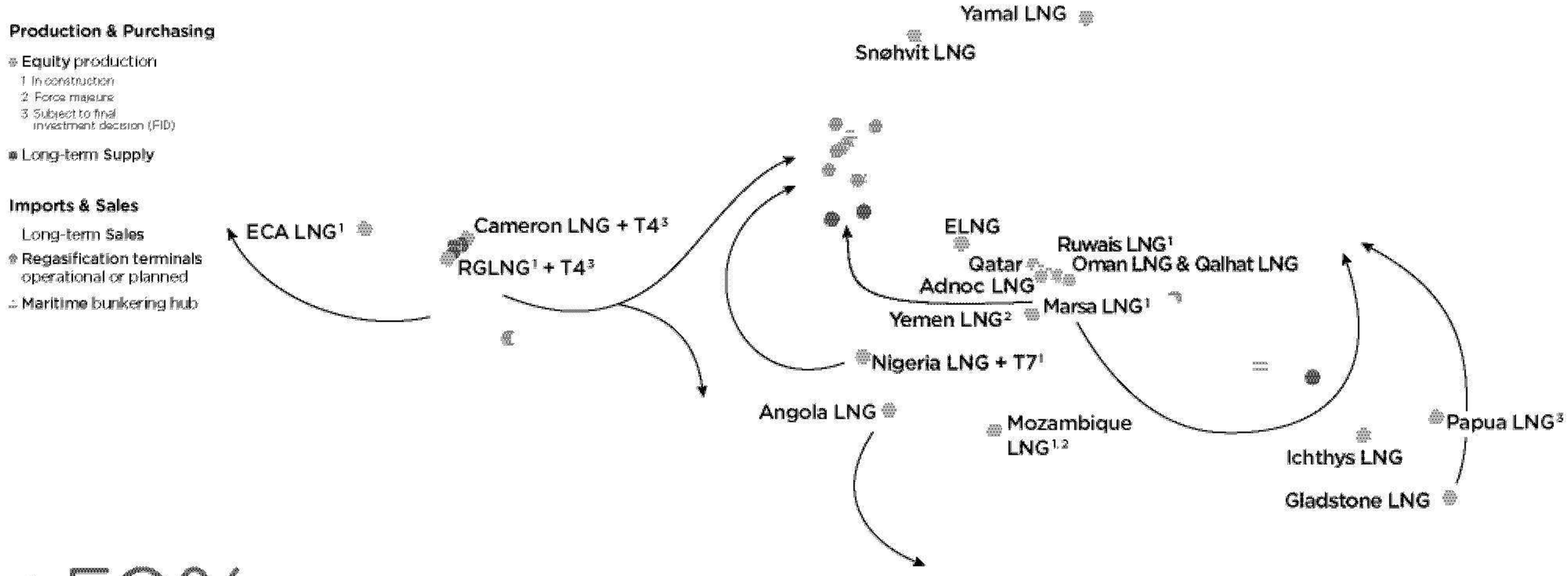
Within the gas markets, TotalEnergies' priority is to position itself across the entire liquefied natural gas value chain (including upstream and LNG activities, *midstream*, gas trading, transport and sales), a global market expected to grow by 5 to 6% a year between 2023 and 2030[2].

TotalEnergies intends to consolidate its position as a major player in the LNG value chain, as it is an energy that favors transition. Although it is a fossil fuel, gas half as emits much as coal in electricity generation[3]. In addition, gas is a flexible complement to intermittent and seasonal renewable energies for electricity generation.

3e the world's largest LNG player, with a diversified sales portfolio of ~40 Mt in 2024 and a market share of around 10% in 2024, TotalEnergies is the leading importer in Europe. TotalEnergies' LNG sales reached 13.8 Mt in 2024, compared with 22.8 Mt in 2023 and 26.5 Mt in 2022, and it has a regasification capacity of almost 21 Mt/year. The Company is also the leading exporter to the United States (with more than 10 Mt in 2024[4]).

(1) Source:IEA, The Role of Gas in Today's Energy Transitions.
(2) Source: TotalEnergies internal projections.
(3) Source: IEA, The Role of Gas in Today's Energy Transitions.
(4) Source: TotalEnergies data

A diversified, integrated portfolio, resilient through cycles



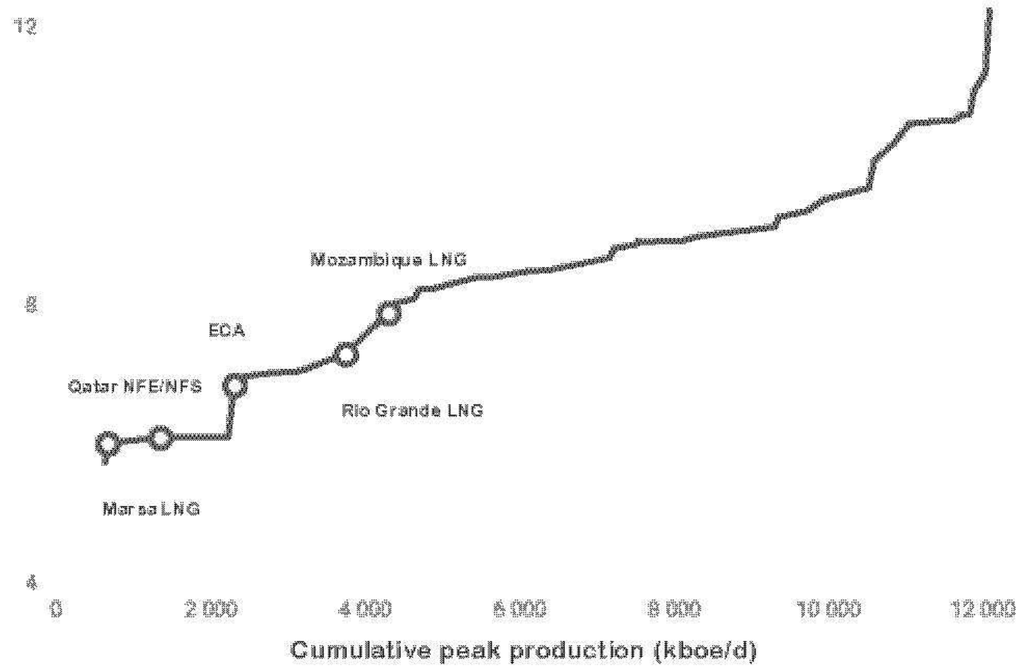
TotalEnergies is strengthening its presence upstream, through stakes in liquefaction plants located in major production zones. LNG volumes managed by TotalEnergies (excluding volumes from Russia and spot volumes) are set to grow by 50% between 2023 and 2030, with the commissioning of North Field East in Qatar, Nigeria LNG T7 and ECA in Mexico in 2026. From 2027 to 2028 will follow the start-ups of other projects currently under construction: Qatar North Field South, Rio Grande LNG in the United States and Marsa LNG in Oman.

The Company enhances the flexibility and resilience of its LNG portfolio by investing in competitive projects that are best positioned on the merit curve (refer to chart below). This strategy enables it to take advantage of both the high cycles with higher prices and the low cycles expected following the launch of +30% additional capacity by 2027-2029, when it should benefit from the recovery in global demand.

In addition, the Company has undertaken to reduce its exposure to indices *spot* gas by signing long-term contracts, with 4 Mt/year of medium-to-long-term sales contracts signed in 2024 in Asia, mainly indexed to Brent and offering more arbitrage options. To reduce its exposure to the American Henry Hub index, TotalEnergies is strengthening its upstream integration, notably through the position it is currently building in the Eagle Ford and Barnett basins.

LNG projects merit curve

$/mcf DES Asia, breakeven at 11% discount



Sources: Merit curve: 2024 Goldman Sachs Top Projects (HH= 3 $/Mcf), TotalEnergies projects: internal data, shareholder view.

Downstream activities

TotalEnergies is active in downstream oil activities through:

- Refining-Chemicals, which includes refining, base petrochemicals (olefins and aromatics), polymer derivatives (polyethylene, polypropylene, polystyrene, hydrocarbon resins) including biopolymers and recycled polymers obtained by chemical or mechanical recycling, as well as the production of biofuels from biomass processing, and the production of specialty fluids. The Refining-Chemicals business also includes Hutchinson's elastomer processing activities. These activities are mainly based in Europe.
- Marketing & Services, present in over 100 countries, comprises the worldwide supply and marketing of petroleum products and services, low-carbon fuels and new energies for mobility. Its main markets are in France, Africa and, to a lesser extent, the Americas and Asia-Pacific.

- Trading-Shipping, whose primary mission is to sell the Company's crude oil production on world markets, supply TotalEnergies' refineries competitively, charter the vessels required for these activities, and intervene on the various derivatives markets.

TotalEnergies' Downstream business has been a steady contributor to the Company's results while transitioning and adapting its activities to focus on high value-added markets. In particular, it aims to align its refined and sold volumes with its Upstream production (down -15% for refined volumes and -30% for sold volumes since 2019).

The Company is addressing the sustainability challenges of its downstream activities through 3 levers:

- Lowering the breakeven point of its refining-petrochemicals assets in a cyclical industry,
- Reducing GHG emissions from its operations,
- Offering customers low-carbon mobility solutions.

In Refining & Chemicals, TotalEnergies is strengthening the resilience of its assets across cycles by capitalizing on the most important platforms, lowering their breakeven points and emissions. TotalEnergies is implementing its cost reduction program for the period 2023-2025, enabling energy savings of $100 M/year. A similar program is planned for the period 2026-2028. These projects focus on the electrification of its processes and heat recovery, enabling it to reduce its GHG emissions by 1 Mt/year.

In petrochemicals, it sanctions the most profitable and resilient projects with access to competitive feedstock, such as the Admiral project in Saudi Arabia, scheduled to come on stream in 2027.

In biofuels, TotalEnergies is capitalizing on its existing assets to produce low-capital-cost SAF (Sustainable Aviation Fuels) by *co-processing* feedstocks from waste and residues (used cooking oils and animal fats), excluding first-generation 1G biomass (which competes with food consumption), in existing jet plants or by converting existing refineries into biorefineries. In addition, it secures access to competitive feedstock through partnerships with waste and residue suppliers, such as the one signed with Saria, and through its biofuels trading business. The company works closely with airlines to define SAF specifications, and has signed strategic partnerships with Air France-KLM and Airbus.

Main Refining & Chemical plants as of 31 December 2024

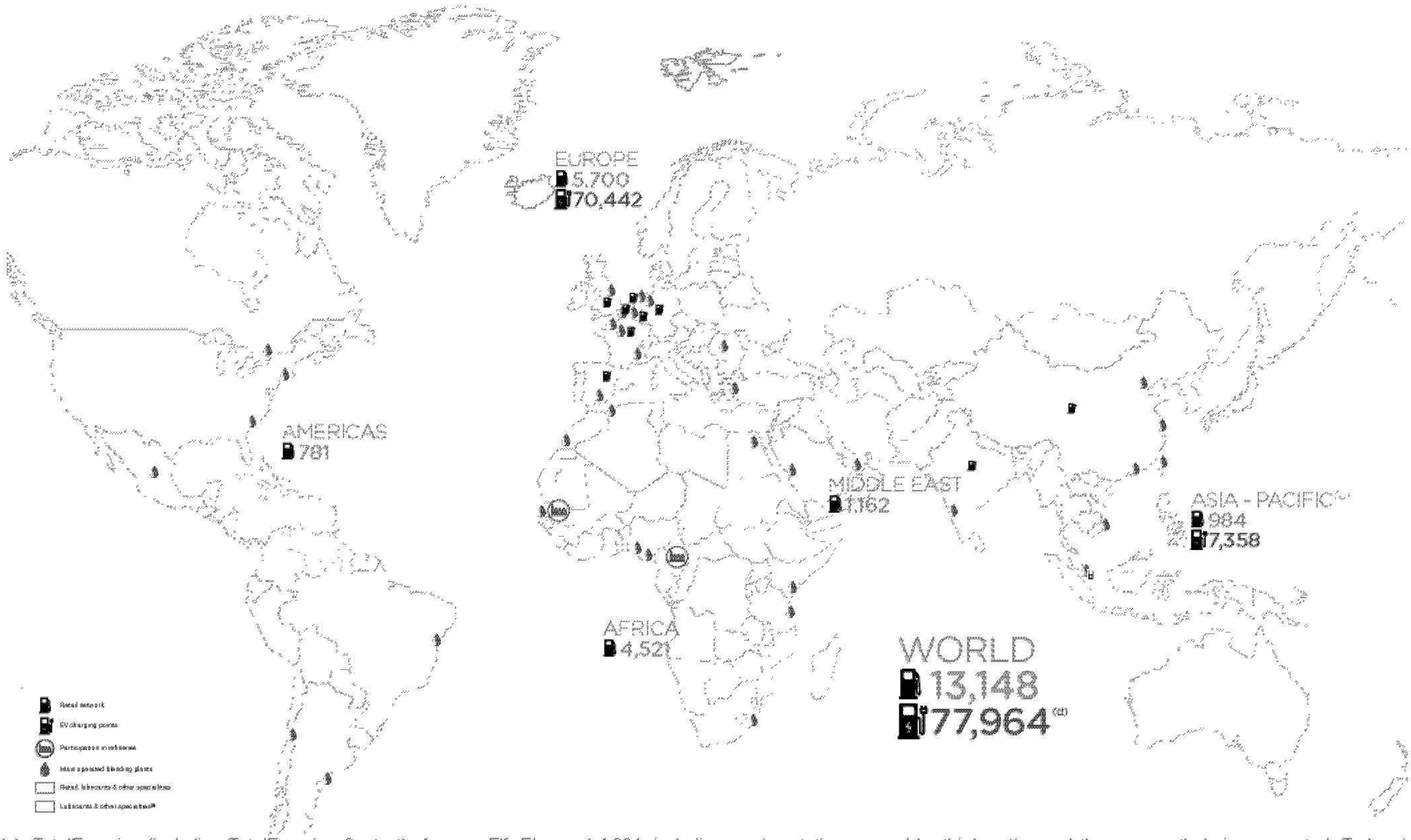


Finally, for Marketing & Services TotalEnergies is developing a three-fold strategy:

- Network: focusing on geographies where it has a competitive advantage, such as France, Africa and certain niche markets, in order to adapt to the evolving demand for petroleum products, particularly in Europe as part of the implementation of the "Fit for 55" program.
- Lubricants: differentiating in high value-added, high-margin products and develop more sustainable products to meet growing demand for circular products (RRBO)[1].
- Electric mobility: expand our footprint in high-power charging in Europe and develop a low-equity business model (partnerships and leverage).

(1) Re-Refined Base Oils.

Global presence in Marketing & Services as of 31 December 2024[a]



(a) TotalEnergies (including TotalEnergies Contact), Access, Elf, Elan and AS24, including service stations owned by third parties and those currently being converted. Turkey is included in the Middle East.
(b) Lubricants, LPG, jet fuel, special fluids, bitumen, marine fuels, additives and special fuels.
(c) Including the Indian Ocean islands.
(d) Including 164 charge points in Americas and Africa.

ELECTRICITY VALUE CHAIN

Essential for a successful energy transition, electricity demand, is expected to grow by almost 3%/year over the decade, driven by the electrification of emerging countries[1], the decarbonization of countries committed to a net-zero roadmap, and the digitization of uses. To meet this demand, Integrated Power, the second pillar of the Company's strategy, is developing an integrated model covering the entire value chain, from power generation to sales activities, and should account for 20% of TotalEnergies' hydrocarbon production by 2030. The profitability objective for this sector includes achieving a positive free cash flow[2] by 2028 and a ROACE[3] of approximately 12% by 2028-2030, aligning with its *oil & gas* activities in an price environment of a Brent at $60/b.

TotalEnergies plans to produce more than 100 TWh of electricity on an equity share basis by 2030, of which around 70% from renewable sources and 30% from flexible assets. As part of its transformation into an integrated multi-energy company, TotalEnergies is building a competitive portfolio of renewable assets (solar, onshore and offshore wind) and flexible (CCGT, storage) to provide its customers with increasingly low-carbon electricity available 24/7.

In 2024, over **70%** of TotalEnergies' electricity production **is located in deregulated markets,** mainly in Europe, the United States (ERCOT and PJM) and Brazil. The Company intends to maintain this ratio anticipating sustained and volatile electricity prices, in a context of strong demand growth and supply constraints. In these deregulated markets, the Company is implementing an integration strategy across the electricity value chain, keeping approximately 30% of its electricity production exposed to market fluctuations. To do so, on the Company leverages its renewable generation capacity, storage solutions, its flexible generation and its power trading activities to capture the best prices.

To this end, the Company is developing specialized expertise in electricity trading particularly in short-term markets, flexibility management activities and the structuring of Corporate PPAs.

In regulated markets, TotalEnergies is implementing a targeted growth strategy:

- in oil- and gas-producing countries, to support their energy transition relying on the Company's local presence and historical activities to develop multi-energy projects, particularly in renewables;
- in the rest of the world, it is selectively developing projects, notably through strategic partnerships with local players.

The key levers for achieving profitable growth with an average of return on capital reaching 12% include selectivity in project choices, integration across the entire electricity value chain, cost control by leveraging the Company's expertise in project management and offshore development, mobilization of external financing at competitive rates and farm-downs to accelerate cash flow generation and diversify portfolio exposure.

(1) Source: IEA Electricity Market Report Update - July 2024.
(2) Refer to the glossary for definitions and additional information on alternative performance measures (APM, Non-GAAP measures) and to point 1.9 for reconciliation tables.
(3) Refer to the glossary for definitions and additional information on alternative performance measures (APM, Non-GAAP measures) and to point 1.9 for reconciliation tables.

BREAKDOWN OF SALES FROM HYDROCARBON ACTIVITIES

Sales *(in $M)*[a]	2024
Oil	137,158
Gas	20,012
Cumulative	**157,170**

(a) Sales shown above correspond to Revenues from sales as presented in the consolidated statement of income, i.e. sales minus excise taxes.

SALES FROM FOSSIL-GAS-RELATED ECONOMIC ACTIVITIES ALIGNED WITH TAXONOMY REGULATIONS

TotalEnergies does not recognize sales generated by economic activities, aligned with the taxonomy, related to fossil gas, in accordance with article 8, paragraph 7, point a) of the Commission Delegated Regulation (EU) 2021/2178 (refer to point 5.2.6.3).

NUMBER OF EMPLOYEES BY GEOGRAPHIC AREA

Headcount as of December 31	2024
Total number of employees	102,887
Breakdown by region	
Europe	62.1%
of which France	*34.5%*
Africa	10.8%
North America	5.9%
Latin America	13.8%
Asia-Pacific	6.6%
Middle East	0.9%

5.1.3.2 Interests and views of stakeholders (SBM-2)

In TotalEnergies' view, dialogue with its internal and external stakeholders is essential for the Company to conduct its business responsibly and integrate the long-term challenges of sustainable development in its strategy and policies.

This dialogue contributes to the identification of the main risks and impacts of the Company's activities, an more broadly to a better understanding of changing trends and the main societal expectations of each of the major categories of stakeholders. It is also a prerequisite to ensuring that the Company is firmly integrated in its host regions, as well as an effective tool for identifying ways to generate value at the local level.

TotalEnergies believes that transparency is an essential principle of action in building a trust-based relationship with its stakeholders and ensuring that the Company is on a path of continuous improvement.

For many years, TotalEnergies has been ensuring that it reports on its performance based on the various reporting frameworks commonly used in extra-financial matters.In addition, the Company continues to refer to the standards of the GRI (Global Reporting Initiative) and SASB (Sustainability Accounting Standards Board), and includes in its reporting the "Core" indicators proposed by the World Economic Forum[1] (refer to chapter 11), and the recommendations of the TCFD (Task Force on Climate-related Financial Disclosures) for its climate reporting. TotalEnergies also responds to the CDP water and climate questionnaires.

Wanting to provide the performance indicators to its stakeholders, TotalEnergies publishes additional information on its website on the pages dedicated to its sustainable development approach.

TotalEnergies has structured its dialogue processes with its stakeholders at different levels of the Company, through relays within the organization, requirements included in internal reference frameworks, the deployment of a methodology for conducting local dialogue and a dedicated attention to the professionalization of the teams responsible for fostering that dialogue. Those measures are designed to develop a long-term, trust-based relationship founded on principles of respect, attentiveness, constructive dialogue, proactive engagement and transparency, consistent with the legitimate need for confidentiality as appropriate. They also ensure that stakeholder warnings or grievances to be gathered and addressed quickly and that potential controversial situations defused.

At a corporate level, each group of stakeholders (employees, employee representatives, customers, investors, shareholders and the financial sector, government officials, suppliers, academics, NGOs and civil society, and the media) has a single point of contact at the corporate level, responsible for responding to their requests, keeping them informed and maintaining an ongoing dialogue in formats appropriate to each concern.

Those stakeholder liaisons also provide advice and support to Company subsidiaries when needed. The One MAESTRO framework *(Management and Expectations Standards Toward Robust Operations)* provides that subsidiaries should conduct a stakeholder mapping and engage in a structured, ongoing process of dialogue with stakeholders to keep them informed, hear and address their concerns and expectations, report on mitigation actions or compensation, measure their satisfaction and identify ways the subsidiaries can improve their societal outreach. This commitment to local dialogue puts special emphasis on residents and communities located near Company facilities.

Additionally, preparing and holding the Shareholders' Meeting feeds the dialogue that the Company maintains with its various stakeholders (investors, shareholders, NGOs). It is one of the ways in which the Board of Directors is informed of the views and interests of stakeholders.

(1) Measuring Stakeholder Capitalism Towards Common Metrics and Consistent Reporting of Sustainable Value Creation, White paper, September 2020.

The table below gives a non-exhaustive list of the main channels for dialogue with stakeholders:

Employees		More information
Main stakeholders	– More than 100,000 employees – Employee representative bodies – Trade unions and employee associations	Sections S-1 and 3.6
Main modalities of dialogue	– Surveys and questionnaires – Negotiation, concertation, consultation or information of representative bodies – Signing of agreements – Processing of alerts	
Main tools and frameworks for dialogue	– 2 internal opinion surveys[1] alternating every other year: – TotalEnergies Survey: more than 90,000 employees in 122 countries where asked to participate in the latest edition of this 2024 survey; – TotalEnergies Pulse Survey: nearly 45,000 employees participated in this first edition conducted in 2023 – TotalEnergies European Works Council – Employee representative bodies and collective bargaining: 92.3% of employees had trade union representation and/or employee representation in 2024; 346 agreements signed with employee representatives worldwide were in force in 2024 – Membership of and participation in the Global Deal[2] (since 2017) – Whistleblowing mechanisms	
Main entities/teams involved	– Human resources	
Main topics of common interest and identified expectations	– Health and safety – Physical and mental health, well-being at work, working hours, work organization – Compensation – Training, employability and skills, mobility – Equal opportunity, diversity – Social dialogue – Respect for human rights in the workplace – Social and environmental responsibility	
Stakeholders interests and points of view taken into account	– The surveys (TotalEnergies Survey, Pulse Survey) are part of a continuous improvement cycle that allows to identify areas for improvement at all levels of the Company as well as the construction and deployment of managerial and HR action plans. – Beyond these surveys, exchange formats between employees and members of the Executive Committee are organized to listen to and consider their proposals on key subjects of the Company.	

Investors and financial players		More information
Main stakeholders	– Individual shareholders – Institutional investors – Investor coalitions – Financial and extra-financial analysts – Financial and extra-financial rating agencies – Market regulators	Sections E-1 to E-5, S-1 to S-4,G-1 Chapters 3,4,6 and 11
Main modalities of dialogue	– Financial and extra-financial publications – Individual or group meetings – Questionnaires and engagement with rating agencies and analysts (financial and/or extra-financial)	
Main tools and frameworks for dialogue	– Investor presentations on the occasion of the disclosure of annual and quarterly results, and during annual events: "Strategy, Sustainability & Climate" event in March, and at the "Strategy & Outlook" event in September – Approximately 1,200 meetings held (individual interviews and roadshows),450 specific exchanges on extra-financial topics and a field trip in Ouganda in April 2024 – Written answers to commitment letters from shareholders or investor groups such as Climate Action 100+	

(1) TotalEnergies Survey is an in-house opinion survey for all the employees worldwide allowing the Company to gather their views and expectations with regard to their working situation and their perception of the company,both locally and Company-wide. TotalEnergies Pulse Survey is a complementary survey to the TotalEnergies Survey, launched in 2023 by decision of the Executive Committee to enable employee engagement to be measured each year, conducted on a scope Company excluding Hutchinson.
(2) International initiative of the OECD and ILO in favor of labor relations

Investors and financial players		More information
	– Annual Shareholders' Meeting: answers given to the questions asked online via the dedicated platform, answers given to written questions. For the 2024 Shareholders' Meeting, the Board of Directors submitted to a consultative vote of the shareholders of TotalEnergies SE, the Sustainability & Climate - Progress Report 2024 reporting on the progress made in the implementation of the Corporation's ambition with respect to sustainable development and energy transition and its related targets by 2030 (resolution approved at close to 80% of the votes cast). – An ISO 9001 certified team dedicated to relationships with individual shareholders and offering a comprehensive communication package, featuring dedicated direct-line, email address, and postal address – Shareholders' Circle – Shareholder Advisory Committee	Sections E-1 to E-5, S-1 to S-4,G-1 Chapters 3,4,6 and 11
Main entities/teams involved	– Executive management – Board of directors – Finance Department; Financial Communications; Individual Shareholder Relations – Legal department	
Main topics of common interest and identified expectations	– Corporate governance – Financial and extra-financial performance – Investment strategy – Climate: decarbonization strategy and trajectory; information on risks and performance indicators – Operational, financial and extra-financial risk management – Transparency – Financial and extra-financial reporting frameworks	
Stakeholders'interests and points of view taken into account	– Continuous improvement of extra-financial reporting in response to requests from extra-financial rating agencies, enabling the Company to maintain its high ESG performance in the sector and among its peers	

Customers		More information
Main stakeholders	– Private customers (B2C) – Business customers (B2B) – Government (B2G) – Consumers and users of products and services	Sections S-2, S-4, Chapter 2
Main modalities of dialogue	– Commercial relationship – Key account management – Technical and commercial partnerships – Complaints and claims	
Main tools and frameworks for dialogue	– Customer Relationship Management (mainly via the Salesforce platform) – Team dedicated to monitoring more than 300 Compagnie's Key Accounts worldwide – Annual B2C customers' satisfaction survey – Global B2B satisfaction survey conducted every two years – Barometer on reputation and image (every two years) – Processing complaints and claims	
Main entities/teams involved	– Marketing/Strategy of business segments – Sales teams – Consumer Services – Research & Development	
Main topics of common interest and identified expectations	– Consumer health & safety – Carbon intensity of products used – Energy efficiency services – Low-carbon goods and services – Access to energy – Energy price – Digitization of services – Competition law	

Customers		More information
Stakeholders'interests and points of view taken into account	– Creation or modification of our service offers and developments of our products. – Review of customer journeys	Sections S-2, S-4, Chapter 2

Suppliers		More information
Main stakeholders	– Network of over 100,000 suppliers and subcontractors	Sections G1-2, 3.6, S-2
Main modalities of dialogue	– Qualification – Call for tenders – Contractualization – Assessment and action plans – Awareness raising – Audits	
Main tools and frameworks for dialogue	– Fundamental principles of purchasing – Supplier qualification process – Since 2023, more than 600 on site audits and more than 390 documentary assessments in sustainable development have been carried out on 1,300 priority suppliers – Surveys and questionnaires (Pilote Workers'Voice Survey) – Suppliers Day (every two years) – Alert mechanism including internal mediator	
Main entities/teams involved	– TotalEnergies Global Procurement – Subsidiaries purchasing teams – HSE division – Business lines	
Main topics of common interest and identified expectations	– Fight against climate change and taking into account suppliers' carbon footprint in the procurement decision process – Human rights in the supply chain (including risks related to child labor, forced labor, working conditions, discrimination, health and safety of workers) – Environment in the supply chain (including risks related to pollution and damage to biodiversity) – Support for the economic development of SMEs and adapted and protected segment companies – Compliance with contractual terms and payment deadlines – Safety/Health as part of the services provided	
Stakeholders'interests and points of view taken into account	– Support for suppliers as part of the climate commitment program – Continuous improvement approach implemented following on-site audits and documentary audits – Development of a guide, with a group of energy companies (EVOLEN), enabling SMEs to meet the requirements and challenges in terms of sustainable development	

Professional associations		More information
Main stakeholders	– Professional or multi-stakeholder business organizations	Sections E-1, E-2 to E-5, S-3, G-1-6
Main modalities of dialogue	– Consultations – Memberships and participation in collective initiatives	List of associations available on TotalEnergies' website
Main tools and frameworks for dialogue	– Review every two years of the list of professional associations and chambers of commerce of which TotalEnergies is a member: the last review was carried out in 2023 and covered 1,107 organizations – Every two years, assessment of public positions relating to the 6 Climate Principles of TotalEnergies, for the main professional associations of which the Company is a member. Following the census of the 1,107 associations, 116 of the most important were the subject of the Climate review and the results report was published in May 2024 – Directive applicable to the representation of interests of the company TotalEnergies (December 2021)	
Main entities/teams involved	– Public Affairs – Business segments – Legal department – Sustainability & Climate Department	

Professional associations		More information
Main topics of common interest and identified expectations	– Climate: energy transition; transparency and consistency of supported positions – Environment and safety - regulations and risk management - minimization of impacts – Employment and economic development	Sections E-1, E-2 to E-5, S-3, G-1-6 List of associations available on TotalEnergies' website
Stakeholders' interests and points of view taken into accounts	– In the European context: – TotalEnergies is a member of several professional associations whose activities and relations with members are codified by the statutes of these associations – These associations are registered in the EU transparency register and thus comply with its code of conduct which governs its relations with the institutions – TotalEnergies participates in the work of these associations as a member and disseminates the information and work of these associations internally to establish and align the respective positions of the Company and its associations – TotalEnergies maintains regular dialogue with these associations, in different forms (working meetings with members, bilateral meetings, board meetings)	

Civil society		More information
Main stakeholders	– Communities living near or not near of our sites – Community representatives, opinion leaders – Land owners – Multilateral institutions and agencies – Universities and research centers – NGOs, non-profit organizations, associations (local and international) – Media	Sections E-1, E-2 to E-5, S-1, S-2, S-3, G-1 3.5, 3.6
Main modalities of dialogue	– Inform – consulting – collaborating – Project management, partnerships (with NGOs,associations,university chairs) – answering appeals and alerts – Mediation	
Main tools and frameworks for dialogue	– Assessment of safety, environmental and societal risks of new projects – Environmental and societal studies (impact studies, baseline studies, etc.), human rights studies – Proactive dialogue led by societal teams and others – VPSHR (Voluntary Principles on Security and Human Rights) initiative and tools for self-diagnosis and risk analysis – Management of complaints from local communities and other stakeholders – Citizen actions - TotalEnergies Foundation Program	
Main entities/teams involved	– Societal teams – Environmental teams – Safety teams – Various teams in subsidiaries (societal, community liaison officers,operations, public affairs, etc.) – OneTech – Sustainability & Climate – Legal Department – Communication – TotalEnergies Corporate Foundation	
Main topics of common interest and identified expectations	– Identification and management of the impacts related to our activities on the environment and biodiversity – Identification and management of societal impacts (i.e. access to land, maritime space and resources, impacts on cultural and religious practices and heritage) – Contribution of the Company to local socio-economic development (local employment, socio-economic projects) – Human rights – Climate and the Company's approach to the energy transition – Employment - reconversion of sites with a desire for a just transition	

Civil society		More information
	– Response to the humanitarian emergency	Sections E-1, E-2 to E-5, S-1, S-2, S-3, G-1
	– Innovation and R&D	
	– Access to energy	3.5, 3.6
	– Prevention of major accidental risks	
	– Education and integration of young people in situations of social and/or educational vulnerability	
Stakeholders'interest and points of view taken into account	– Regulatory consultations during environmental and societal impact studies	
	– Regular engagement with local communities in the form of group discussions for example, to collect their questions and concerns (weak signals) and respond to them	
	– Study of local needs to develop a local development strategy (social investment)	
	– Deployment of the SRM+ (Stakeholder Relationship Management) tool with stakeholder interviews in the form of questionnaires to review the subsidiary's societal action plan	
	– Forums, webinars, meetings with our partners (NGOs, local associations, etc.)	
	– Participation in organizations bringing together associations and patrons	
	– Presence in the field alongside our associative partners	
	– Questioning our associative partners on our relationship and their needs in the context of impact measurement	

Public authorities		More information
Main stakeholders	– Host countries	Sections E-1, E-2 to E-5, S-1, S-2, S-3, G-1
	– Authorities	
	– Administrations	3.5, 3.6
	– The elected officials	
	– International organizations	
Main modalities of dialogue	– Agreements and authorizations	
	– Project management	
	– Cooperation	
	– Mediation	
Main tools and frameworks for dialogue	– Meetings organized at the request of the authorities or the Company	
	– regular dialogue with the authorities responsible for supervising projects and operations	
	– TotalEnergies company's Advocacy Directive (December 2021)	
	– Voluntary Principles on Security and Human Rights	
	– Code of Conduct	
Main entities/teams involved	– Executive management	
	– Country chairs	
	– Legal department	
	– Public Affairs	
	– Security	
Main topics of common interest and identified expectations	– Climate change	
	– Fighting corruption and tax evasion	
	– Human rights	
	– Protection of the environment and biodiversity	
	– Major accident risk prevention	
	– Economic development	
	– Access to energy	
Stakeholders'interests and points of view taken into accounts	– Take into consideration the challenges of economic and social development in our projects and operations	
	– Ensure compliance with the rules established by the authorities	
	– Respect pluralism and observe political neutrality	

5.1.3.3 Material impacts, risks and opportunities and their interaction with strategy and business model (SBM-3)

The double materiality analysis was carried out in 2024 to identify material Impacts, Risks and Opportunities (IROs). TotalEnergies has identified 65 material IROs that fall within the scope of the matters covered by the ESRS.

The assessment of IROs related to the Company's activities and its value chain (upstream, including tier 1 suppliers, and downstream), where relevant and possible on the basis of the information available within the Company, has been carried out on a "gross" basis, i.e. before taking into account the level of control and the policies and actions implemented.

The Company has not identified any material current financial effect related to material risks and opportunities (SBM-3 48-d) unless otherwise stated.

The value chain is represented by the following signs:		The time horizon is represented by the following abbreviations:	
	Upstream value chain	ST:	Short term
	Company	MT:	Medium-term
	Downstream value chain	LT:	Long term

Climate change (E1)

IRO	IRO type	Impact on strategy, business model and value chain
GHG emissions (CO_2e) of the Company ST - MT - LT	Negative impact	The world's energy system is still 80% dependent on fossil fuels. Worldwide, greenhouse gas (GHG) emissions associated with TotalEnergies' operated facilities represent ~0.1% of global energy-related emissions(1). Reducing GHG emissions from the Company's operated sites (Scope 1+2) is at the heart of its ambition to supply more energy while reducing GHG emissions. The Company has set a target of a 40% reduction in net Scope 1+2 emissions from its operated facilities between 2015 and 2030. By 2030, the Company intends to sell its customers a mix of energy products with a carbon content 25% lower than in 2015. In other words, TotalEnergies intends to reduce by 25% the lifecycle carbon intensity(2) of its products sold.
Methane emissions of the Company ST - MT - LT	Negative impact	The Company's objective is to reduce methane emissions from its operated facilities by 80% between 2020 and 2030, and to maintain methane emissions intensity below 0.1% of commercial gas produced at Upstream operated oil and gas facilities, moving towards near-zero methane emissions from the Company's operations. With regard to non-operated activities, TotalEnergies takes actions to mobilize its partners, in particular national companies within the framework of the Oil & Gas Decarbonization Charter (OGDC), aiming to reduce emissions from the assets they operate.
Renewable and low-carbon energy supply ST - MT - LT	Positive impact	TotalEnergies is deploying its integrated, balanced multi-energy strategy based on two pillars: hydrocarbons, particularly LNG, a transitional energy, and electricity, with the ramp-up of the Integrated Power sector. It is developing its renewable electricity and low-carbon energy portfolio. The Company is building a competitive portfolio of renewable (solar and wind) and flexible (gas-fired power plants, storage) assets to provide its customers with increasingly decarbonized electricity available 24/7. It plans to invest profitably~$4 billion/year to become one of the world's leading electricity producers, with over 50 TWh generated by 2025 and over 100 TWh generated by 2030. TotalEnergies aims to supply energy to charging station networks by developing integrated solutions from energy supply to complete charging services via charging stations, particularly on major roads and in European urban centers. It promotes low-carbon molecules through the development of biofuels, biogas and low-carbon hydrogen, both as a consumer and, depending on demand trends, as a large-scale producer of low-carbon hydrogen.

(1) Source: Ratio calculated for 2022, TotalEnergies Outlook 2024, IEA
(2) Lifecycle carbon intensity of energy products sold (refer to the glossary for definition).

Climate change (E1)		
Insufficient capacity to adapt to the pace of deployment of the energy transition and inadequate anticipation of the evolution of demand ST - MT - LT	Risk	An insufficient ability to adapt to the pace of deployment of the energy transition, in particular the evolution of the demand or energy cost, which may be considered excessive by the populations, could affect TotalEnergies' prospects as well as its financial situation (deterioration in profitability, loss of operating rights, loss of revenues, increased financing difficulties) or its shareholder value. The energy transition is underway, and the growth in renewable electricity production worldwide is kick-starting the decarbonization of energy. However, energy demand trajectories are still a long way from the scenarios compatible with the Paris Agreement. The energy transition requires the participation of all stakeholders, from regulators to end customers, including industrial players. TotalEnergies deploys a strategy that supports this collective transition and will enable our Company to adapt to the various scenarios that may materialize, depending on developments in low-carbon technologies (penetration speed, cost reduction), geopolitical relations and international exchanges, and consumer behavior.
Difficulties in accessing to the key skills and talents required in the context of climate change ST - MT - LT	Risk	TotalEnergies could face difficulties in securing the key skills and talent needed for its transition strategy. Maintaining employees' employability over the long term is one of the Company's social challenges, and one of the key factors in the success of the Company's project, in the context of a just transition. Deploying the Company's transition strategy to become an integrated multi-energy company requires to support employees as they develop their skills, and to build bridges between current jobs and electricity jobs, particularly in renewable energies, in order to have the key skills available at the pace of the transition (refer to point 5.3.1 (SBM3 - S1).
Access to financing for the development of oil and gas activities made more difficult by the climate policies of financial institutions MT - LT	Risk	TotalEnergies' profitability and ability to finance the energy transition depend on its ability to finance the development of its reserves profitably and in sufficient quantities. If TotalEnergies failed to develop its reserves profitably, in sufficient quantities and as part of its climate ambition, its financial condition, operating incomes and cash flows could be materially affected. The Company is also exposed to the risk of more difficult access to the financial resources it needs, in particular to develop its oil and gas activities. If TotalEnergies were unable to obtain adequate financing from investors for its activities, particularly in the oil and gas fields, the significant increase in the cost of financing that could result could hamper its ability to carry out its projects under satisfactory economic conditions, worsening its financial situation or its shareholder value. Over the decade 2020-2030, in line with its two-pillar transition strategy, TotalEnergies plans to **increase its cash flow by growing its energy production by +4%** per year between 2024 and 2030 by developing an attractive low-cost, low-emissions oil and gas portfolio and evolving its production mix with a ~20% share of electricity. This integrated and balanced multi-energy strategy should help preserve the Company's ability to finance its development competitively, thanks to the cash flows generated to self-finance part of its development, estimated at an additional $5 to 10 billion between 2024 and 2030, and to the diversification of its panel of financial partners and the financing tools it may use.
Costs linked to climate-related technological evolutions MT - LT	Risk	TotalEnergies could fail to anticipate appropriately the technological changes related to its main markets, the expectations of its customers and changes in its competitive environment or in certain business models, or its ambition of carbon neutrality in 2050 and its commitment for sustainable development or may not respond to them in an appropriate way and at an appropriate pace. An unsuitable pace of innovation or an unanticipated or uncontrolled technological or market evolution could have a negative impact on TotalEnergies' market share, profitability, reputation and ability to attract the necessary human resources. In 2024, TotalEnergies devoted 68% of its R&D budget to low-carbon activities, including disruptive technologies such as hydrogen, synthetic fuels and carbon storage.

Climate change (E1)

Costs linked to climate-related regulations evolutions MT - -LT	Risk	The increasing number of regulations, and the constant developments, whether anticipated or not, in the legal and tax frameworks in countries where TotalEnergies operates, may have significant operational and financial effects, jeopardize TotalEnergies' business model and affect the conduct of its business and its financial conditions, especially given the size of TotalEnergies and its international dimension. For instance, more and more countries are likely to adopt carbon pricing mechanisms to accelerate the transition to a low-carbon economy. Although CO_2 pricing does not currently apply in all the countries where the Company operates, TotalEnergies takes into account as a base case in its investment criteria an internal CO_2 price of $100/t (or the prevailing price in a given country, if higher) and beyond 2030, the CO_2 price is inflated by 2%/year (refer to point 5.1.2.3 (E1-8)).
Legal proceedings against the Company in climate-related matters, including third-party actions trying to influence its strategy ST - MT - LT	Risk	The increasing number of legal regulations that are sometimes incompatible with each other, and the constant changes, whether anticipated or not, in the legal frameworks of the countries in which TotalEnergies operates, create a legal instability that increases the risk of litigation and encourages the multiplication of national or transnational disputes. If TotalEnergies were unable to anticipate these developments or comply with them in a timely manner in one or more of the countries in which it operates, TotalEnergies could face an increase in litigation, be forced to modify and/or cease certain of its activities, which could lead to a deterioration in the profitability of certain projects and have an adverse impact on its financial situation and reputation. TotalEnergies is committed to a balanced transition strategy for the benefit of the energy transition. We report transparently on our progress in this area. It is developing a process of dialogue with all of its internal and external stakeholders, which it considers essential to the responsible conduct of its activities and for taking account of the long-term challenges of transition risks in its strategy.
Damage to the Company's reputation in the event of climate-related claims ST - MT - LT	Risk	TotalEnergies is exposed to a reputational and media scrutiny risk that can damage its reputation. The attention that many stakeholders are paying to major industrial groups is increasing, particularly given the challenges of climate change and the support needed to be put in place in a responsible manner for a just transition. As a major energy player, TotalEnergies faces media scrutiny, mainly from NGOs. It is developing an approach based on dialogue with all its internal and external stakeholders, which it considers essential to the responsible conduct of its business and the inclusion of long-term transition risk issues in its strategy.
Required costs for adapting facilities to anticipate the climate-related physical risks ST - MT - LT	Risk	The effects of climate change could present physical risks to some of TotalEnergies' facilities, disrupting or even interrupting its operations, with potential financial consequences. The Company takes climate risk into account in the design of its facilities.
Contribution to the development of new low-carbon activities ST - MT - LT	Opportunity	TotalEnergies is developing its renewable energies (solar and wind) to reach 100 GW gross installed capacity by 2030, which would place it among the world's top 5 producers (excluding China). It is also developing biofuels, primarily Sustainable Aviation Fuels, and plans to produce 1.5 Mt by 2030.
Recognition by stakeholders, particularly investors, of the quality of the Company's approach to climate issues and its long-term resilience. ST - MT - LT	Opportunity	The Company is committed to a process of continuous improvement and reinforcement of its climate objectives. Moreover, it has been recognized by extra-financial rating agencies for the quality of its approach to environmental issues, particularly climate-related ones.
Improvement of the Company's economic performance through the adoption of energy efficiency plans ST - MT - LT	Opportunity	The Company is committed to energy efficiency across all its operations. It is implementing a $1 billion investment plan (2023-2025) to reduce its energy consumption. For the period 2026-2028, the Company plans to launch a new $1 billion energy efficiency plan.

Pollution (E2)

IRO	IRO type	Impact on strategy, business model and value chain
Degradation of the environment (water, air, soil) and biodiversity in the event of the release of polluting substances of concern or very high concern linked to the Company's activities. ST - MT - LT	Negative impact	
Legal proceedings and/or compliance costs based on applicable environmental regulations or in the event of environmental damage. ST - MT - LT	Risk	The Company's activities may generate smoke discharges from combustion facilities, air emissions from the various transformation processes, or wastewater discharges. The Company's operations are also likely to generate pollution in the event of accidental spills, waste storage or major industrial accidents (explosion, fire, product leakage, etc.). To reduce chronic emissions and prevent the occurrence of a major industrial accident, such as an explosion, fire, leakage of hazardous products or a massive leakage of products, large-scale accidental pollution, or on an environmentally sensitive site, TotalEnergies implements appropriate risk management policies and measures, which apply to the Company's operated activities.
Damage to the Company's reputation in the event of water, air or soil pollution linked to its activities, waste management, purchases of goods and services and use of its products. ST - MT - LT	Risk	
Release of microplastics in the frame of the Company's activities ST - MT - LT	Negative impact	In the context of its Refining-Chemicals activities, a potential release of microplastics would take the form of plastic granules (with a diameter of less than 5 mm), on its sites during handling and transport. In the event of loss, these granules would be disseminated in the environment and could lead to soil and water pollution. As a pellet producer, TotalEnergies is aware of its environmental responsibility within the industry, and adapts its processes to take account of this issue at its sites while engaging with its partners as part of the Operation Clean Sweep certification program, an industry initiative that promotes best practices aimed at preventing the dispersion of plastic pellets in the environment.
Disruption of the Company's activities following industrial accidents resulting in pollution, with shutdown or slowdown of operations and costs of remediating the impact. ST - MT - LT	Risk	The Company could be affected by a major industrial accident, such as an explosion, fire, leakage of hazardous products or a massive leakage of products, causing large-scale accidental pollution, or on an environmentally sensitive site. To prevent the occurrence of such an accident, TotalEnergies implements appropriate risk management policies and measures that apply to the activities it operates.
Tightening of regulations on the use, release and sale of certain substances of concern or very high concern, affecting access to raw materials, production and/or sales, and associated revenues. ST - MT - LT	Risk	The Company could be affected by changes in regulations governing the release of chemical or hazardous products, including CMR products, as defined by the European Chemicals Agency (ECHA). The Company is taking steps to limit this risk, by assessing the substances used on its operated sites and value chain, in compliance with applicable health and environmental protection regulations, and implementing management measures to reduce the risks associated with these substances or their use.

Water and marine resources (E3)

IRO	IRO type	Impact on strategy, business model and value chain
Disruption of operations in the event of restricted access to the water resources required for the Company's activities, particularly in water-stressed areas. ST - MT - LT	Risk	Some of the Company's industrial facilities may be currently or in the future dependent on water resources, which could lead to restrictions on operations in times of drought. The Company implements management measures to reduce this risk.

Biodiversity and ecosystems (E4)

IRO	IRO type	Impact on strategy, business model and value chain
Damage to biodiversity and ecosystems linked to the Company's activities, particularly in sensitive areas or areas hosting protected species ST - MT - LT	Negative impact	The Company's activities may generate negative impacts on biodiversity due to land use changes, population influx, discharges into natural environments or the introduction of invasive exotic species. It implements management measures to avoid, reduce and compensate for these impacts (refer to point 5.2.4 (E4)), including voluntary exclusion zones, impact studies and biodiversity action plans.
	Risk	The Company could face reputational risk in the event of alleged or proven damage to biodiversity and ecosystems linked to its operations and supplies.

Resource use and the circular economy (E5)

IRO	IRO type	Impact on strategy, business model and value chain
Development by the Company of recycling and waste recovery processes (particularly plastics), with a positive impact on employment and a contribution to reducing resource consumption. ST - MT - LT	Positive impact	The Company is developing recycling and reclamation processes for waste (particularly plastics), with a positive impact on employment and a contribution to reducing resource consumption. It aims to achieve a 70% recovery rate for production waste from its sites. In addition, it is developing recycling activities for electric vehicle batteries, via an extensive take-back and recycling network.
Dependence of the Company's operations on raw materials available in limited stocks or difficult to access, generating risks of disruption to activities ST - MT - LT	Risk	The Company could face a risk of dependence on the raw materials required for its activities. This applies in particular to the manufacture of batteries and solar panels using certain critical metals (cobalt, silicon, etc.) and biofuels (using waste and residues so as not to compete with food). It implements purchasing strategies to reduce this risk.
Development of new markets linked to the circular economy: SAF, recycled plastics, biofuels, etc... ST - MT - LT	Opportunity	The energy transition presents opportunities to develop new markets for low-carbon molecules, in which the Company is positioning itself as part of its multi-energy strategy, notably biodiesels, more sustainable aviation fuels (SAF) and biogas as far as fuels are concerned. The development of the circular economy also presents opportunities in terms of the production and marketing of recycled polymers, battery recycling and waste recovery, as well as in terms of job creation.

Own workforce (S1)

Employees health and safety		
Medical support for the Company's employees through regular medical check-ups ST - MT - LT	Positive impact	As a responsible employer, TotalEnergies is committed to preserving the health of its employees. The Company offers its employees regular medical check-ups. It also supports health promotion in its host countries through vaccination and screening campaigns. Through these measures, TotalEnergies contributes to the continuity of its operations and participates in the development of the territories in which it operates.

Own workforce (S1)

Harm to the health and safety of personnel (on site or during transportation) in the event of a major industrial accident or during activities related to operations	Negative impact	TotalEnergies' operational activities are likely to have a negative impact on the health and safety of the Company's employees and those of partner companies. They also entail multiple operational risks, such as the risk of a major industrial accident. TotalEnergies' operating procedures are structured around safety, one of the Company's core values, and in compliance with the strictest health standards. In terms of health and safety, the Company strives to prevent the occurrence of any major industrial accident, with zero fatal accidents, a continuous reduction in TRIR and the preservation of employee health in the workplace.
ST - MT - LT		
Costs related to damage suffered by personnel following a major industrial accident	Risk	
ST - MT - LT		
Damage to the Company's reputation in the event of degraded health and safety conditions leading to accidents on its sites	Risk	
ST - MT - LT		

Well-being of Company's employees

Well-being of the Company's employees and their families, supported by proactive policies in terms of compensation,social health and other social benefits in response to employees' expectations	Positive impact	As a responsible employer, the Company is convinced that the well-being of its employees is an essential source of professional fulfillment and long-term performance, and contributes to the protection of mental health. The Company promotes decent employment and social protection in a work environment that combines performance and conviviality.
ST - MT - LT		

Talent development and skills management

IRO	IRO type	Impact on strategy, business model and value chain
Contribution to the upskilling of employees through training programs and actions carried out by the Company	Positive impact	The Company offers its employees opportunities for professional development and fulfillment, through training programs and upskilling and reskilling initiatives designed to build bridges between the Company's traditional businesses and the electricity sector, particularly renewable energies.
MT - LT		
Loss of employability due to lack of support for skills development	Negative impact	Maintaining employee employability is an important social issue, and one of the key factors in the success of our corporate project. If the Company did not provide its employees with sufficient support in upgrading their skills, this could lead to a loss of employability. The learning model, combined with the training axes, enables TotalEnergies employees to maintain their employability.
MT - LT		
Decline in competitiveness and slowdown in the Company's capacity for innovation due to insufficient and/or inappropriate skills management	Risk	TotalEnergies' ability to attract, retain and motivate the talent required for its transition strategy is a key challenge for the Company. Increased competition with high-growth sectors such as information technology and new energies can make recruiting and retaining certain key skills more complex. If TotalEnergies were unable to respond adequately to these social challenges, it could face difficulties in building the teams needed to make its transition strategy a success.
MT - LT		
Improving performance, stimulating innovation and strengthening the Company's positioning through an appropriate skills management policy	Opportunity	The adaptation of employee skills is key to the deployment of the Company's balanced, integrated multi-energy strategy, given the need to upgrade skills in low-carbon energy and electricity, particularly renewable energies. The opportunities offered to employees for professional development and fulfillment create a stimulating environment for talent.
ST - MT - LT		

Diversity, inclusion and non-discrimination

Implementation of policies promoting equal opportunity, mutual respect and inclusion	Positive impact	The Company promotes equal opportunity, mutual respect and inclusion of its employees through its human resources policies. It excludes any discrimination linked to national, ethnic or social origins, sex, sexual orientation or identity, marital or parental status, disability, state of health, age or membership of a political, trade union or religious organization or minority group.
ST - MT - LT		

Own workforce (S1)

Deterioration of mental health and well-being in the event of repeated discriminatory practices, violence or harassment in the workplace	Negative impact	The mental health and well-being of employees are likely to deteriorate in the event of repeated discriminatory practices, violence or harassment in the workplace. The Company promotes a working environment that respects its corporate values and the principles of its Code of Conduct.
ST - MT - LT		
Damage to the Company's reputation and deterioration of its employer brand in the event of repeated allegations of discrimination or harassment in the workplace	Risk	The Company could face reputational risk in the event of repeated allegations of discrimination or harassment in the workplace. If TotalEnergies were unable to adequately prevent such allegations, the Company's public image and reputation could be damaged.
ST - MT - LT		
Social dialogue		
In countries where employee representation is not mandatory, the Company proposes the setting up of bodies to promote social dialogue, freedom of association and collective bargaining	Positive impact	Social dialogue is a key component of the Company and it ensures to maintain it worldwide. Where local law offers few protection for freedom of association and the right to collective bargaining, the Company encourages the introduction of alternatives enabling employees to have regular exchanges with management.
ST - MT - LT		
Social movements that could lead to disruptions, potentially leading to halt in operations and damage to the company's image/reputation	Risk	The Company could be exposed to risks of business disruption and damage to its reputation in the event of industrial action. It anticipates and supports organizational changes and the transformation of its activities in a responsible manner, through regular dialogue with its employees and representatives.
ST - MT - LT		
Other human rights of Company employees		
Consideration of fundamental labor rights as defined by the ILO for the Company's personnel, by applying the highest standard in case of discrepancies between legal requirements and the Code of Conduct	Positive impact	In application of its Code of Conduct, the Company is committed to respecting fundamental rights as defined by the ILO wherever it does business: non-use of forced labor, child labor, discrimination, occupational health and safety, freedom of association and the right to collective bargaining.
ST - MT - LT		
Violation of fundamental labor rights as defined by the ILO due to practices that do not comply with Company standards (as defined in the Code of Conduct)	Negative impact	
ST - MT - LT		
Damage to the Company's reputation in the event of allegations of non-compliance with fundamental labor rights as defined by the ILO (forced and child labor, discrimination, fair, satisfactory and safe working conditions)	Risk	
ST - MT - LT		

Value chain workers (S2)

IRO	IRO type	Impact on strategy, business model and value chain
Violation of the fundamental rights at work defined by the ILO (forced labor and child labor, discrimination, fair, satisfactory and safe working conditions) of workers in the value chain, due to practices by the Company's partners that do not comply with its standards. ST- MT - LT	Negative impact	The Company is likely to be associated with possible breaches of fundamental labor rights as defined by the ILO, due to non-compliance with international regulations and standards on the part of its value chain partners. TotalEnergies may take measures up to and including termination of commercial relations in the event of proven non-compliance by its partners.
Disruption, or even stoppage of the Company's operations due to the difficulty of identifying and working with partners that comply with regulations and the Company's principles regarding fundamental rights at work as defined by the ILO. ST - MT - LT	Risk	The Company could face disruption or even closure of its operations if it is unable to identify suppliers who comply with the Company's regulations and principles on fundamental rights at work as defined by the ILO. The Company could be exposed to higher operating costs, lower production, delays or even stoppages in certain projects, or loss of market share.
Damage to the Company's reputation in the event of allegations of non-compliance by its partners with fundamental rights at work as defined by the ILO. ST - MT - LT	Risk	In the event of alleged breaches by its partners of fundamental rights at work as defined by the ILO, the Company could be exposed to risks relating to the conduct of its operations or projects, its financial situation and/or its reputation. As part of the Company's ambition to integrate all aspects of sustainable development at the heart of its strategy, projects and operations, TotalEnergies is committed to continuous progress in sustainable procurement.

Affected communities (S-3)

IRO	IRO type	Impact on strategy, business model and value chain
Strengthening the structure of local economy and the dynamism of affected communities through actions to promote the enhancement of value chain partners' skills, the development of local employment, the improvement of infrastructure and the support of producing countries. ST - MT - LT	Positive impact	As part of its sustainable development approach and in order to contribute to the United Nations' Sustainable Development Goals (SDGs), the Company has made the creation of value for the countries and territories in which it operates a key focus of its commitment. Based on its values and the principles set out in its Code of Conduct and Health, Safety, Environment and Quality Charter, TotalEnergies aims to have a positive impact on society and contribute to its development through its social actions at national and local levels, as well as through its partners and its upstream and downstream value chain. It also intends to support producer countries in making the right energy transition, by implementing programs to diversify energy sources and reduce dependence on fossil fuels.
Harm to the health and safety of local communities due to the proximity of the Company's facilities in the event of a major industrial accident. ST - MT - LT	Negative impact	In addition to the potential consequences for the Company's employees and the environment (refer to point 5.1.4 (IRO S1 and E2)), major industrial accidents can also have an impact on local communities. The operational systems and indicators used to manage the Company's activities are structured around safety, one of the Company's core values, and in compliance with the strictest health and safety standards.The identification of health and safety risks and challenges is the result of a dynamic process, based in particular on feedback integrated into the HSE reference framework known as One MAESTRO (Management and Expectation Standards Towards Robust Operations).
Violation of human rights related to land access, health and an adequate standard of living for local communities whose territories are affected by the Company's activities, as well as in cases of disproportionate use of force by private security companies protecting the Company's personnel and facilities. ST - MT - LT	Negative impact	Using the method developed by the United Nations Guiding Principles on Business and Human Rights (UNGPs), the Company has identified the "salient issues" likely to have a negative impact on the human rights of local communities – access to land – the right to health and an adequate standard of living – disproportionate use of force by private security companies intervening to protect Company personnel and facilities. As part of its commitment to sustainable development, the Company has made respect for human rights a cornerstone of its Code of Conduct. Solid, formalized commitments specify the principles of action to be followed to respect the Company's values and prevent human rights abuses. The Company is committed to implementing the Voluntary Principles on Security and Human Rights.

Affected communities (S-3)

Legal proceedings and/or compliance costs based on applicable regulations concerning the human rights of local communities related to land access, health and an adequate standard of living. ST - MT - LT	Risk	TotalEnergies may be exposed to financial or legal risks and/or compliance costs on the basis of applicable regulations relating to the human rights of local communities identified in its sailant risks. As part of its commitment to sustainable development, the company has developed and implemented guidelines to ensure respect for the human rights of affected communities, both within the company and among its partners.
Damage to the Company's reputation and loss of trust from civil society due to allegations of non-compliance with international standards regarding local communities' rights related to land access, health, and an adequate standard of living ST - MT - LT	Risk	The Company may be exposed to reputational risks on the basis of allegations of non compliance with applicable international standard regarding local communities' fundamental rights related to land access, health, and an adequate standard of living of local communities. As part of its commitment to sustainable development, the company has developed and implemented guidelines to ensure respect for the human rights of affected communities, both within the company and among its partners.
Reduced capacity to access to financing due to allegations of non-compliance with international standards on human rights of local communities related to land access, health and an adequate standard of living. MT - LT	Risk	TotalEnergies' energy production growth and profitability rely heavily on the success of major development projects, which are increasingly complex and require substantial financing. These major projects, like any other, can be affected by the occurrence of a number of difficulties, including those related to the requirements of financial institutions to respect the human rights of local communities identified in its highlights. As part of its commitment to sustainable development, the company has developed and implemented guidelines to ensure respect for the human rights of communities within the company and its partners.

Consumers and end-users (S-4)

IRO	IRO type	Impact on strategy, business model and value chain
Access to more affordable, more available and more sustainable energy, in particular through innovation ST - MT - LT	Positive impact	The Company's transition strategy aims, on the one hand, to contribute to the construction of a new low-carbon energy system based on electricity and renewables, in which gas plays a useful role as a flexible transition energy, and on the other hand, to accompany this fair, orderly and equitable transition away from fossil fuels, particularly in emerging countries that legitimately aspire to economic and social development for their populations over the long term. It is stepping up its efforts in Africa and India, with the aim of providing 100 million people with solutions by 2030LPG-powered *.clean cooking*
Harm to the health and safety of consumers and end-users linked to the Company's products and services. ST - MT - LT	Negative impact	The conduct of the Company's activities and the nature of its products may give rise to risks of direct and repeated exposure of customers and end-users that could have health effects. TotalEnergies monitors, evaluates and improves its products, services, technology and processes at every stage of development, production and distribution.
Damage to the Company's image and reputation resulting from the leak/loss of consumer and end-user personal data ST - MT - LT	Risk	In the course of its business activities, the Company collects and processes certain personal data from consumers and end-users. Potential cases of data loss or leakage could damage the Company's image and reputation. TotalEnergies protects the confidentiality of personal data in compliance with applicable regulations.
Damage to the Company's reputation in the event of allegations of non-compliance with regulations on commercial practices ST - MT - LT	Risk	Potential breaches of regulations governing business practices could result in a loss of confidence among consumers and end-users, and damage the Company's reputation. The Code of Conduct sets out the principles that form the basis of the Company's commercial policies, and prohibits certain sales channels.

Business management (G1)		
IRO	**IRO type**	**Impact on strategy, business model and value chain**
Ethics and anti-corruption		
Promoting compliance principles of the Company ST - MT - LT	Positive impact	The company contributes to promoting responsible business ethics in all the countries in which it operates. Through its Code of Conduct, the Company maintain a policy of zero tolerance for fraud of any kind, particularly bribery and corruption, influence peddling and violations of antitrust law towards its employees, suppliers and partners in joint-ventures and public authorities. To prevent corruption risks and ensure the sustainability of its activities, TotalEnergies has a Compliance network with dedicated teams who implement and deploy a robust anti-corruption compliance program. TotalEnergies communicates the "zero tolerance" principle to its stakeholders through various publications.
Legal proceedings and/or compliance costs based on regulations relating to business ethics, including anti-fraud, anti-corruption and anti-competitive practices. ST - MT - LT	Risk	Non-compliance with the various applicable anti-corruption laws is likely to entail the risk of legal proceedings, financial and reputational risks (exclusion from public contracts, difficulty in obtaining financing, downgrading of ratings, etc.). To prevent these risks and ensure the sustainability of its activities, TotalEnergies implements and deploys a robust and regularly updated anti-corruption compliance program.
Damage to the Company's reputation in case of unethical practices, suspected or proven cases of fraud or corruption and non-compliance with business ethics regulations. ST - MT - LT	Risk	Allegations or proven cases of fraud or corruption present an image and reputational risk for TotalEnergies that could have an impact on the sustainability of the Company's activities. To ensure the Company's sustainability, TotalEnergies relies on its Code of Conduct to maintain a policy of zero tolerance for fraud of any kind, particularly bribery and corruption, towards its stakeholders. This principle is publicly reiterated when TotalEnergies is the subject of allegations.
Balanced supplier relationships and supply chain resilience		
Vulnerability of suppliers due to a situation of economic dependence on the Company or in the event of extended payment terms or payment terms not respected by the Company. ST - MT - LT	Negative impact	The Company's activities could lead to economic dependence on suppliers and have a negative impact on their economic situation, particularly depending on the weight the Company represents in their activities, or in the event of extended payment deadlines or failure to meet supplier payment deadlines. The Company ensures that contractual conditions are negotiated fairly with its suppliers. The Code of Conduct reiterates this requirement, as well as the three essential principles guiding the Company's relations with its suppliers: dialogue, professionalism and respect for commitments.
Business disruption associated with supplier dependencies MT - LT	Risk	TotalEnergies could be exposed to risks in the conduct of its operations or projects if its supply chain were insufficiently diversified. TotalEnergies has an extensive supply chain with a network of over 100,000 suppliers of goods and services in more than 150 countries, reducing the risk of dependence on its suppliers.
Damage to the Company's reputation in the event of unfair or unethical practices or controversies related to its supply chain ST - MT - LT	Risk	The Company's reputation could be affected by controversies linked to unfair or unethical practices in its supply chain. TotalEnergies has a qualification process for the selection of its suppliers and looks after the interests of each party in the tendering process. It ensures that clear, fairly-negotiated contractual terms and conditions are implemented, and that the parties' commitments are respected.

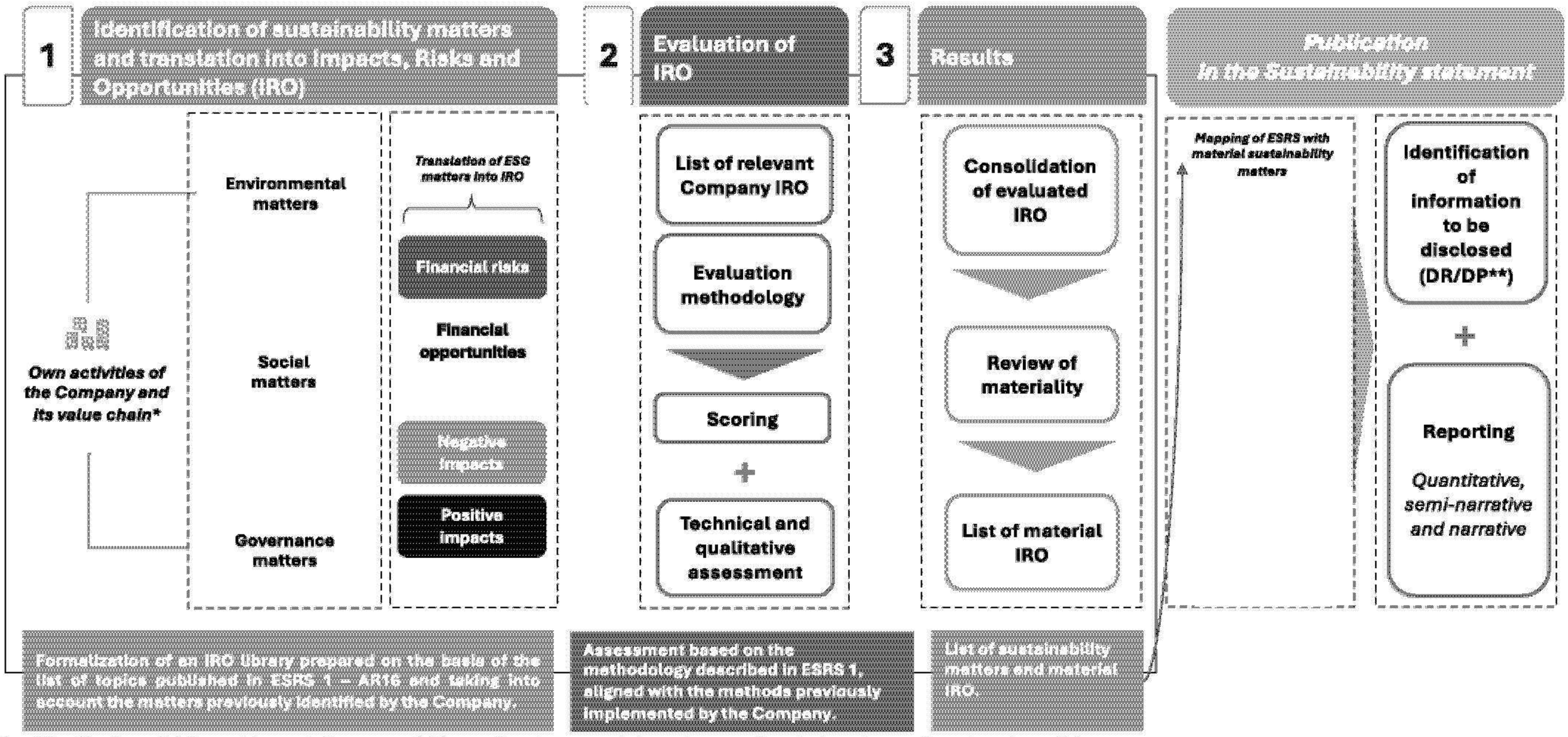
5.1.4 Impact, risk and opportunity management (IRO-1 and 2)

5.1.4.1 Description of the processes to identify and assess material impacts, risks and opportunities (IRO-1)

In 2024, the Company formalized its double materiality analysis with the involvement of the Strategy & Sustainability divisions (which include the Legal, Sustainability & Climate, Audit & Internal Control, Health, Safety and Environment divisions), as well as the People & Social Engagement and Finance divisions.

The work was examined by the Executive Committee and then reviewed by the Audit Committee.

PROCESS FOR IDENTIFYING AND ASSESSING THE COMPANY'S MATERIAL IROS



* Identification of risks and impacts for own activities and upstream and downstream value chains where relevant and possible.
** **DR:** disclosure requirements - **DP**: data points.

The identification and assessment of IROs related to the Company's activities and its value chain (where relevant and possible), whether actual or potential, have been carried out on a "gross" basis, i.e. before taking into account the level of control and the policies and actions implemented.

The process of identifying and assessing IROs as part of the double materiality analysis was based on existing systems within the Company, and in particular on the ongoing risk identification and mapping process implemented by the Company to develop policies in line with the desired degree of control.

In this process, the Company thus follows a variety of procedures to identify and assess the risks, opportunities and impacts of its activities in the areas of society, people's health and safety, the environment, climate, human rights and business ethics, as well as in its supply chain:

- as regards health, safety and the environment, IROs are identified by the HSE division as part of a dynamic process that draws in particular on lessons learned, which are included in the HSE (Health, Safety and Environment) reference framework known as One MAESTRO (*Management and Expectations Standards Toward Robust Operations*);
- the identification of climate-related IROs is carried out by the Sustainability & Climate division;
- the identification of labor IROs is carried out by the Human Resources division;
- the identification of IROs as regards human rights is carried out by the Sustainability & Climate division, the Health, Safety and Environment division, the People & Social Engagement division and the TotalEnergies Global Procurement division, and relies in particular on the Reporting Framework for the UN Guiding Principles to identify its salient issues;
- in terms of purchasing, a mapping of CSR risks has been drawn up and regularly updated since 2012.

In conjunction with these processes to identify IROs, dialogue approaches based on stakeholders' involvement and participation are implemented in order to develop transparent relationships with them and to identify the main challenges and expectations. Modalities of dialogue are presented in point 5.1.3.2 (SBM-2).

Additionally, the identification and assessment of IROs are generally carried out on an ongoing basis, in particular:

- prior to investment, acquisitions and divestitures decisions on the Company's industrial projects (evaluation by the Risk Committee of safety and security studies, impact assessments, particularly environmental and societal, and evaluation of consistency with the Company's climate strategy, prior to review by the Executive Committee);
- during operations;
- prior to placing new substances on the market (toxicological and ecotoxicological studies, life cycle analyses).

These assessments incorporate the local context and the regulatory requirements of the countries where the Company operates, as well as the generally accepted professional practices.

In addition to this work and the risk maps, the relevance of the IROs identified was corroborated by comparing them with various internal and external sources of analysis, in particular:

- the list of sustainability matters established by the ESRS standards (delegated regulation (EU) 2023/2772 - AR 16- ESRS 1);
- the Company's internal standards and reference frameworks, in particular the Universal Registration Document, the Sustainability & Climate Progress Report and the Human Rights Briefing Paper;
- external reference frameworks and industry standards, in particular: GRI 11 Oil and Gas Sector 2021, SASB Oil and Gas standards, IPIECA Sustainability Guide.

The IROs identified were analyzed according to:

- their nature: positive impact, negative impact, risk, opportunity;
- their dimension, i.e. for risks and opportunities: financial, strategic, legal, image and reputation, HR - social relations; and for negative and positive impacts: environment, human rights, health and safety, socio-economic;
- their scope of application: the Company's activities and the value chain (where relevant and possible).
- their time horizon: short-term, medium-term, long-term.

As part of this analysis, attention was paid to the identification of potentially affected stakeholders and to the existing modalities of dialogue that enabled their views and interests to be taken into account wherever possible and relevant.

Each IRO has been assessed to determine whether it is material or not, based on the criteria and thresholds specified below. The approach adopted was based on the recommendations published by EFRAG. This evaluation, the basis of which has been documented, was carried out by means of scores and additional assessment criteria.

The aim of scoring is to determine a rating for each of the relevant IROs identified.

Therefore, to assess impact materiality, the scoring takes into account the following criteria:

- quality of impact: positive or negative;
- type of effect: actual or potential;
- the severity of the impact, taking into account the scale, scope, irremediable character and likelihood of occurrence.

For the assessment of financial materiality, scoring is determined on the basis of the potential magnitude of financial effects, and by taking into account the likelihood of occurrence.

In order to ensure consistent implementation of the methodology and the scoring obtained, specific rating scales have been defined. The scales are applicable both for financial materiality and impact materiality and take into account the time horizon (short, medium or long term). They are based on methods already used within the Company (Company risk mapping, HSE risk mapping, human rights risk mapping, etc.).

In addition to the scoring, a qualitative review was carried out based on the experience of the Company's specialized departments, with particular regard to the risk mapping exercises carried out by the Company.

The materiality of the IROs was ultimately determined by taking into account this work and the scoring indications. This methodology has enabled to qualify materiality relying on an objective basis, based on knowledge and technical studies.

The materiality analysis, like the methodology used, will be subject to periodic review.

SPECIFIC PROCESSES FOR IDENTIFYING AND ASSESSING MATERIAL IROS

A. Climate change

The Company has drawn on the recommendations of the TCFD (Task Force on Climate-related Financial Disclosures) to identify the risks and opportunities associated with climate change.

a. GHG emissions

Climate change is a global risk for the planet that is the result of various human actions, including the consumption of fossil fuels. As a multi-energy company, TotalEnergies has identified its CO_2e and methane emissions as material. Emissions of other greenhouse gases, including nitrous oxide (N_2O), ozone (O_3), halogen gases and aerosols, are not material for the Company.

b. Physical risks associated with climate change

In 2024, using a modeling tool provided by a third-party expert (Jupiter Intelligence), TotalEnergies carried out an assessment of the potential impacts of the effects of climate change on around 300[1] assets in its portfolio, including all operated industrial sites classified as Seveso (and their equivalents outside the European Union).

The climate data used for this assessment are based on models from the IPCC's 6th Assessment Report of 2021. The climate scenario considered is a high emissions scenario: IPCC SSP5-8.5[2], as recommended by the European standard ESRS-E1, for which the global warming is estimated at 4.4°C by the end of the century. In addition, sensitivity tests were carried out for the SSP2-4.5[3] and SSP1-2.6[4] climate scenarios (for which global warming at the end of the century is 2.7°C and 1.8°C respectively). The climate hazards analyzed were selected for their relevance to the nature of the Company's portfolio and the state of available scientific knowledge. The main acute risks selected cover precipitation, flooding, drought, heat waves, cold/, hail, strong winds, significant wave heights and wildfires. The main chronic risks included were temperature change, water stress and sea-level rise. Some climate hazards have not been included due to the nature and location of the Company's assets (such as avalanches or glacial lake outbursts), or to the unavailability of suitable climate risk assessment tools (as in the case of saline intrusion).

The results of the assessment are presented in point 5.2.1.1.B.D.

c. Transition risks and opportunities linked to climate change

The Company has identified its transition risks and opportunities, based on the TCFD recommendations.

The scenarios used to assess transition risks are those used for the resilience analysis (refer to point 5.2.1.1.B).

Climate change and the energy transition are considered in preparing the consolidated financial statements. They may have significant impacts on the value of TotalEnergies's assets and liabilities and on similar assets and liabilities that may be recognized in the future (refer to the appendix to the consolidated financial statements, point 8.7 in chapter 8 - Major judgments and accounting estimates - Climate change and energy transition).

(1) Operated and non-operated, excluding the value chain.
(2) SSP5-8.5 is a pessimistic scenario that assumes, among other things, high GHG emissions linked to heavy dependence on fossil fuels. According IPCC, the "best estimate"in global surface temperature change associated with SSP5-8.5 is +4.4°C [3.3-5.7°C] over 2081-2100.
(3) SSP2-4.5 is an intermediate scenario that assumes, among other things, the continuation of current emissions until 2050, followed by a reduction.
(4) SSP1-2.6 is an optimistic scenario involving strong reductions in GHG emissions, net zero in 2080, compatible with the Paris agreement to limit global warming to below +2 C by 2100.

B. Environment

a. Specific environmental aspects

To identify and assess material IROs related to the environment, TotalEnergies relied on the mapping of its Dependencies, Impacts, Risks and Opportunities (DIRO) linked specifically to nature together with the recommendations of the TNFD (Task Force on Nature-related Financial Disclosure), which highlighted in particular:

- the dependencies of the Company's operated facilities on water resources (refineries, petrochemical sites, CCGT), on the availability of land (direct for solar farms and indirect for its feedstock of agricultural origin), and on weather conditions;
- impacts linked to potential pollution or to the physical footprint of its operated facilities (e.g. wind farms);
- the physical risks associated with extreme climatic events, as well as the risks of water stress and rising land prices.

This mapping was supplemented by a detailed analysis carried out with a third party, taking into account reference frameworks (IPBES, SBTN, TNFD, CSRD, etc.), stakeholder concerns as well as SBTN database for impacts and ENCORE (Exploring Natural Capital Opportunities, Risks and Exposure) proposed by the United Nations Environment Program (UNEP) for dependencies. Impacts have been identified by analyzing the contribution to the various pressure factors on biodiversity (SBTN, 2023). Dependencies have been identified in relation to the various ecosystem services listed in the IPBES reference framework, 2019. In particular, the analysis identified a list of families of pollutants specific to the Company's activities and value chain. These families of pollutants include: gaseous pollutants (SO_2, NOx, NMVOC, PM) and pollutants more commonly found in aqueous effluents (nitrogen, heavy metals, BTEX, hydrocarbons). The Company has also drawn on its knowledge of its activities and markets to identify the relevant incoming and outgoing resource flows to determine its sustainability challenges in terms of resource use and the circular economy.

Environmentally material sites (IRO-1 E2, E3, E4, E5)

TotalEnergies has identified its environmentally material sites. The Company defines them as sites likely to have a significant impact on the environment through their footprint (pressure on biodiversity), chronic discharges or accidental releases. They cover all subsidiary production sites in the Exploration & Production segment, sites producing more than 250 kt/year in the Refining & Chemicals and Marketing & Services segments, and gas-fired power plants operated by the Company in the Integrated Power segment.

TotalEnergies operates 82 environmentally material sites at the end of 2024. In line with the One MAESTRO reference framework, 100% of these sites are ISO14001 certified. In addition to this requirement, at year-end 2023, a total of 297 sites operated by the Company were ISO14001 certified.

b. Aspects specific to water and marine resources

TotalEnergies has identified its operated sites likely to have an impact on freshwater resources and to be dependent on them, particularly when the activity concerned is located in a water-sensitive environment. The analysis did not reveal any dependence on marine resources.

TotalEnergies has examined the potential impact of the activities of its operated sites on water resources as a result of possible pollution.

With regard to dependencies, operated sites may be affected by water shortages in water-stressed areas, and local authorities may ask the site to reduce its water intake in the event of drought. In the event of severe drought, a site would have to suspend operations for several weeks or months. The operated sites which are material for water resources are presented in the following table.

Activity	Site name	Catchment area
Refining and petrochemicals	Antwerp platform	Scheldt, Belgium
Refining and petrochemicals	Normandy platform	Seine, France
Petrochemicals:	Feluy plant	Sambre, Belgium
Refining	Leuna refinery	Elbe River, Germany
Biorefinery	Grandpuits platform	Seine, France
Biorefinery	La Mède platform	Rhône, France
Gas power plant	Pont-sur-Sambre CCGT	Maas/Sambre, France
Gas power plant	Marchienne CCGT	Maas/Sambre, Belgium
Gas power plant	Castejón CCGT	Ebro, Spain
Gas power plant	Colorado Bend CCGT	Gulf Coast, USA
Production of gas	Barnett segment	Gulf Coast, USA

c. Specific aspects of biodiversity and ecosystems

TotalEnergies has identified its material sites for biodiversity and ecosystems. The Company defines them as sites (i) located in biodiversity-sensitive areas[1] identified in the frame of it's biodiversity ambition, (ii) material to the environment (as defined above), and (iii) whose activities have a potential negative impact on these areas; potential negative impacts are analyzed as part of environmental and societal impact studies.

The list of 12 material sites for biodiversity (operated and non-operated) identified by TotalEnergies is presented in the table "List of material sites for biodiversity (operated and non-operated)" in point 5.2.4.2.

C. Business conduct

TotalEnergies, a major actor in the energy sector, has an industrial and retail presence in about 120 countries spanning five continents. TotalEnergies' supply chain is especially wide, with a network of over 100,000 suppliers of goods and services over more than 150 countries.

In identifying and assessing material IROs relating to business conduct issues, the Company took into account its size, its business segment in which the amounts invested can be very substantial, its strategic positioning and its geographical presence in more than 120 countries, some of which are perceived to have high levels of corruption according to the Transparency International index.

(1) UNESCO natural world heritage areas, Ramsar wetlands and IUCN category I to IV protected areas.

5.1.4.2 Disclosure Requirements in ESRS covered by the Sustainability Report (IRO-2)

The Company conducted its double materiality analysis based on the list of sustainability matters covered by the ESRS. The sustainability matters identified were assessed as material using the assessment process described in point 5.1.4.1.

The identification of the information to be disclosed in the Sustainability Report was based on a review of the disclosure requirements and data points of each ESRS. The Company has therefore identified the relevant data points, with regard to their materiality, for each topic by following the method recommended in ESRS 1 (Appendix E). Subsequent analysis was carried out to ensure data availability and collection methodology.

The Company has chosen not to disclose in this first Sustainability Report the information relating to the disclosure requirements and data points phased-in (ESRS 1 - Appendix C), the disclosure of which may be deferred, in particular the expected financial effects (ESRS 2 SBM-1 §40, b and c; ESRS 2 SBM-3 48.e, E1-9, E2-6, E3-5, E4-6 and E5-6) as well as certain information or disclosure requirements relating to ESRS S1 (S1-7, S1-8, S1-11, S1-14 and S1-15).

LIST OF DISCLOSURE REQUIREMENTS

In accordance with the disclosure requirement IRO 2, § 56 of ESRS 2, the table below refers to the section number where the information on the disclosure requirement can be found.

	Section
ESRS 2 - General disclosures	**5.1**
BP-1 — General basis for preparation of sustainability reports	5.1.1.1
BP-2 — Disclosures in relation to specific circumstances	5.1.1.2
GOV-1 — The role of the administrative, management and supervisory bodies	5.1.2.1
GOV-2 — Information provided to and sustainability matters addressed by the undertaking's administrative, management and supervisory bodies	5.1.2.2
GOV-3 — Integration of sustainability-related performance in incentive schemes	5.1.2.3
GOV-4 — Statement on due diligence	5.1.2.4
GOV-5 — Risk management and internal controls over sustainability reporting	5.1.2.5
SBM-1 — Strategy, business model and value chain	5.1.3.1
SBM-2 —Interests and views of stakeholders	5.1.3.2
SBM-3 — Material impacts, risks and opportunities and their interaction with strategy and business model	5.1.3.3
IRO-1 — Description of the process to identify and assess material impacts, risks and opportunities	5.1.4.1
IRO-2 — Disclosure requirements in ESRS covered by the undertaking's sustainability statement	5.1.4.2
ESRS E1 - Climate change	**5.2.1**
Disclosure Requirement related to ESRS 2 GOV-3 — Integration of sustainability-related performance in incentive schemes	5.1.2.3
E1-1 — Transition plan for climate change mitigation	5.2.1.1 A.
Disclosure Requirement related to ESRS 2 SBM-3 – Material impacts, risks and opportunities and their interaction with strategy and business model	5.2.1.1 B.
Disclosure requirement related to ESRS 2 IRO-1 – Description of the processes to identify and assess material climate-related impacts, risks and opportunities	5.1.4.1
E1-2 — Policies related to climate change mitigation and adaptation	5.2.1.2 A.
E1-3 — Actions and resources in relation to climate change policies	5.2.1.2 B.
E1-4 — Targets related to climate change mitigation and adaptation	5.2.1.3 A.
E1-5 — Energy consumption and mix	5.2.1.3 B.
E1-6 — Gross Scopes 1, 2, 3 and Total GHG emissions	5.2.1.3 B.
E1-7 — GHG removals and GHG mitigation projects financed through carbon credits	5.2.1.3 B.
E1-8 — Internal carbon pricing	5.2.1.3 B.
ESRS E2 - Pollution	**5.2.2**
Disclosure Requirement related to ESRS 2 IRO-1 — Description of the processes to identify and assess material pollution-related impacts, risks and opportunities	5.1.4.1
E2-1 — Policies related to pollution	5.2.2.1
E2-2 — Actions and resources related to pollution	5.2.2.2
E2-3 — Targets related to pollution	5.2.2.2
E2-4 — Pollution of air, water and soil	5.2.2.3
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LIST OF DATA POINTS IN CROSS-CUTTING AND TOPICAL STANDARDS THAT DERIVE FROM OTHER EU LEGISLATION

In application of disclosure requirement IRO 2, § 56 of ESRS 2, the following table specifies for the data points required by other EU legislative acts, as listed in Appendix B of ESRS 2, the paragraph where they appear in the Sustainability Report For data points which, after evaluation, have been deemed to be not material, "Not material" is indicated in the table in accordance with paragraph 35 of ESRS 1.

Disclosure requirement and related datapoint	SFDR[1] reference	Pillar 3[2] reference	Benchmark Regulations[3] reference	EU climate law[4] reference	Section concerned
ESRS 2 GOV-1 Board's gender diversity, paragraph 21 (d)	Indicator number 13, table 1, annex I		Annex II to Commission Delegated Regulation (EU) 2020/1816[5]		5.1.2.1 - Composition of the Board of Directors, reflecting the diversity and complementarity of its members
ESRS 2 GOV-1 Percentage of board members who are independent, paragraph 21 (e)			Annex II to Commission Delegated Regulation (EU) 2020/1816		5.1.2.1 - Composition of the Board of Directors, reflecting the diversity and complementarity of its members
ESRS 2 GOV-4 Statement on due diligence paragraph 30	Indicator number 10, table 3, annex I				5.1.2.4 - Statement on due diligence (GOV-4)
ESRS 2 SBM-1 Involvement in activities related to fossil fuel activities paragraph 40 (d) i	Indicator number 4, table 1, annex I	Article 449a of Regulation (EU) No 575/2013, Commission Implementing Regulation (EU) 2022/2453[6], Table 1: Qualitative information on environmental risk and Table 2: Qualitative information on social risk	Annex II to Commission Delegated Regulation (EU) 2020/1816		5.1.3.1 - Strategy, business model and value chain (SBM-1)
ESRS 2 SBM-1 Involvement in activities related to chemical production, paragraph 40 (d) ii)	Indicator number 9, table 2, annex I		Annex II to Commission Delegated Regulation (EU) 2020/1816		5.1.3.1 - Strategy, business model and value chain (SBM-1)
ESRS 2 SBM-1 Involvement in activities related to controversial weapons, paragraph 40 (d) iii	Indicator number 14, table 1, annex I		Article 12(1) of Delegated Regulation (EU) 2020/1818[7], Annex II of Delegated Regulation (EU) 2020/1816		Not applicable (no involvement in activities related to controversial weapons).
ESRS 2 SBM-1 Involvement in activities related to cultivation and production of tobacco, paragraph 40 (d) iv			Delegated Regulation (EU) 2020/1818, Article 12(1) of Delegated Regulation (EU) 2020/1816, Annex II.		Not applicable (no involvement in activities related to cultivation and production of tobacco)
ESRS E1-1 Transition plan to reach climate neutrality by 2050, paragraph 14				Article 2(1) of Regulation (EU) 2021/1119	5.2.1.1 - Strategy
ESRS E1-1 Undertakings excluded from Paris-aligned Benchmarks, paragraph 16 (g)		Article 449a of Regulation (EU) No 575/2013, Commission Implementing Regulation (EU) 2022/2453, Template 1: Banking book - Climate change transition risk: Credit quality of exposures by sector, emissions and residual maturity	Article 12(1)(d) to (g) and Article 12(2) of Delegated Regulation (EU) 2020/1818		5.2.1.1 - Strategy
ESRS E1-4 GHG emission reduction targets, paragraph 34	Indicator number 4, table 2, annex I	Article 449a of Regulation (EU) No 575/2013, Commission Implementing Regulation (EU) 2022/2453, Template 3: Banking book - Climate change transition risk: alignment metrics	Article 6 of Delegated Regulation (EU) 2020/1818		5.2.1.3 - Metrics and targets

Disclosure requirement and related datapoint	SFDR[1] reference	Pillar 3[2] reference	Benchmark Regulations[3] reference	EU climate law[4] reference	Section concerned
ESRS E1-5 Energy consumption from fossil sources disaggregated by sources (only high climate impact sectors), paragraph 38	Indicator number 5, table 1, and indicator number 5, table 2, annex I				5.2.1.3 - Metrics and targets
ESRS E1-5 Energy consumption and mix, paragraph 37	Indicator number 5, table 1, annex I				5.2.1.3 - Metrics and targets
ESRS E1-5 Energy intensity associated with activities in high climate impact sectors, paragraphs 40 to 43	Indicator number 6, table 1, annex I				5.2.1.3 - Metrics and targets
ESRS E1-6 Gross Scopes 1, 2, 3 and Total GHG emissions, paragraph 44	Indicators 1 and 2, Table 1, Annex I	Article 449a of Regulation (EU) No 575/2013, Commission Implementing Regulation (EU) 2022/2453, Template 1: Banking book - Climate change transition risk: Credit quality of exposures by sector, emissions and residual maturity	Article 5(1), Article 6 and Article 8(1) of Delegated Regulation (EU) 2020/1818		5.2.1.3 - Metrics and targets
ESRS E1-6 Gross GHG emissions intensity, paragraphs 53 to 55	Indicator number 3, table 1, annex I	Article 449a of Regulation (EU) No 575/2013, Commission Implementing Regulation (EU) 2022/2453, Template 3: Banking book - Climate change transition risk: alignment metrics	Article 8(1) of Delegated Regulation (EU) 2020/1818		5.2.1.3 - Metrics and targets
ESRS E1-7 GHG removals and carbon credits, paragraph 56				Article 2(1) of Regulation (EU) 2021/1119	5.2.1.3 - Metrics and targets
ESRS E1-9 Exposure of the benchmark portfolio to climate-related physical risks, paragraph 66			Annex II of Delegated Regulation (EU) 2020/1818, Annex II of Delegated Regulation (EU) 2020/1816		Not published in first year
ESRS E1-9 Disaggregation of monetary amounts by acute and chronic physical risk paragraph 66 (a)		Article 449a of Regulation (EU) No. 575/2013, Commission Implementing Regulation (EU) 2022/2453, paragraphs 46 and 47, Template 5: Banking book - Climate change physical risk: Exposures subject to physical risk.			Not published in first year
ESRS E1-9 Location of significant assets at material physical risk, paragraph 66(c)		Article 449a of Regulation (EU) No. 575/2013, Commission Implementing Regulation (EU) 2022/2453, paragraphs 46 and 47, Template 5: Banking book - Climate change physical risk: Exposures subject to physical risk.			Not published in first year
ESRS E1-9 Breakdown of the carrying value of its real estate assets by energy-efficiency classes, paragraph 67 (c)		Article 449a Regulation (EU) No 575/2013; Commission Implementing Regulation(EU) 2022/2453 paragraph 34; Template 2:Banking book -Climate change transition risk: Loans collateralised by immovable property - Energy efficiency of the collateral			Not published in first year

Disclosure requirement and related datapoint	SFDR[1] reference	Pillar 3[2] reference	Benchmark Regulations[3] reference	EU climate law[4] reference	Section concerned
ESRS E1-9 Degree of exposure of the portfolio to climate- related opportunities, paragraph 69			Annex II to Commission Delegated Regulation (EU) 2020/1818		Not published in first year
ESRS E2-4 Amount of each pollutant listed in Annex II of the E-PRTR Regulation (European Pollutant Release and Transfer Register) emitted to air, water and soil, paragraph 28	Indicator No. 8,table 1, annex 1, Indicator No. 2, table 2, annex 1, Indicator No 1, table 2, annex 1, Indicator No. 3, table 2, annex 1				5.2.2.3 - Quantitative data on substance releases to water, air and soil (E2-4)
ESRS E3-1 Water and marine resources, paragraph 9	Indicator number 7, table 2, annex I				5.2.3.1 - Policies related to water and marine resources (E3-1)
ESRS E3-1 Dedicated policy, paragraph 13	Indicator number 8, table 2, annex I				5.2.3.1 - Policies related to water and marine resources (E3-1)
ESRS E3-1 Sustainable oceans and seas, paragraph 14	Indicator number 12, table 2, annex I				5.2.3.1 - Policies related to water and marine resources (E3-1)
ESRS E3-4 Total water recycled and reused, paragraph 28 (c)	Indicator number 6.2, table 2, annex I				5.2.3.5 - Water indicators (E3-4)
ESRS E3-4 Total water consumption in m^3 per net revenue on own operations, paragraph 29	Indicator number 6.1, table 2, annex I				5.2.3.5 - Water indicators (E3-4)
ESRS 2- SBM-3 - E4 paragraph 16 (a) i	Indicator number 7, table 1, annex I				5.2.4.2 Material impacts, risks and opportunities and their interaction with strategy and business model (ESRS 2 SBM-3)
ESRS 2- SBM-3 - E4 paragraph 16 (b)	Indicator number 10, table 2, annex I				5.2.4.2 Material impacts, risks and opportunities and their interaction with strategy and business model (ESRS 2 SBM-3)
ESRS 2- SBM-3 - E4 paragraph 16 (c)	Indicator number 14, table 2, annex I				5.2.4.2 Material impacts, risks and opportunities and their interaction with strategy and business model (ESRS 2 SBM-3)
ESRS E4-2 Sustainable land/ agricultural practices or policies, paragraph 24 (b)	Indicator number 11, table 2, annex I				Not material
ESRS E4-2 Sustainable oceans / seas practices or policies, paragraph 24 (c)	Indicator number 12, table 2, annex I				Not material
ESRS E4-2 Policies to address deforestation, paragraph 24 (d)	Indicator number 15, table 2, annex I				5.2.4.3 - Policies related to biodiversity and ecosystems (E4-2)
ESRS E5-5 Non-recycled waste, paragraph 37(d)	Indicator number 13, table 2, annex I				5.2.5.5 - TotalEnergies products from the circular economy and waste (E5-5)

Disclosure requirement and related datapoint	SFDR[1] reference	Pillar 3[2] reference	Benchmark Regulations[3] reference	EU climate law[4] reference	Section concerned
ESRS E5-5 Hazardous waste and radioactive waste, paragraph 39	Indicator number 9, table 1, annex I				5.2.5.5 - TotalEnergies products from the circular economy and waste (E5-5)
ESRS 2- SBM3 - S1 Risk of incidents of forced labour, paragraph 14 (f)	Indicator number 13, table 3, annex I				5.3.1.5 - Respect for human rights at work
ESRS 2- SBM3 - S1 Risk of incidents of child labour paragraph 14 (g)	Indicator number 12, table 3, annex I				5.3.1.5 - Respect for human rights at work
ESRS S1-1 Human rights policy commitments paragraph 20	Indicator number 9, table 3, and indicator number 11, table 1, annex I				5.3.1.5 - Respect for human rights at work
ESRS S1-1 Due diligence policies on issues addressed by the fundamental International Labor Organisationf Conventions 1 to 8, paragraph 21			Delegated Regulation (EU) 2020/1816, Annex II		5.3.1.5 - Respect for human rights at work
ESRS S1-1 Processes and measures for preventing trafficking in human beings, paragraph 22	Indicator number 11, table 3, annex I				5.3.1.5 - Respect for human rights at work
ESRS S1-1 Workplace accident prevention policy or management system paragraph 23	Indicator number 1, table 3, annex I				5.3.1.2 - Health and safety
ESRS S1-3 Grievance/complaints handling mechanisms, paragraph 32 (c)	Indicator number 5, table 3, annex I				5.3.1.5 - Respect for human rights at work
ESRS S1-14 Number of fatalities and number and rate of work-related accidents, paragraph 88 (b) and (c)	Indicator number 2, table 3, annex I		Delegated Regulation (EU) 2020/1816, Annex II		5.3.1.2 - Health and safety
ESRS S1-14 Number of days lost to injuries, accidents, fatalities or illness, paragraph 88 (e)	Indicator number 3, table 3, annex I				5.3.1.2 - Health and safety
ESRS S1-16 Unadjusted gender pay gap, paragraph 97 (a)	Indicator number 12, table 1, annex I		Delegated Regulation 2020/1816, Annex II		5.3.1.3 - Working conditions and environment
ESRS S1-16 Excessive CEO pay ratio, paragraph 97 (b)	Indicator number 8, table 3, annex I				5.3.1.3 - Working conditions and environment
ESRS S1-17 Incidents of discrimination, paragraph 103 (a)	Indicator number 7, table 3, annex I				5.3.1.5 - Respect for human rights at work
ESRS S1-17 Non-respect of UNGPs on Business and Human Rights and OECD, paragraph 104 (a)	Indicator no. 10, table 1, and indicator no. 14, table 3, annex I		Annex II to Delegated Regulation (EU) 2020/1816, Article 12(1) of Delegated Regulation (EU) 2020/1818		5.3.1.5 - Respect for human rights at work

Disclosure requirement and related datapoint	SFDR[1] reference	Pillar 3[2] reference	Benchmark Regulations[3] reference	EU climate law[4] reference	Section concerned
ESRS 2- SBM3 - S2 Significant risk of child labour or forced labour in the value chain, paragraph 11, point b)	Indicators no. 12 and no. 13, table 3, annex I				5.3.2.1 - Value chain worker policies (S2-1)
ESRS S2-1 Human rights policy commitments, paragraph 17	Indicator no. 9, table 3, and indicator no. 11, table 1, annex I				5.3.2.1 - Value chain worker policies (S2-1)
ESRS S2-1 Policies related to value chain workers, paragraph 18	Indicators no. 11 and no. 4, table 3, annex I				5.3.2.1 - Value chain worker policies (S2-1)
ESRS S2-1 Non-respect of UNGPs on Business and Human Rights principles and OECD guidelines paragraph 19	Indicator number 10, table 1, annex I		Annex II to Delegated Regulation (EU) 2020/ 1816, Article 12(1) of Delegated Regulation (EU) 2020/1818		5.3.2.1 - Value chain worker policies (S2-1)
ESRS S2-1 Due diligence policies on issues addressed by the fundamental International Labor Organisation Conventions 1 to 8, paragraph 19			Annex II to Delegated Regulation 2020/1816		5.3.2.1 - Value chain worker policies (S2-1)
ESRS S2-4 Human rights issues and incidents connected to its upstream and downstream value chain, paragraph 36	Indicator number 14, table 3, annex I				5.3.2.1 - Value chain worker policies (S2-1)
ESRS S3-1 Human rights policy commitments, paragraph 16	Indicator number 9, table 3, annex I, and indicator number 11, table 1, annex I				5.3.3.1 Policies for affected communities (S3-1)
ESRS S3-1 Non-respect of UNGPs on Business and Human Rights, ILO principles or and OECD guidelines, paragraph 17	Indicator number 10, table 1, annex I		Delegated Regulation (EU) 2020/1816, article 12, Annex II Delegated Regulation(EU) 2020/ 1818, Art 12 (1)		5.3.3.3 - Processes to remedy negative impacts and channels for affected communities to voice their concerns
ESRS S3-4 Human rights issues and incidents, paragraph 36	Indicator number 14, table 3, annex I				5.3.3.3 - Processes to remedy negative impacts and channels for affected communities to voice their concerns
ESRS S4-1 Policies related to consumers and end-users, paragraph 16	Indicator no. 9, table 3, and indicator no. 11, table 1, appendix I				5.3.4 - Consumers and end-users (S4)
ESRS S4-1 Non-respect of UNGPs on Business and Human Rights principles and OECD guidelines paragraph 17	Indicator number 10, table 1, annex I		Delegated Regulation (EU) 2020/1816, Annex II Delegated Regulation(EU) 2020/ 1818, Art 12 (1)		5.3.4 - Consumers and end-users (S4)

Disclosure requirement and related datapoint	SFDR[1] reference	Pillar 3[2] reference	Benchmark Regulations[3] reference	EU climate law[4] reference	Section concerned
ESRS S4-4 Human rights issues and incidents, paragraph 35	Indicator number 14, table 3, annex I				5.3.4 - Consumers and end-users (S4)
ESRS G1-1 United Nations Convention against Corruption, paragraph 10 (b)	Indicator number 15, table 3, annex I				5.4.2.1 - Preventing and detecting corruption (G1-3)
ESRS G1-1 Protection of whistleblowers, paragraph 10 (d)	Indicator number 6, table 3, annex I				5.4.1.3 - Procedure for collecting and reporting whistleblowing reports
ESRS G1-4 Fines for violation of anti-corruption and anti-bribery laws, paragraph 24 (a)	Indicator number 17, table 3, annex I		Delegated Regulation 2020/1816, Annex II		5.4.2.2 - Incidents of corruption (G1-4)
ESRS G1-4 Standards of anti-corruption and anti- bribery, paragraph 24, (b)	Indicator number 16, table 3, annex I				5.4.2.1 - Preventing and detecting corruption (G1-3)

(1) Regulation (EU) 2019/2088 of the European Parliament and of the Council of November 27, 2019 on sustainability-related disclosures in the financial services sector (OJ L 317, 9.12.2019, p. 1).
(2) Regulation (EU) No 575/2013 of the European Parliament and of the Council of June 26, 2013 on prudential requirements for credit institutions and investment firms and amending Regulation (EU) No 648/2012 (Capital Requirements Regulation or "CRR" Regulation) (OJ L 176, 27.6.2013, p. 1).
(3) Regulation (EU) 2016/1011 of the European Parliament and of the Council of June 8, 2016 on indices used as benchmarks in financial instruments and financial contracts or to measure the performance of investment funds and amending Directives 2008/48/EC and 2014/17/EU and Regulation (EU) No 596/2014 (OJ L 171, 29.6.2016, p. 1).
(4) Regulation (EU) 2021/1119 of the European Parliament and of the Council of June 30, 2021 establishing the framework for achieving climate neutrality and amending Regulations (EC) No 401/2009 and (EU) 2018/1999 ("European Climate Law") (OJ L 243, 9.7.2021, p. 1).
(5) Commission Delegated Regulation (EU) 2020/1816 of 17 July 2020 supplementing Regulation (EU) 2016/1011 of the European Parliament and of the Council as regards the explanation in the benchmark statement of how environmental, social and governance factors are reflected in each benchmark provided and published (OJ L 406 of 3.12.2020, p. 1).
(6) Commission Implementing Regulation (EU) 2022/2453 of November 30, 2022 amending the implementing technical standards laid down in Implementing Regulation (EU) 2021/637 as regards the disclosure of environmental, social and governance risks (OJ L 324 of 19.12.2022, p. 1).
(7) Commission Delegated Regulation (EU) 2020/1818 of July 17, 2020 supplementing Regulation (EU) 2016/1011 of the European Parliament and of the Council as regards minimum standards for EU Climate Transition Benchmarks and EU Paris-aligned Benchmarks (OJ L 406, 3.12.2020, p. 17).

5.2 Environmental information

5.2.1 Climate change (E1)

5.2.1.1 Strategy

A. TRANSITION STRATEGY FOR CLIMATE CHANGE MITIGATION

Climate issues are addressed at the highest level of the organization by the Board of Directors and the Executive Committee, which have committed the Company to a balanced transition strategy for the benefit of the energy transition. This transition strategy translates into targets for short- (2025) and medium-term (2030).

By 2030 TotalEnergies will unfold its two-pillar strategy, low-emissions and low-cost oil and gas projects on the one hand and integrated power on the other hand. This strategy is supported by an investment policy that enables to ensure the delivery of the Company's targets, through a growth of oil and gas production by approximately 3% per annum and a growth of its whole energy production by 4% per annum, taking into account the growth in low-carbon electricity. By 2030, TotalEnergies targets a gross renewable power generation capacity of 100 GW, and the production of 100 TWh, based on renewables for 70% and flexible generation (including gas-powered plants) for 30%.

As since 2021, the Board of Directors submitted at the Annual Shareholders' Meeting on May 24, 2024 to a consultative vote of the shareholders of TotalEnergies SE, the Sustainability & Climate - Progress Report 2024 reporting on the progress made in the implementation of the Corporation's ambition with respect to sustainable development and energy transition and its related targets by 2030 (resolution approved at close to 80% of votes cast).

The Chairman and Chief Executive Officer with the members of his Executive Committee as well as the Lead Independent Director participate all year long to a nourished dialogue with shareholders and different stakeholders on the Company's climate issues. As an illustration, in 2024, the Lead Independent Director entertained an intense dialogue ahead of the Annual Shareholders' Meeting with shareholders representing close to a quarter of the share of capital of the Company in order to prepare the vote of resolutions. The Lead Independent Director has also driven a sustained dialogue with proxy advisors. This dialogue continued after the Annual Shareholders' Meeting. These meetings provide an opportunity to exchange views on TotalEnergies' transition strategy, its progress and the update of its climate ambition.

2030: targets for more energy and less emissions

Over the decade 2020-2030, in line with its two-pillar transition strategy, TotalEnergies plans to increase its energy production (oil, gas and electricity) globally by +4% per annum between 2024 and 2030, by developing its production mix towards ~20% electricity.

Description of decarbonization levers identified and key actions planned

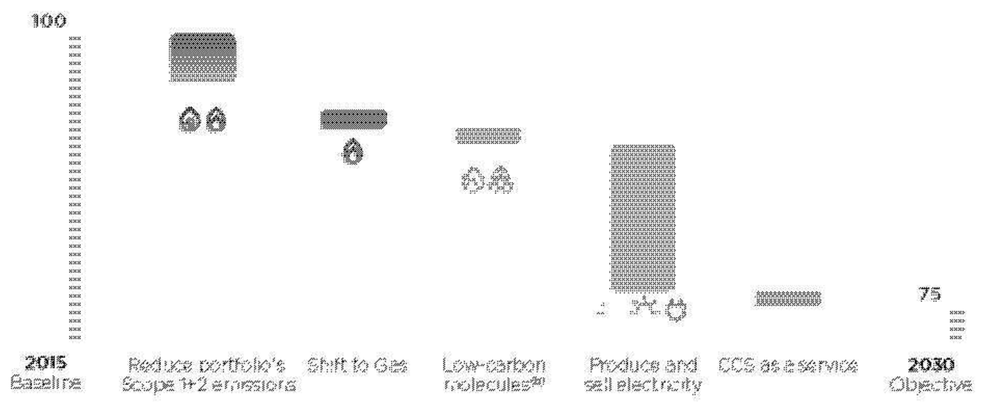
A strategy to help clients reduce their emissions

By 2030, the Company intends to sell its customers a mix of energy products with a 25% lower carbon content than in 2015. In other words, it intends to reduce the lifecycle carbon intensity of its products sold[1] by 25%, which is the ratio of lifecycle emissions (Scope 1+2+3) of its energy products sold to the volumes of energy supplied (g CO2e/MJ).

Indeed, by offering its clients an increasingly decarbonized portfolio, TotalEnergies contributes to the energy transition and helps its clients reduce their emissions.

Growth in electricity will drive more than half the reduction in its lifecycle carbon intensity between 2015 and 2030. Lower emissions from facilities will contribute to approximately 25% of the intensity reduction. The other levers will be the reduction in sales of petroleum products coupled with an increase in gas production (particularly LNG) and sales of products derived from biomass.

Levers for reducing the lifecycle carbon[a] intensity of energy products sold (2015-2030)



(a) Lifecycle carbon intensity of energy products sold (refer to point 5.2.1.3 (E1-6) for the definition of this indicator).
(b) Biofuels, biogas, hydrogen and e-fuels/e-gas.

Reduction in Scope 1+2 emissions by 2030

TotalEnergies reaffirms its target to reduce emissions from its operated assets, which aims to reduce its net Scope 1+2 emissions[2] by 40% by 2030 relative to 2015, after mobilizing around 5 million credits from nature-based carbon sinks projects. This offsetting will start only from 2030 for residual emissions on the basis of a consumption of approximately 10% per year of the stock of carbon credits (refer to point 5.2.1.3 (E1-7)).

These targets include emissions generated by the growth strategy in electricity pursued since 2015, which has prompted to create a portfolio of flexible power generation plants (CCGT). The baseline values in the 2015 reference year against which the progress towards the targets are measured are representative in terms of activities covered (mainly the supply of energies) and influences of external factors, taking into account the geographical diversity of the locations and markets covered by the Company.

To achieve this 2030 target, the Company is activating every lever at its disposal to avoid and reduce the emissions linked to its operations.

Scope 1+2 decarbonization levers are described in paragraph 5.2.1.3 (E1-4).

Investments and financing by the Company to support the implementation of its transition strategy

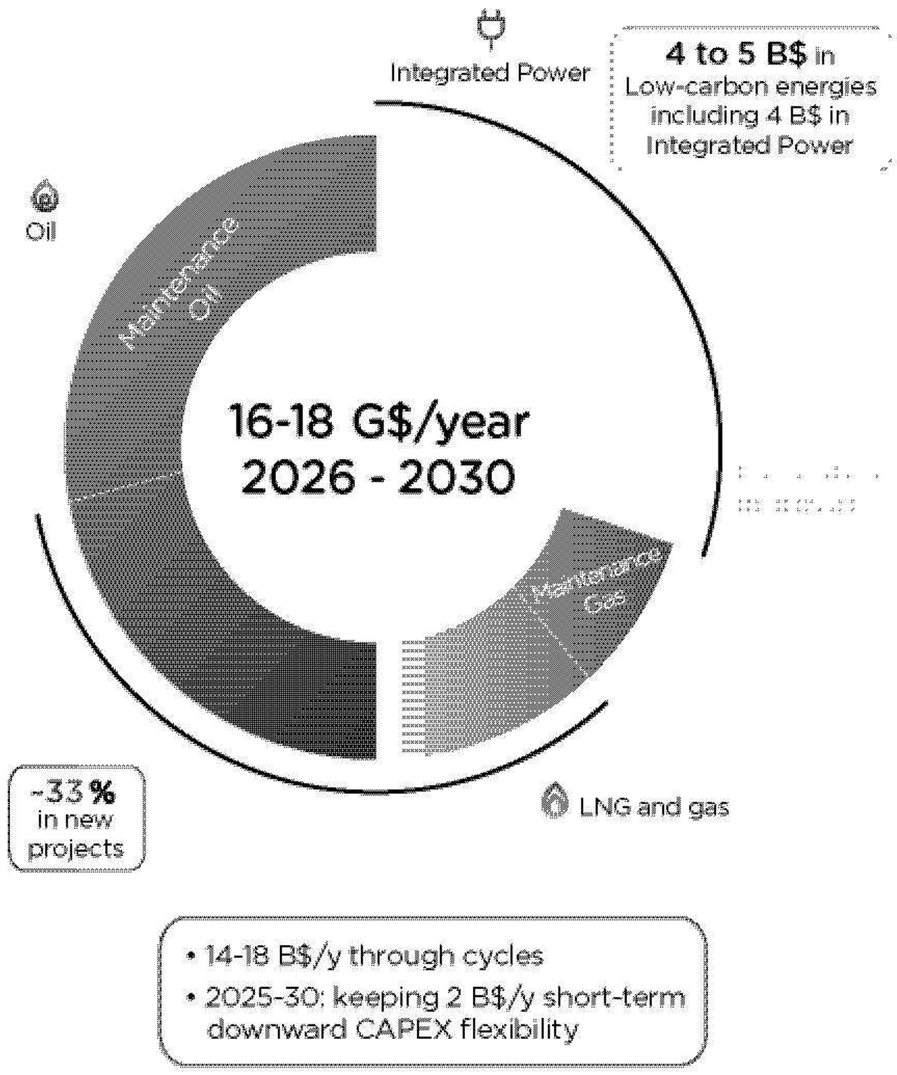
The Company is maintaining an annual capital expenditure target of $16-18 billion over the next 5 years. Since several years, TotalEnergies has consistently maintained a significant investment effort in low-carbon energies, mainly in low-carbon electricity.

In 2024, TotalEnergies has invested a total of $17.8 billion, including $4.8 billion in low-carbon energies, mainly in electricity ($4 billion). In 2025, the Company plans to maintain the same level of investment of $4 billion in Integrated Power, for a total net investment amount of $17 to $17.5 billion.

(1) Refer to point 5.2.1.3 (E1-6) for the definition of this indicator.
(2) The calculation of net emissions includes nature-based carbon sinks projects as from 2030.

Consistent with its commitment to build a multi-energy Company, TotalEnergies has published financial indicators for the Integrated Power segment since 2023.

In a global economic context marked by a high level of uncertainty, it is essential to maintain the Company's investment criteria to ensure the profitability and resilience of its portfolio.



Each material investment project is assessed taking into consideration the aims of the Paris Agreement on the basis of the following criteria:

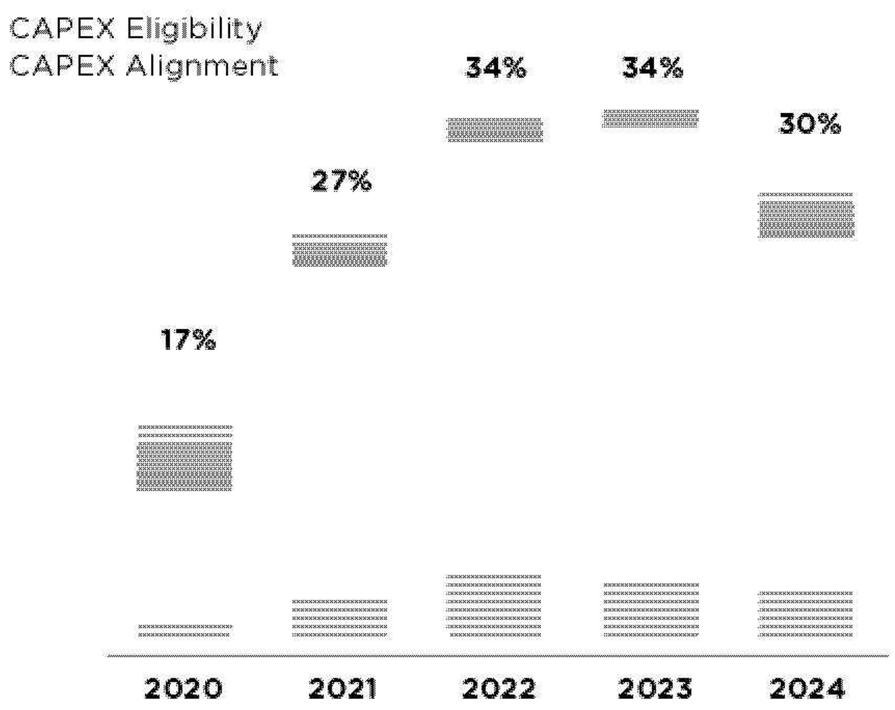
- project profitability is analyzed in a hydrocarbon price scenario compatible with the Paris Agreement objectives of limiting temperature rise to "well below 2°C" and with an internal carbon price of $100 per ton (or the prevailing price if higher in a given country);
- for new oil & gas projects (greenfield projects and acquisitions), the intensity of Scope 1+2 greenhouse gas emissions is compared, depending on their nature, to the intensity of the average greenhouse gas emissions of Upstream production assets or that of various Downstream units (LNG plants, refineries) of the Company. For Upstream projects, as of 2025, the threshold has been lowered to 17 kg CO_2e/ boe, versus 18 kg CO_2e/boe previously – evidence of the effectiveness of the Company's criteria. For additional investments in existing assets (brownfield projects), the investment will have to lower the Scope 1+2 emissions intensity of the asset in question. The goal is for each new investment to contribute to lowering the average intensity of the Company's Scope 1+2 greenhouse gas emissions in its category;
- for projects involving other energy and technologies (biofuels, biogas...), GHG emission reductions are assessed based on the amount by which they will reduce the carbon content of the Company's sales.

In addition to investments in new low-carbon activities, TotalEnergies is funding a $1 billion energy efficiency improvement plan over the period 2023-2025, and in 2024 announced a second plan for the same amount for the period 2026-2028.

TotalEnergies also devotes more than $1 billion in 2024 to R&D, industrial innovation and developments in digital, with 68% of the R&D budget devoted to low carbon energies (renewable electricity, biomass, batteries...) and to reducing the environmental footprint through CCUS and sustainability programs.

Pursuant to European Union regulations, TotalEnergies publishes the proportion of eligible activities and aligned activities in the CapEx indicator[1]. Eligible or aligned CapEx represent respectively 30% and 25% of investments on proportional view[2] in 2024, confirming the dynamic initiated since 2020 (refer to point 5.2.6).

Eligible and aligned Capex[a] - Proportional view[b]



(a) CapEx refers to the taxonomy standard. A reconciliation table is provided in point 5.2.6.
(b) Proportional view, in accordance with EU Delegated Act 2021/2178.

As part of a balanced energy transition and a growing world energy demand, TotalEnergies as an integrated global multi-energy company producing and supplying energies has to and will have to make investments in activities not aligned according to the criteria of EU Delegated Act 2021/2139 of the European Commission. Indeed, demand for oil could start to decline during the 2030s but less quickly than the current rate of natural decline of existing fields (around 5% per year). TotalEnergies therefore considers that new oil projects are necessary to meet this demand and maintain prices at an acceptable level in order to create the conditions for a just transition, giving people time to adapt their energy use.

Significant investments during the reporting year related to coal, oil and gas-related economic activities

In 2024, the Company's net investments amounted to approximately $13 billion in its oil and gas-related economic activities, representing approximately 70% of its net investments.

TotalEnergies has not made any investments in coal-related economic activities. In 2015, TotalEnergies ceased its coal production activities and it stopped selling and trading coal in 2016.

(1) CapEx refers to the taxonomy standard. A reconciliation table is provided in point 5.2.6.
(2) Proportional view, in accordance with EU Delegated Act 2021/2178.

How TotalEnergies' 2030 targets compare to the IEA scenarios

From a scientific perspective, there are a multitude of transition scenarios and there is currently no consensus on GHG emission reduction targets or trajectories applicable at the scale of a company in a given sector and which would be compatible with a given global temperature target.

Current trends indicate that the evolution of the global energy mix is not compatible with limiting global warming to 1.5°C and with the objective of achieving climate neutrality by 2050[1]. The "Stated Policies" scenario (STEPS) of the International Energy Agency provides an idea of the direction taken by the energy sector based on the most recent policies in countries around the world. It takes into account the energy, climate and related industrial policies that are in place or have been announced. While the STEPS scenario projects a peak for the three fossil fuels before 2030, thanks to the growth of solar photovoltaic (PV) and wind energy, the global primary energy mix in 2050 still relies on fossil fuels for 58% (24% oil, 21% gas and 13% coal). STEPS is associated with a temperature increase of 2.4°C in 2100 (with a 50% probability) compared to the reference period 1850–1900.

TotalEnergies' targets for 2025 and 2030 outline trajectories comparable to those of certain recognized public scenarios (IEA - APS and STEPS scenarios, Fit for 55 of the European Union[2]). Achieving the Scope 1+2 and methane emission reduction targets in the operated perimeter depends mainly on the Company, while the evolution of TotalEnergies' Scope 3[3] assumes an evolution of customers' Scope 1+2 emissions that does not depend only on TotalEnergies but on various external factors such as consumer behavior or public policies. The Company monitors the conditions for achieving its targets as part of the long-term plan exercises that it carries out annually. When setting its targets, TotalEnergies also listens to its stakeholders (investors, shareholders, public authorities and civil society in particular). It reports on its progress as part of its Sustainability & Climate Progress Report.

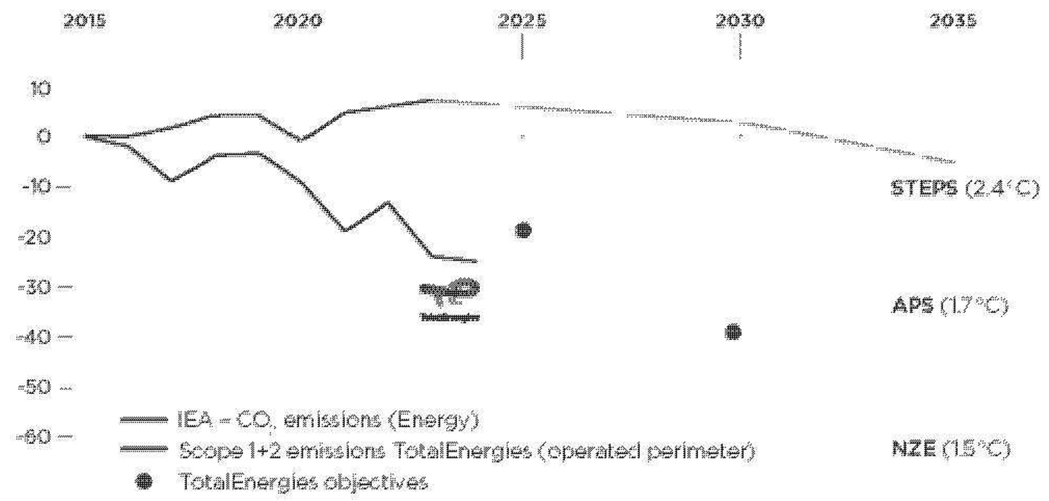
TotalEnergies puts its targets for 2030 into perspective in relation to the IEA scenarios.

Its targets for reducing the lifecycle carbon intensity of energy products sold[4] (a 17% reduction by 2025 and a 25% reduction by 2030) put TotalEnergies on a trajectory close to the Announced Pledges Scenario (APS) in the IEA's World Energy Outlook 2023, which assumes that the States party to the Paris Agreement fulfill all their carbon neutrality objectives.

An independent third party (Wood Mackenzie) has audited the calculations made and the trajectories presented.

Scope 1+2 emissions TotalEnergies operated perimeter World CO_2 emissions (all sectors) - IEA scenarios (WEO 2024[(a)])

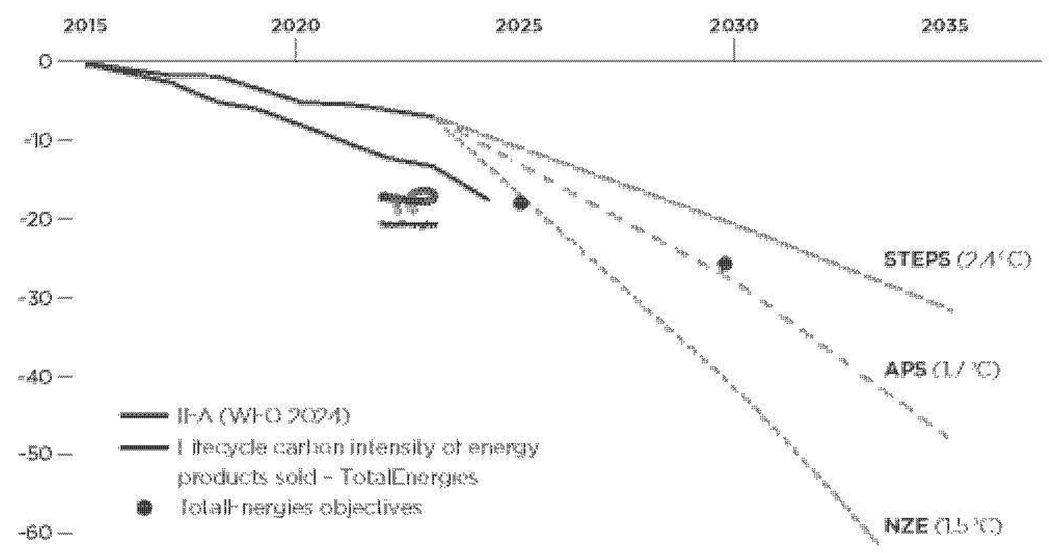
In % relative to 2015



(a) Based on the IEA World Energy Outlook 2024, License CC by 4.0. Worldwide CO_2 emissions from energy combustion and industrial processes. For TotalEnergies, emissions exclude the COVID effect in 2019, 2020 and 2021, and take into account nature-based carbon sinks projects from 2030.

Lifecycle carbon intensity of energy products sold[(a)] IEA Scenarios (WEO 2024)

In % relative to 2015



(a) Lifecycle carbon intensity of energy products sold (refer to definitions in point 5.2.1.3 B. for more details) and evolution of the carbon intensity of world energy, calculated as the ratio of worldwide CO_2 emissions from fossil fuels (Mt CO_2) to total primary energy supply (EJ) in the IEA World Energy Outlook 2024. The electricity production from renewable sources (wind, solar, hydro) included in these scenarios is reduced to the same fossil base, taking into account a substitution factor of 2.63 (38%) to make them comparable with the lifecycle carbon intensity of the energy products sold by TotalEnergies.

Exclusion of the Company from the "Paris Agreement" benchmarks

TotalEnergies is excluded from the EU Paris-aligned benchmark in accordance with the exclusion criteria stated in Articles 12(1)(d) to (g) of Commission Delegated Regulation (EU) 2020/1818, since it derives more than 10% of its revenues from the exploration, extraction, distribution or refining of liquid fuels. EU Paris-aligned benchmarks are a category of benchmarks that aim to align passively managed capital with the decarbonisation objectives of the Paris Agreement. They are subject to minimum standards and exclusion criteria set by the European Benchmark Regulation and its aforementioned Delegated Regulation.

Qualitative assessment of potential locked-in GHG emissions

The potentially locked-in GHG emissions associated with the Company's main assets and products represent an estimate of the future GHG emissions likely to be caused by these assets or products sold during their operational life.

For the Company, these emissions would essentially be linked:

- on the one hand, with respect to assets, to Scope 1+2 emissions from its facilities over their lifetime, including its oil and gas installations and flexible power generation assets (CCGT);
- and on the other hand, with respect to products, to Scope 3[5] emissions, category 11, corresponding to indirect GHG emissions caused by customers' use of energy products, i.e. from their combustion to obtain energy.

(1) International Energy Agency, STEPS scenario.
(2) A 37% decrease between 2015 and 2030.
(3) Refer to point 5.2.1.3 (E1-6) for the definition.
(4) Refer to point 5.2.1.3 (E1-6) for the definition.
(5) Refer to point 5.2.1.3 (E1-6) for the definition.

Against a backdrop of ever-increasing global demand, particularly in developing countries, TotalEnergies has chosen to meet this demand while at the same time reducing its emissions. To this end, TotalEnergies implements its integrated, balanced multi-energy strategy based on two pillars: hydrocarbons, particularly LNG, and electricity, the energy at the heart of the transition.

Potential locked-in GHG emissions are taken into account by the Company in the process to define its targets.

With respect to assets, Scope 1+2 emissions of operated facilities are part of a reduction trajectory materialized by targets described in point 5.2.3.1 (E1-4).

With respect to products, the Company has set a target of maintaining Scope 3[1] GHG emissions related to its customers' use of energy products at a level below 400 Mt CO_2e by 2025 and 2030.

In view of the transition risk that could be associated with potential locked-in emissions, TotalEnergies has managed to strengthen the resilience of its portfolio through very active management in recent years, leading on the one hand to a recentering of the oil and gas portfolio on assets and projects with low break-even points and low greenhouse gas emissions and on the other to diversification into electricity, particularly electricity from renewable sources, through an integrated strategy from production to customer.

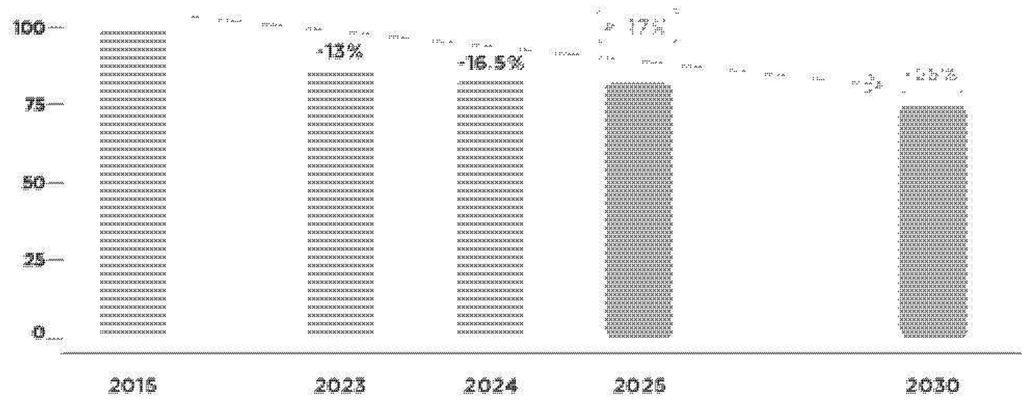
Progress made by the Company in implementing the transition strategy

The Company measures the progress made in implementing its transition strategy through various indicators listed in point 5.2.1.3 (E1-4 and E1-6), notably:

- lifecycle carbon intensity of energy products sold[2];
- net Scope 1+2 emissions from its operated activities[3];
- methane emissions from its operated activities.

In 2024, TotalEnergies maintained its progress, thanks to growth in sales of electricity from renewable sources, achieving a 16.5% reduction in the lifecycle carbon intensity of its energy products sold relative to 2015.

Lifecycle carbon intensity of energy products sold[a]
Base 100 in 2015

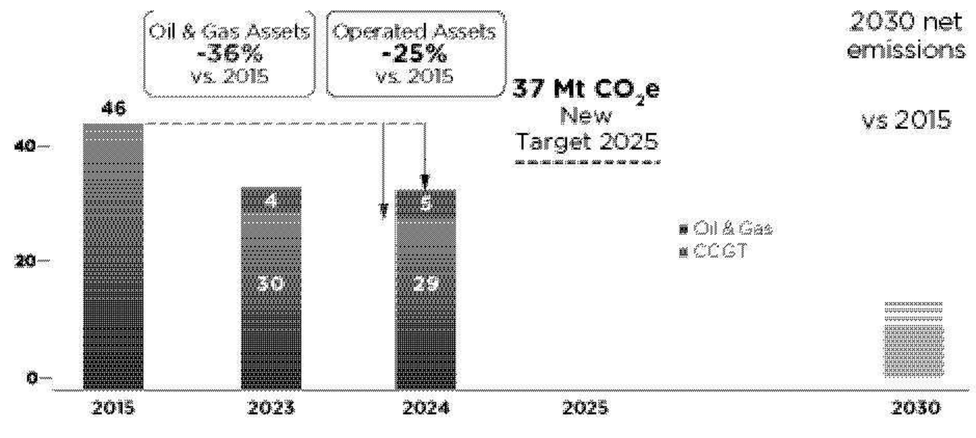


(a) Lifecycle carbon intensity of energy products sold (refer to the glossary for the definition).

The Company is resolutely continuing to reduce emissions from its operational assets. Thus, within the scope of its oil and gas facilities, emissions from assets operated by the Company fell by more than 36% compared to 2015 levels. In 2024, with more than 200 GHG emissions reduction projects coming to fruition, the Company reduced its emissions by 1.3 Mt CO_2e across its operated assets.

At the same time, emissions from flexible electricity generation increased as a result of the addition to the portfolio of CCGTs acquired in the United States and the United Kingdom, to support the strategy of rolling out an integrated low-carbon electricity offer. As a result, the Company's overall operated emissions have decreased by 25% compared to 2015.

Scope 1+2 emissions from operated facilities (Mt CO_2e)



In 2024, operated methane emissions were 29 kt CH_4, a decrease of 55% compared to 2020. TotalEnergies thus achieved its 2025 target of -50%, one year ahead of schedule, in 2024.

B. MATERIAL IMPACTS, RISKS AND OPPORTUNITIES AND THEIR INTERACTION WITH STRATEGY AND BUSINESS MODEL (ESRS2 SBM-3)

In carrying out its double materiality analysis, the Company identified eight material climate-related risks, which are described in the table below:

Material climate-related risks	Type of climate-related risk
Pace of deployment of the energy transition, evolution of the demand	Transition risk
Reputational risk relating to climate issues	Transition risk
Financing of oil and gas activities relating to climate change	Transition risk
Risk of legal actions relating to climate change	Transition risk
Risk of skill management and evolution of the professions relating to climate change	Transition risk
Risk of evolution of regulations relating to climate change	Transition risk
Technology risk relating to climate change	Transition risk
Operational risks relating to the effects of climate change and extreme events	Physical risk

(1) Refer to point 5.2.1.3 (E1-6) for the definition.
(2) Refer to point 5.2.1.3 (E1-6) for the definition of this indicator.
(3) The calculation of net emissions includes nature-based carbon sinks projects as from 2030.

Resilience analysis: scope, analysis and results

The scope of the resilience analysis covers the Company's transition and physical risks. It was updated at the end of 2024.

As detailed in point 5.1.3 (SBM-1), the Company has strengthened the resilience of its portfolio through very active portfolio management in recent years: the Upstream portfolio has seen a 50% portfolio change since 2015, ensuring an oil reserves replacement ratio above 100% over 2015-2024.

The Company's portfolio has a low breakeven point, in line with its objective of keeping it below $30/b (the Company's organic cash breakeven point before dividend is $25.4/b in 2024), which ensures the competitiveness of its resources. For its Upstream Oil & Gas assets in 2024, TotalEnergies has the lowest production cost per barrel of around $4.9/boe among its peers(1) and its GHG emissions intensity (Scope 1+2) is falling to 17 kg CO_2e/boe in 2024 (compared with 18 in 2023)(2).

Furthermore, the average life of the Company's proved and probable Oil & Gas reserves is 18.5 years, and the discounted value of its Upstream Oil & Gas assets over 18.5 years old represents less than 15% of their total value.

TotalEnergies' downstream business has been a steady contributor to the Company's results, while transitioning and adapting its activities to focus on high value-added markets. The Company is addressing the sustainability challenges of its downstream activities through three levers:

- Lowering the breakeven point of its refining-petrochemicals assets in a cyclical industry;
- Reducing GHG emissions from its operations;
- Offering its customers low-carbon mobility solutions.

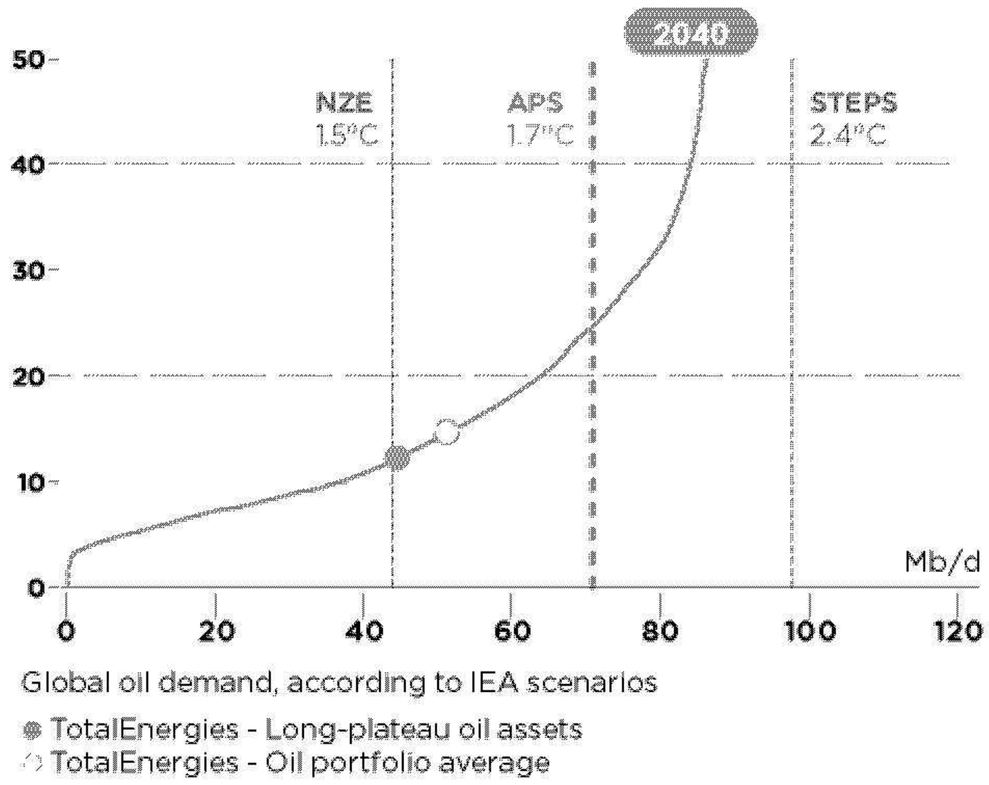
A. Risk of stranded assets

In June 2020, TotalEnergies determined that among its Upstream assets, only the Fort Hills and Surmont oil sands projects in Canada could be classified as stranded assets, meaning assets with reserves beyond 20 years and high production costs, whose overall reserves might therefore not be produced by 2050. TotalEnergies has sold these assets in 2023. This portfolio management approach allows TotalEnergies to mitigate the risk of stranded assets in the future if the risks of a structural decline in demand for Oil & Gas materialize faster than estimated as a result of stricter global environmental regulations and constraints and the resulting changes in consumer preferences.

As shown in the cost merit order curve of production costs for 2040, compared to the demand expected under various IEA scenarios, TotalEnergies' portfolio of Upstream Oil & Gas projects has an average technical cost that places it among the 50 Mb/d lowest-cost for these horizons, thanks in particular to long plateau oil assets with low production costs.

Merit order curve of global production costs(a)

Technical costs ($/b)



(a) Source: Rystad, IEA WEO 2024 scenarios.

B. Sensitivity to CO_2, oil and gas prices

TotalEnergies assesses the robustness of its portfolio, including new material investments, based on relevant scenarios and sensitivity tests.

Each material investment, including in the exploration, acquisition or development of Oil & Gas resources, as well as in other energies and technologies, is subject to an assessment taking into account a price scenario of Brent at $50/b and Henry Hub at $3/Mbtu, i.e. prices lower than those of the IEA's APS scenario deemed to be compatible with the objectives of the Paris Agreement; every new investment reinforces the resilience of the Company's portfolio.

Even though CO_2 pricing does not currently apply in all the countries where the Company operates, TotalEnergies includes as a base case, a CO_2 price of $100/t in its investment criteria (or the prevailing price in a given country, if higher); beyond 2030, the CO_2 price is inflated by 2% per year (refer to point 5.2.1.3 (E1-8)).

On the assumption that this CO_2 price would be at $200/ton, then inflated by 2%/year beyond 2030, i.e., an increase of $100/ton compared to the base case scenario from this date, TotalEnergies estimates a negative impact around 15% on the discounted present value of all the Company's assets (Upstream and Downstream).

TotalEnergies assessed the impact on the present value of its assets (Upstream and Downstream) of using the IEA's NZE price scenario in 2024. Such a scenario would reduce the discounted present value of all its assets (Upstream and Downstream) by around 10% compared with its reference scenario used to evaluate investments.

C. Impairment of Upstream assets

In addition, to ensure robust accounting of its assets in the balance sheet, for the purposes of calculating asset impairment, the Company assumes oil price trajectory that remains sustained at $\$_{2024}$70/b until 2030, then decreases linearly to reach $\$_{2024}$50/b in 2040 and then decreases from 2040 onwards to the price adopted in 2050 by the IEA's NZE scenario, ie. $\$_{2024}$25.8/b. Gas prices used in Europe and Asia decrease and stabilize from 2027 until 2040 at respectively $\$_{2024}$8/Mbtu and $\$_{2024}$9/Mbtu at levels lower than current prices; the Henry Hub price remaining at $\$_{2024}$3/MBtu over the period 2025-2040. They then all then converge towards the prices in the IEA's NZE scenario in 2050.The impairment tests also retain an internal carbon price (refer to point 5.2.1.3 (E1-8)).

(1) Peers: BP, Chevron, ExxonMobil, Shell.
(2) Oil & Gas Upstream intensity is calculated excluding integrated LNG assets.

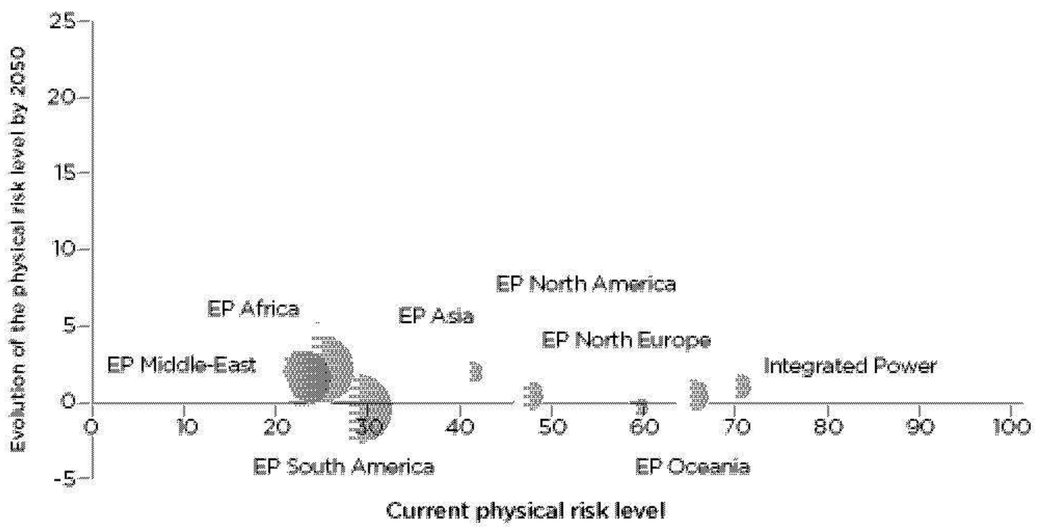
D. Physical risks

The results of the physical risk assessment carried out in 2024 for around 300 onshore and offshore assets for the SSP5-8.5 scenario[1] are presented in the graphs below based on net book value at end 2024[2].

For the selected offshore sites, strong winds and wave heights are the two most severe hazards for this type of asset. As shown in the graph below, the majority of the Company's offshore portfolio[3], which includes the Exploration & Production asset groups in Africa, South America and the Middle East, is subject to a relatively low physical risk in the current climate, and also a limited potential change between now and 2050. Offshore assets in the Integrated Power sector, comprising wind farms, are subject to a higher current physical risk due to their location (North Atlantic and South China Sea), but a low potential risk evolution.

Offshore portfolio exposure to climate-related physical risks (scenario SSP5-8.5[4]) - based on the most prevalent risk

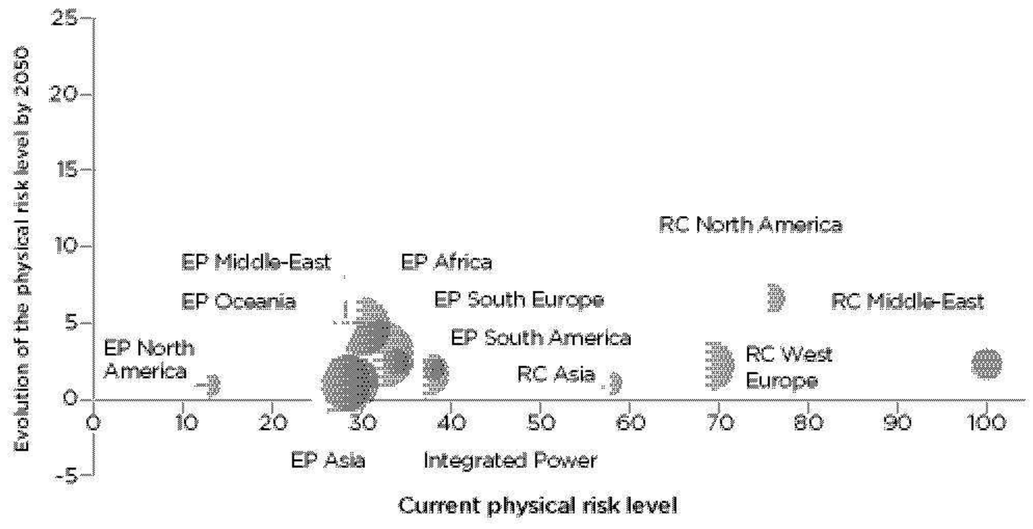
Results of the evaluation conducted in 2024 for TotalEnergies' offshore assets. Bubble size is proportional to net book value.



The results of the study of physical risks at onshore sites are presented below. Today, the Company's refineries and petrochemical plants are relatively more at risk from climate change than assets in other sectors, due to their general dependence on water resources in water-stressed areas (refer to point 5.2.3) and their greater vulnerability to flooding (as in the case of the Refining-Chemicals sites in North America, including the Port-Arthur site, for which mitigation measures have been put in place (refer to point 5.2.1.2.B Action 8). For most of the assets studied, TotalEnergies has identified limited potential evolution of physical risks linked to climate change between now and 2050.

Onshore portfolio exposure to climate-related physical risks (scenario SSP5-8.5[5]) - based on the most prevalent risk

Results of the evaluation conducted in 2024 for TotalEnergies' onshore assets. Bubble size is proportional to net book value.



5.2.1.2 Impact, risk and opportunity management

A. POLICIES RELATED TO CLIMATE CHANGE MITIGATION AND ADAPTATION (E1-2)

In implementing its strategy, TotalEnergies relies on a set of action and management principles to manage its material impacts, risks and opportunities in terms of climate change mitigation and adaptation, which are integrated into the Company's cross-functional policies, including its investment policy.

In addition, at the beginning of 2024, under the impetus of General Management, the Company launched the roll out of a collective program called "Our 5 Levers for a Sustainable Change" (refer to point 1.4 of chapter 1) which encompasses five Levers, including two relating to climate change mitigation issues ("Energy Consumption" and "Low-carbon operations"). This program aims to promote a dynamic for change by encouraging certain priority collective attitudes, and requires a commitment from everyone to implement them.

The "Energy Consumption" lever involves reviewing all energy consumption in operations and aiming to minimize it. In all projects, installations must be designed to minimize energy consumption.

The "Low-carbon operations" lever consists in promoting the use of low-carbon technologies and renewable energies in projects and operations, taking into account a CO_2 cost of $100/t. The same must be done with customers and suppliers to enable them to reduce their emissions.

The table below summarizes them, mentioning the areas concerned, their scope in terms of activities and value chain, and the people or entities responsible for their implementation.

(1) SSP5-8.5 is a pessimistic scenario assuming, among other things, high GHG emissions linked to heavy dependence on fossil fuels.According IPCC, the "best estimate"in global surface temperature change associated with SSP5-8.5 is +4.4 C [3.3-5.7 C] over 2081-2100.
(2) Capital employed excluding working capital at December 31, 2024.
(3) Capital employed excluding working capital at December 31, 2024.
(4) SSP5-8.5 is a pessimistic scenario that assumes, among other things, high ghg emissions linked to heavy dependence on fossil fuels. According IPCC, the "best estimate"in global surface temperature change associated with SSP5-8.5 is +4.4 C [3.3-5.7 C] over 2081-2100.
(5) SSP5-8.5 is a pessimistic scenario that assumes, among other things, high ghg emissions linked to heavy dependence on fossil fuels. According IPCC, the "best estimate"in global surface temperature change associated with SSP5-8.5 is +4.4°C [3.3-5.7°C] over 2081-2100.

Cross-functional policies

Principles of action and management/ Policy	Policy content	Areas covered	Material IRO involved	I/R/O	Scope of the policy	Person or entity responsible for implementation
Investment	– Allocation of investment expenses – Investment rules and criteria for projects – Portfolio sensitivity and resilience – Environmental and societal assessment of projects	Cross-functional	Pace of deployment of the energy transition, evolution of demand	Risk	Company	Executive Committee
			Financing of oil and gas activities relating to climate change	Risk		
			New low-carbon activities	Opportunity		
			Supply of renewable and transition energies, and contribution to reducing customers emissions	Impact		
			Operational risks relating to the effects of climate change and extreme events	Risk		
Controlling technological risks	– Preventing risks of accident, reducing and limiting their consequences	Cross-functional	Operational risks relating to the effects of climate change and extreme events	Risk	Company	HSE Division
Maintaining activity	– Ensuring business continuity	Cross-functional	Operational risks relating to the effects of climate change and extreme events	Risk	Company	HSE Division Safety Division
Innovation	Refer to point 1.6. of chapter 1.	Cross-functional	Technology risk relating to climate change	Risk	Company	OneTech, Hutchinson, Saft
Ethics and compliance	Refer to point 5.4.1 (G1-1, G1-3, G1-4)	Cross-functional	Risk of legal actions relating to climate change	Risk	Company	Ethics committee Legal division
			Risk of evolution of regulations relating to climate change	Risk		
HR Policies	Refer to point 5.3.1 (S1-1)	Cross-functional	Risk of skill management and evolution of the professions relating to climate change	Risk	Company	People & Social Engagement Division
Responsible purchasing program	Refer to point 5.4.2 (G1-2)	Cross-functional	GHG emissions of the Company	Impact	Upstream value chain	TotalEnergies Global Procurement

"Our 5 Levers for Sustainable Change" program

Principles of action and management/ Policy	Policy content	Areas covered	Material IRO involved	I/R/O	Scope of the policy	Person or entity responsible for implementation
"Energy Consumption" lever	– In operations, review all energy consumption with a view to minimizing it; – In projects, design installations to minimize energy consumption	Mitigation Energy efficiency	GHG emissions of the Company	Impact	Company and upstream/ downstream value chain	Business segments and industrial sites
			Implementation of energy efficiency plans	Opportunity		
"Low-carbon operations" lever	– Promote the use of low-carbon technologies and renewable energies in projects and operations, taking into account a CO_2 cost of $100/t; – Do the same with customers and suppliers to enable them to reduce their emissions	Mitigation Deployment of renewable energies	Pace of deployment of the energy transition, evolution of demand	Risk	Company and upstream/ downstream value chain	Business segments and industrial sites
			New low-carbon activities	Opportunity		
			GHG emissions of the Company	Impact		
			Methane emissions of the Company	Impact		
			Supply of renewable and transition energies, and contribution to reducing customers emissions	Impact		

	Principles of action and management/ Policy	Policy content	Areas covered	Material IRO involved	I/R/O	Scope of the policy	Person or entity responsible for implementation
Our 5 Levers for Sustainable Change" program	"Our communities" lever	– Get to know local residents and the Company's stakeholders – Embark upon and maintain constructive dialogue with them, including the careful handling of complaints – Anticipate dialogue right from the design stage of a new project	Cross-functional	Reputational risk relating to climate change Stakeholders recognition of the balanced transition strategy	Risk Opportunity	Company	Business segments and industrial sites

B. ACTIONS AND RESOURCES IN RELATION TO CLIMATE CHANGE POLICIES (E1-3)

The Company is continuing to implement its transition strategy by rolling out action plans on its decarbonization levers.

Action 1: Energy efficiency improvement plan

In September 2022, TotalEnergies launched a plan to accelerate energy efficiency improvements at its sites worldwide. Over the period 2023-2025 the Company is investing $1 billion to reduce its energy consumption and cut GHG emissions by 2 Mt CO_2e.

This plan has enabled to accelerate the actions undertaken for several years in the Company's operating sectors, with a total of more than 170 projects completed by 2024, including more than 80 initiatives for Exploration & Production, more than 80 for Refining-Chemicals and more than 10 for Marketing & Services and Gas, Renewables & Power.

At the end of 2024, these investments amounted to around $750 million: they have reduced emissions by around 1.5 Mt CO_2e/year and generated energy savings of more than $100 million/year.

Taking into account the efficiency projects reported by the teams at the industrial sites, a second energy efficiency improvement plan will be rolled out over the period 2026-2028, for a total of $1 billion.

At Exploration & Production sites, some of the gas produced by oil reservoirs is used in gas turbines to generate the electrical power needed by equipment such as water injection pumps and treatment units.

TotalEnergies has launched a project to shut down certain underused gas turbines on its operated assets. Since 2021, 74% of E&P assets have been optimized in this way, enabling a total of nine gas turbines to be shut down. This initiative has resulted in GHG savings of around 130 kt CO_2e/ year, while reducing maintenance costs and recovering additional gas.

In 2024, in Angola, two gas turbines were shut down on Block 17 (Dalia and Pazflor), reducing CO_2 emissions by 29 kt CO_2e/year and saving 13 Mm^3/year of fuel gas, while in the United Kingdom, the Elgin site reduced its CO_2e emissions by 15 kt CO_2e/year by switching from two turbines to one.

In the Refining & Chemicals segment, improving energy efficiency involves optimizing heat exchangers, furnaces and the steam network. For example, at the Company's operated sites, the performance of furnaces has been improved by perfecting combustion conditions, which has led to a reduction in the associated GHG emissions.

Adapting the design of the facilities

At the Normandy refinery, the project to modernize the equipment in the Reforming unit, including the furnace, an exchanger and a column, has resulted in a reduction of 75 kt CO_2e/year. In addition, the heat recovery project was commissioned at the end of 2024: this waste heat emitted by the refinery process will be used to supply the district heating network for the city of Le Havre, with an associated reduction of 18 kt CO_2e.

In the Gas, Renewables & Power segment's combined-cycle power plants (CCGT), the reduction in GHG emissions is reflected in improved efficiency and performance. In 2024, at the Pont Sur Sambre CCGT, major modifications were made to the gas turbine during a major maintenance shutdown. The same project is planned for the St Avold 8 CCGT in 2025.

Over a large part of the power station fleet, high-power electric motors have been replaced by the latest generation motors with variable speed drives, which are more efficient.

Action 2: Flaring and Methane emissions reduction plan

TotalEnergies has long been committed to reducing its methane emissions by taking specific actions on each of the four sources: flaring, vents, stationary combustion and continuous real-time detection to identify any fugitive emissions.

Actions to reduce flaring

During flaring, gas combustion at the flare is incomplete, and around 2% of the gas sent to the flare is not burnt, the rest - 98% – being transformed into CO_2 after combustion. The actions to reduce flaring described below therefore directly reduce methane emissions.

Eliminating routine flaring is a priority for reducing methane and CO_2 emissions. TotalEnergies has been committed to eliminating routine flaring for new projects since 2000. A founding member of the World Bank's "Zero Routine Flaring by 2030" initiative since 2014, the Company is committed to ending this type of flaring by 2030 and to achieve this goal, has implemented several large-scale projects at its sites.

TotalEnergies is also looking to reduce other forms of flaring, and is launching projects to retrofit installations with closed flares. Closed flare systems recover and treat waste gases, reducing methane and CO_2 emissions. In 2024, the first closed flare was installed at the Tempa Rossa facility already in operation in Italy.

Several projects for closed flares on existing facilities are under study, and three have already been approved, two in Angola and one in the UK, with start-ups scheduled between 2025 and 2026. They will enable an overall reduction of 160 kt CO_2e/year.

In addition to actions on each of these sources, all new projects include strict design criteria to avoid methane emissions: no natural gas for pneumatic equipment, no continuous cold venting and systematic installation of closed flares.

In Nigeria, the OML100 asset accounted for 57% of global routine E&P flaring in 2020. The end of routine flaring on the OML100 offshore block became effective in 2023. This was the last TotalEnergies asset in Nigeria with routine flaring by design (initial design, facilities commissioned in 1993). Significant modifications were made to the facilities to send the gas produced to the Bonny LNG plant for upgrading instead of being flared. The total reduction in greenhouse gas emissions is around 330 kt CO_2e/year, including 1.3 kt CH_4/year.

In Gabon, on the operated assets of the subsidiary TotalEnergies Exploration Production, routine flaring was definitively eliminated in 2024, two years ahead of the initial schedule. To achieve this, the subsidiary adopted new operating methods and made modifications to its facilities.

Firstly, at the Anguille facility, the flare system has been redesigned to allow low-pressure gas, which was previously burnt, to be redirected to the compression facilities for recovery.

At the beginning of 2024, the Ile Mandji asset saw its compression capacity increased, enabling the gas – previously routinely flared – to be sent for treatment and compression in order to be recovered. The elimination of routine flaring has reduced the subsidiary's GHG emissions by around 120 kt CO_2e/year, including more than 1 kt CH_4/ year, while helping to increase production by 7% between 2023 and 2024.

Actions on vents

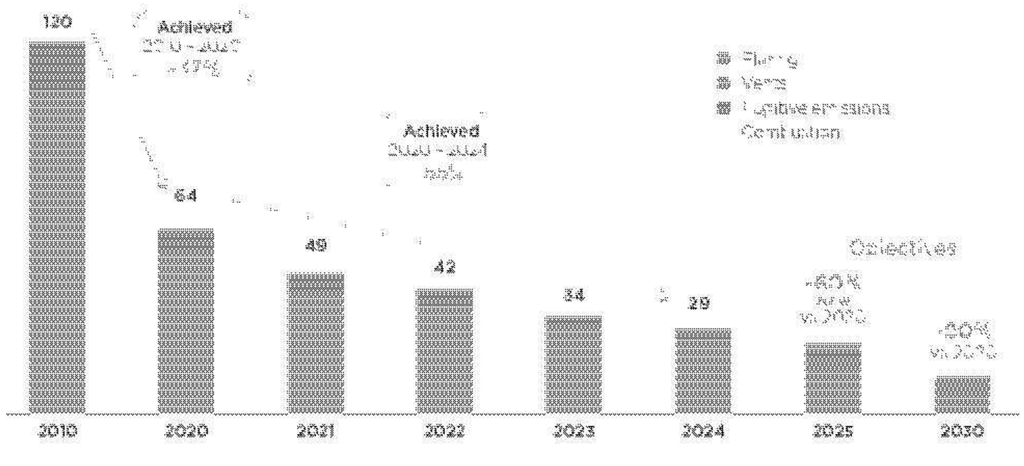
Venting is the release of methane into the atmosphere without combustion. TotalEnergies has reduced its vents since 2020 by rerouting the gas going to the vents to the gas export system or to the flare. Some equipment – such as pneumatic actuators – also uses methane as an instrumentation gas, and the replacement of this equipment with innovative solutions using compressed air instead of methane has significantly reduced vents.

Continuous real-time detection

Leaks are monitored by annual detection and repair campaigns deployed at all upstream sites operated by TotalEnergies. This regular monitoring is complemented by the deployment of AUSEA (Airborn Ultralight Spectrometer for Environmental Application) drone detection campaigns, as well as continuous, real-time detection resources that will be installed by the end of 2025 on all operated upstream assets. The number of sensors deployed will be around 13,000 for an investment of around $50 million. As illustration, a FPSO[1] could be equipped with around 500 sensors to provide complete, accurate coverage of the entire installation.

Progress since 2010

Methane emissions on operated facilities (kt CH_4)



Between 2010 and 2020, TotalEnergies reduced its operated methane emissions by almost half. Operating methane emissions decreased from 64 kt CH_4 in 2020 to 29 kt CH_4 in 2024, a 55% reduction. TotalEnergies is thus one year ahead of schedule in meeting its target of reducing its operated methane emissions by 50% between 2020 and 2025: TotalEnergies has set a new, reinforced target of -60% in 2025, compared with 2020. TotalEnergies is on the way to achieving its target of reducing its operated methane emissions by 80% in 2030, compared with 2020.

OGMP 2.0 Gold Standard Reporting and COP29

TotalEnergies has been assessed Gold Standard OGMP 2.0 in 2024 for the 4th consecutive year[2]. The OGMP 2.0 (Oil & Gas Methane Partnership) is the reference framework created in 2020 and piloted by the United Nations Environment Programme (UNEP) for methane reporting in the oil and gas sector. This framework encourages companies to continue improving the completeness and accuracy of their emissions reporting, for both operated and non-operated perimeters, in order to focus on reducing the most significant emissions. To date, nearly 150 companies are members across the value chain, including 65 upstream.

Action 3: Electrification

Low-carbon electricity supply

In Refining & Chemicals, TotalEnergies' ambition is to provide its facilities in Europe and the United States with a 100% low-carbon electricity supply from 2025, which will be made possible by its Go Green initiative. In Europe, up to 2.5 TWh/year will be supplied to the Refining & Chemicals industrial assets (excluding cogeneration facilities). This electricity will come partly from the European renewable portfolio, of which 0.8 TWh/year is under construction or in operation and 4.2 TWh/ year is under development, and partly from the Company's aggregation trading portfolio.

In the United States, around 1.5 TWh/year will gradually be supplied to the Refining & Chemicals assets from the renewable portfolio in Texas. The Danish and Myrtle assets, which are already in service, will supply around 1 TWh/year, with the Hill project providing the remainder from 2025. This electricity will benefit the Port-Arthur and La Porte facilities.

This action to supply low-carbon electricity illustrates the "Lever 2 for a Sustainable Change" which aims to use low carbon technologies in the Company's own operations and will enable a reduction in emissions of more than 2 Mt CO_2e/year on the Refining & Chemicals segment's Scope 2 compared with 2015.

Electrification of facilities

Major projects to electrify facilities have been completed or are under way at the Company's operated assets:

- at the Antwerp petrochemicals site, the steam turbine driving an ethylene compressor was replaced by an electric motor at the end of 2023;
- at the Normandy platform, an obsolete gas furnace has been replaced by a 2 MW electric heater, reducing emissions by 4.8 kt CO_2e per year;
- at the Exploration Production subsidiary in Argentina, power purchase agreements have been put in place to increase the proportion of renewable energy to 80%, enabling the Neuquèn asset to be connected to the local electricity grid and justifying the electrification of turbocompressors from 2025, thereby reducing the asset's fuel gas consumption by 90%.

(1) Floating Production Storage and Offloading unit.
(2) Refer to UNEP report "An Eye on Methane: Report 2024."

Action 4: Building Low Carbon Hydrogen supply for our refineries in Europe by 2030

TotalEnergies is committed to reducing the carbon footprint associated with the production, transformation and supply of energy to its customers. One of the levers identified by the Company is the use of low-carbon hydrogen to decarbonize its European refineries, which would reduce their direct CO_2 emissions by up to three million tons a year by 2030.

In September 2023, TotalEnergies launched a call for tender to use up to 500 kt/year of low-carbon hydrogen in its European refineries from 2030.

Four types of projects are being launched to help develop a European low-carbon hydrogen market:

- biohydrogen production units using biomass gas produced in TotalEnergies' biorefineries. This biohydrogen will be used in particular to produce sustainable aviation fuels (SAF);
- electrolyzer projects powered by TotalEnergies renewable electrons, through:
  - either joint-venture projects between TotalEnergies and a partner,
  - or tolling contracts for electrons supplied by TotalEnergies,
- long-term third-party purchases of green hydrogen from local electrolyzers or via green hydrogen imports.

Action 5: Developing Carbon Capture and Storage to reduce our emissions and those of our customers

The IEA's NZE scenario[1] includes the use of CCS[2] for up to 6 Gt CO_2 per year in 2050, in order to reduce some of the emissions from residual oil and gas consumption, as well as from other industrial processes (cement, lime, steel, etc.) This capacity is more than 100 times greater than the 50 Mt CO_2 per year[3] currently captured worldwide.

TotalEnergies' CCS strategy gives priority to reducing emissions from its activities, to reducing Scope 1+2 emissions from upstream Oil & Gas assets, as well as refining and LNG plants. For example, at Snøhvit liquefaction plant in Norway, where the Company is partner alongside Equinor, around 9 Mt of native CO_2 have been stored since 2008. Similarly, the separated native CO_2 in the new NFE and NFS LNG liquefaction trains, currently under development in Qatar, will be stored by QatarEnergy. Finally, for our Ichthys LNG asset in Australia, the Company is studying a native CO_2 storage solution for start-up beyond 2030. The study of CCS solutions for its assets therefore complements the already mentioned efforts to reduce emissions, including electrification, energy efficiency and flaring reduction.

The Company also invests in CO_2 storage projects to its own assets, which can additionally serve as a CO_2 storage solution for large industrial emitters ("Storage as a Service") which can thereby reduce their Scope 1 and secure the future of their activities. TotalEnergies is investing around $100 million per year in this business, with models that enable us to benefit from leverage. This investment will be sustained in order to contribute to a gross storage capacity of 10 Mt CO_2 per year by 2030.

Europe is at the heart of this CCS strategy as TotalEnergies is an historical operator in the North Sea, with recognized operational and geological expertise in the area. The United Kingdom, Norway and the European Union have set objectives and regulations and have provided significant financial support to promote a cross-border deployment of CCS. The Company currently developing four projects in the North Sea that will provide CO_2 storage solutions for its own assets and those of its customers.

The Company has entered the United States CCS market in 2024, with a 25% stake in the Bayou Bend project in Texas.

Finally, TotalEnergies is studying the development of CO_2 storages in Malaysia, for local and regional markets, with its partners Petronas and Mitsui.

TotalEnergies is also studying the utilization of carbon in various forms (CCU), such as in reaction with renewable hydrogen, to produce fuels or synthesis gas. In the United States, the Company is currently studying an industrial-scale production unit for "synthetic methane", produced from renewable hydrogen and biogenic CO_2, to be transported and marketed using existing natural gas infrastructures.

Action 6: Actively working with the Company's partners on non-operated assets

TotalEnergies' Scope 1+2 emissions based on equity share from sites operated by its partners in 2024 represent 25 Mt CO_2e, of which 11 Mt CO_2e are included in Scope 1+2 of the ESRS perimeter. TotalEnergies is working to mobilize its partners to reduce emissions from the assets they operate.

At Exploration & Production, a dedicated team is tasked with sharing best practices with partners at non-operated assets, such as deploying an emissions reduction roadmap that includes an energy assessment, reduction of methane venting and routine flaring, and improving energy efficiency, particularly for gas turbines and compressors. The projects conducted at the Company's operated sites are used to illustrate ways its partners can reduce their Scope 1+2 emissions and encourage uptake.

In addition to the existing collaboration with its partners on each of its non-operated assets, TotalEnergies has been a very active contributor to the Oil & Gas Decarbonization Charter (OGDC) initiative since its creation at the end of 2023.

80%[4] of TotalEnergies' non-operated production is operated by partners who are members of initiatives of which the Company is an active member (OGDC and OGMP 2.0). The vast majority of its partners are therefore committed to reducing methane emissions and eliminating routine flaring by 2030.

TotalEnergies industry leader through the Oil & Gas Decarbonization Charter

At COP28, a major initiative between national and international companies was launched to reduce the industry's GHG emissions: the Oil & Gas Decarbonization Charter (OGDC). Through this initiative – which for the first time brings together international oil companies (IOCs) and national oil companies (NOCs – the companies are committed to achieving net-zero operations by 2050, aiming for near-zero upstream methane emissions and eliminating routine flaring by 2030, as well as measuring and reporting progress towards these goals. Dr. Sultan Al Jaber, CEO of ADNOC and former President of COP28, is the driving force behind this initiative, which is being led by two other CEO Champions: Amin Nasser, CEO of Aramco, and Patrick Pouyanné, Chairman and CEO of TotalEnergies.

(1) World Energy Outlook 2024, License CC BY 4.0.
(2) Carbon Capture & Storage.
(3) Source: IEA "Carbon Capture, Utilization and Storage".
(4) Based on 2024 SEC production from all non-operated assets and membership as of end 2024. For the purpose of this calculation, ADNOC-led operating companies in the UAE are considered OGDC members, given ADNOC is championing OGDC; also when the operator is a joint-venture that is not directly an OGDC or OGMP 2.0 member, it is treated as OGDC member if 100% of its partners are OGDC members, and as OGMP 2.0 member if 100% of its partners are OGMP 2.0 members.

This initiative now brings together more than 55 companies representing almost 45% of the world's oil and gas production. On November 12, 2024, at the opening of COP29 in Baku, the OGDC published its first report to baseline, prioritize and track progress on emissions reductions. Over the past 12 months, the OGDC has established a governance framework and launched a survey of its signatories' emission reduction ambitions and implementation plans, in order to establish a baseline against which future progress can be measured. The OGDC has also rolled out a program called Collaborate & Share, designed to share solutions, promote peer-to-peer collaboration and encourage the adoption of best practices to reduce emissions.

Sharing best practices and AUSEA technology with partners

At the end of 2024, as part of the OGDC's Collaborate & Share program, TotalEnergies shared with OGDC members the latest information on its AUSEA campaigns and continuous methane monitoring plan, and at the end of 2025 will share the lessons learned from deploying continuous, real-time detection equipment on all its operated Upstream assets.

In addition to the OGDC, TotalEnergies actively contributes to sharing its experience with its partners by making available its cutting-edge AUSEA technology for the detection and quantification of on-site methane emissions by drone. In November 2024, TotalEnergies signed its 6th cooperation agreement with a partner, Oil India in India, to share AUSEA, following the Companies Sonangol in Angola, Socar in Azerbaijan, Petrobras in Brazil, NNPC in Nigeria and ONGC in India.

These cooperation agreements, which enable to fly over installations where TotalEnergies is not a partner, complement the AUSEA campaigns on all its operated upstream sites, now regular in 2024, following the first flights in 2022, and those on non-operated assets (in Brazil, Angola and Nigeria in 2024).

Action 7: Helping customers reduce their emissions

The Company is ambitious in its targets for direct emissions (Scope 1+2), which its controls in facilities it is operating. It is also ambitious in helping its customers reduce their emissions through its multi-energy strategy, which makes a wider range of energies available to customers, including low-carbon energies. Indeed, by offering its clients an increasingly decarbonized portfolio, TotalEnergies contributes to the energy transition and helps its clients reduce their emissions. It tracks progress through the lifecycle carbon intensity of energy products sold – the decarbonization index of its sales – for which it has set reduction targets for 2025 and 2030.

TotalEnergies has been leading among its peers in terms of actually achieving decarbonization of the energy products sales mix since 2015. In 2024, it maintained its progress by notching a 16.5% reduction in the lifecycle carbon intensity of its energy products compared to 2015.

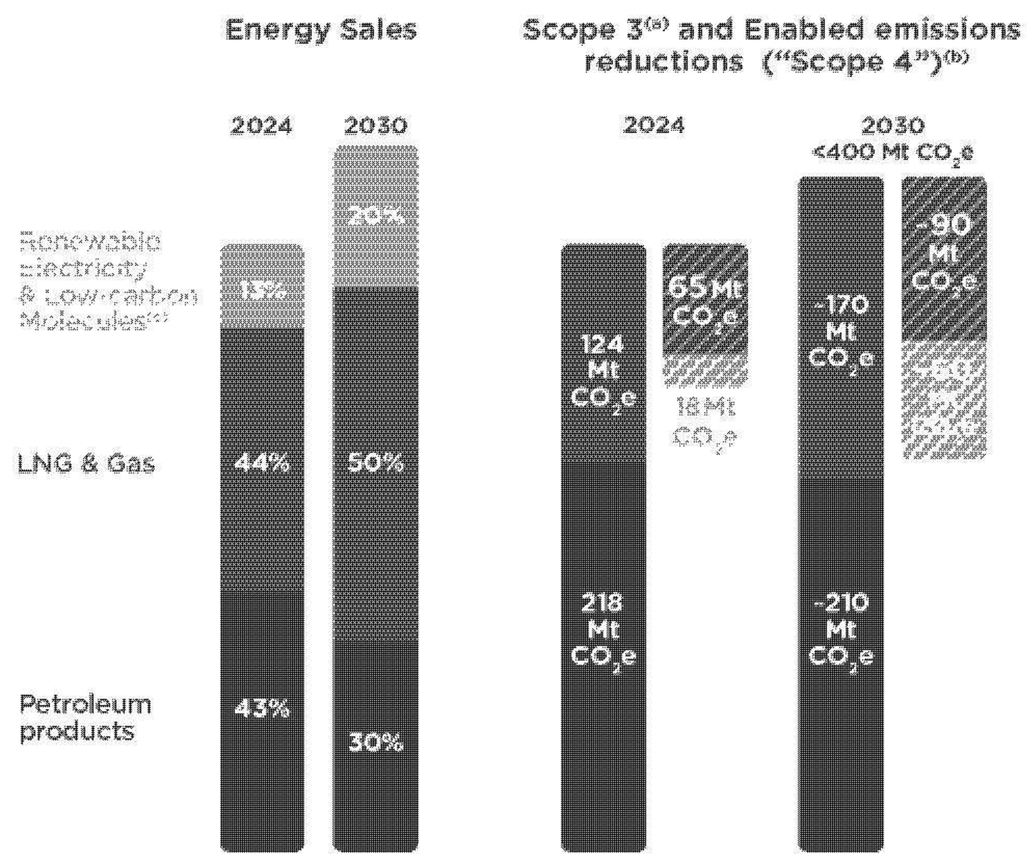
The 2025 target for lowering the lifecycle carbon intensity of energy products sold[1] has been strengthened: Previously at 15%, it is now targeting 17%. By 2030, the Company's two-pillar balanced transition strategy aims to result in a sales mix of energy products with the view to final use whose lifecycle carbon intensity of energy products sold would be reduced by 25%, which means:

- for an equivalent quantity of energy, the carbon content of energy products would be reduced by 25% ("less emissions for same energy")
- for an equivalent quantity of emissions (Scope 1+2+3), the Company would supply 33% more energy to its customers ("more energy for same emissions").

Established in 2022, TotalEnergies OneB2B Solutions assists large companies across 35 industries in fulfilling their decarbonization roadmaps and offers low-carbon solutions tailored to their needs from various segments of the Company, such as renewable electricity, BESS solutions, biogas, biofuels, truck charging solutions, and CCS. In 2024, more than 400 large companies are accompanied in their transition through 850 potential projects worldwide. To date, about 7 TWh/year of low-carbon energy sales have been committed in 2030 to these industries.

Enabled emissions reductions

Estimated Scope 3[a] and enabled emissions reductions[b]



(a) Presented as full area in the graph. GHG Protocol - Category 11 (refer to point 5.2.1.3 for further details).
(b) Presented as hatched area in the graph (refer to point 5.2.1.3 for further details).
(c) Biofuels, biogas, hydrogen and e-fuels/e-gas.

Estimated enabled emissions reductions[2] from LNG sales

Gas-fired power plants are a flexible mean of power generation and can be mobilized quickly; so they offer a secure backup for grids which are supplied by a growing share of intermittent renewable sources. CCGTs emit half as much GHG as coal or fuel oil-powered power plants[3], that still account for the majority of power generation capacity in some countries. Globally, coal covers 36% of production and 74% of GHG emissions associated with electricity, and gas covers 23% of production and 22% of emissions respectively[4].

LNG, which can be shipped by sea, can flexibly supply a large number of power plants. A large part of the gas sold by the Company goes to the electricity sector.

(1) Refer to point 5.2.1.3 (E1-6) for the definition of this indicator.
(2) Presented as hatched area in the graph (refer to point 5.2.1.3 for further details).
(3) IEA 2024; Life Cycle Upstream Emission Factors 2024.
(4) The rest of the electricity production is provided by hydroelectricity (15%), solar and wind (12%), nuclear (9%) as well as by fuel oil and other renewables. Figures for the year 2022 detailed in the IEA's WEO 2024.

Given the positive role of gas in the transition, TotalEnergies is aiming to increase its share in its sales mix by 2030, and has made the decision not to set a gas Scope 3[1] reduction target. When fuel-oil or coal-fired power generation is replaced by gas-fired power generation, GHG emissions fall, whereas TotalEnergies' gas Scope 3[2] increases.

The Company has estimated the enabled emissions reductions to which its 2024 sales of LNG may have contributed. The calculation is based on generation mixes and emission factors, published by Enerdata and the IEA[3], for each country or region[4] and power generation mean. According to its estimates, the Company's customers use of LNG may have enabled emissions reductions by about 65 Mt CO_2e in 2024.

Estimated enabled emissions reductions from renewable electricity generation

A similar approach has been taken to estimate the enabled emissions reductions by renewable electricity generation: following IRENA's approach, the methodology compares the emissions of the country's alternative non-renewable mix to those from solar and wind generation. The applied emission factors (published by the IEA) cover the entire life cycle of power generation[5]. Non-renewable generation mixes are based on historical data published by Enerdata[6] for each country or continent[7].TotalEnergies estimates that its renewable power generation may have enabled reduced emissions by around 18 Mt CO_2e in 2024.

Estimates for 2030

By 2030, the enabled emissions reductions could amount to 150 Mt CO_2e (around 90 Mt CO_2e for LNG sales and around 60 Mt CO_2e for renewable production), compared with a Scope 3[8] maintained below 400 Mt CO_2e. These enabled emissions reductions that will result from the customers' decision to substitute carbon-based energy products (fossil fuels, in particular coal) with less carbon-intensive energies (natural gas and renewables) will contribute to a reduction in global GHG emissions.

Action 8: Adapt to physical risks

Following an assessment of the exposure of its operating sites to climatic hazards performed in 2024 (refer to point 5.2.1.1.B.D), TotalEnergies carries out additional studies where necessary to ensure that the consequences do not affect the integrity of installations or the safety of people. The Company also takes climate risk into account in the design of its facilities.

Some refineries and petrochemical plants are relatively more at risk from climate change than assets in other sectors, such as those in North America, which are highly vulnerable to flooding. For example, the Port-Arthur site is subject to the risk of flooding following hurricanes, heavy rain and/or river flooding. Measures are in place to mitigate risks:

- a perimeter dike protects the industrial zone and the town of Port Arthur from river flooding.
- a drainage system allows rainwater to be carried away from the area.
- sensitive installations (electrical distribution, control room, fire protection, etc.) have been raised or protected by inflatable flood control barriers.
- an emergency plan predefines the organization, means of communication and measures to be implemented, depending on the thresholds reached during the alert phase.
- a contract with a meteorological company allows us to supplement the information provided by the authorities and make it more reliable, by providing site-specific monitoring in real time.

(1) GHG Protocol - Category 11 (refer to point 5.2.1.3).
(2) GHG Protocol - Category 11 (refer to point 5.2.1.3).
(3) Production mix for the year 2023 provided by Enerdata (data published in January 2025) and emission factors for the year 2022 provided by IEA (data published in 2024).
(4) For this calculation, Germany, France, Belgium, Luxembourg and the Netherlands were considered as a single electricity and gas system. For France, the emission factors published by RTE have been considered.
(5) Combustion-associated emission factors and upstream emission factors published in 2024 by the IEA for the year 2022.
(6) Enerdata data published in January 2025 for the year 2023.
(7) For this calculation, Europe has been considered as a single electrical system.
(8) GHG Protocol - Category 11 (refer to point 5.2.1.3).

5.2.1.3 Metrics and targets

A. TARGETS RELATED TO CLIMATE CHANGE MITIGATION AND ADAPTATION (E1-4)

To support its climate change mitigation and adaptation policies, the Company has set targets for 2025 and 2030, and established a set of indicators to monitor its performance.

	Base year	Value at base year	2025 target	2030 target	Target perimeter	in % of the ESRS perimeter (2024)
Net Scope 1+2 emissions[a]	**2015**	**46 Mt CO_2e**	**37 Mt CO_2e**	**-40% (25 to 30 Mt CO_2e)**	**Operated perimeter, Scope 2 market-based**	**76%**
Methane emissions	2020	64 kt CH_4	-60%	-80%	Operated perimeter, excluding biogenic methane	64%
Intensity of methane emissions from operated oil & gas facilities (Upstream)	**2015**	**2.3%**		**<0.1%**	**Operated perimeter, upstream oil & gas facilities**	
Routine flaring	**2010**	**7.5 Mm^3/d**	**<0.1 Mm^3/d[b]**	**~0**	**Operated perimeter - Upstream oil & gas operations**	
GHG emissions - Scope 3[c]	**2015**	**410 Mt CO_2e[d]**	**<400 Mt CO_2e**	**<400 Mt CO_2e**	**Value chain, excluding biogenic CO_2, GHG Protocol - category 11**	**100%**
Lifecycle carbon intensity of energy products sold	**2015**	**73 g CO_2e/MJ**	**-17%**	**-25%**	**Value chain, net Scope 1+2+3 lifecycle emissions**	

(a) Net emissions, including nature-based carbon sinks projects from 2030.
(b) Excluding Iraq.
(c) GHG Protocol – Category 11. Refer to point 5.2.1.3 (E1-6) for the definition.
(d) In 2015, Scope 3 category 11 was published at 410 MtCO_2e. The Company keeps this reference to assess the evolution of its Scope 3. If the Scope 3 category 11 for 2015 had been recalculated according to the IPIECA value chain methodology (published in 2016) on the gas value chain, as introduced in data disclosures from 2021, then the Scope 3 category 11 of 2015 would have been 465 Mt CO_2e, including 344 Mt CO_2e for the oil value chain and 121 Mt CO_2e for the gas value chain.

2030 targets worldwide (Scope 1+2)

- Reduce GHG emissions (Scope 1+2) from operated facilities from 46 Mt CO_2e in 2015 to less than 37 Mt CO_2e by 2025. By 2030, reduce by 40% net[1] Scope 1+2 GHG emissions relative to 2015 for operated activities, thus bringing them to between 25 and 30 Mt CO_2e. Offsetting through nature-based carbon sinks projects will start only from 2030 on for residual emissions on the basis of a consumption of approximately 10% per year of the Company's stock of carbon credits, i.e. around 5 million per year. This target concerns Scope 1+2 GHG emissions, as the Company has not defined a specific target for Scope 1 or Scope 2 alone. It implements action plans to reduce both these scopes (refer to point 5.2.1.2 B. (E1-3)). The perimeter of this target is the operated perimeter defined in point 5.1.1.1 (BP-1), covering, in 2024, 76% of the GHG emissions (Scope 1+2) of the ESRS perimeter (refer to point 5.2.1.3 (E1-6)). The Scope 2 used in this indicator is market-based Scope 2.
- Within Scope 1, TotalEnergies has specifically set a more ambitious target for its direct methane emissions[2], given its greater warming potential than CO_2. This target is a 60% reduction between 2020 and 2025, and an 80% reduction between 2020 and 2030 on the Company's operated facilities.
- Reduce methane emissions intensity[3] below 0.1% of commercial gas produced at Upstream operated Oil & Gas facilities.
- Reduce routine flaring[4] (Upstream Oil & Gas operations) to less than 0.1 Mm^3/d by 2025, with the goal of eliminating it by 2030.

2030 worldwide targets (Scope 3)

- Maintain Scope 3[5] GHG emissions below 400 Mt CO_2e by 2025 and 2030. This target covers, in 2024, 100% of Scope 3 emissions of the categories considered as significant by the Company.

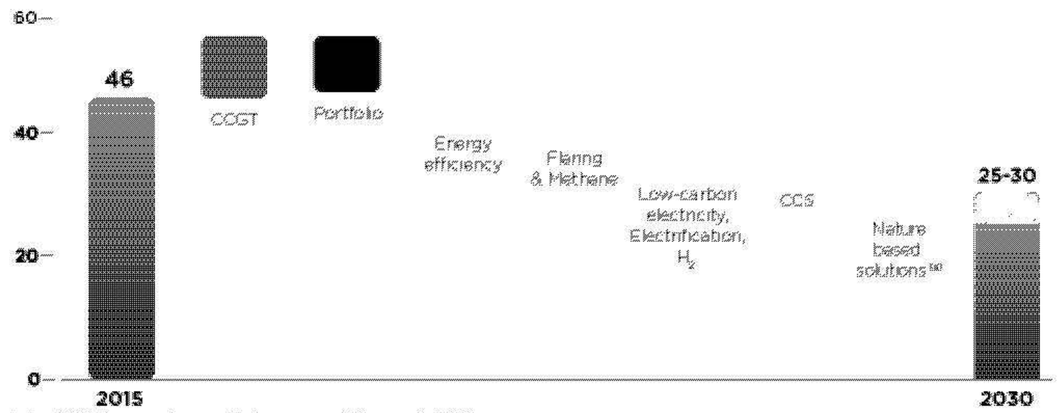
2030 worldwide target (carbon intensity)

- Reduce the lifecycle carbon intensity of the energy products sold by more than 25% compared to 2015. By 2025, the target reduction is at least 17% (Scope 1+2+3).

(1) The calculation of net emissions takes into account nature-based carbon sinks projects from 2030.
(2) Excluding biogenic methane.
(3) Methane emissions intensity in relation to commercial gas produced, refer to definition in point 5.2.1.3 (E1-6).
(4) Routine flaring, as defined by the working group of the Global Gas Flaring Reduction program within the framework of the World Bank's Zero Routine Flaring initiative. Excluding Iraq.
(5) GHG Protocol – Category 11.

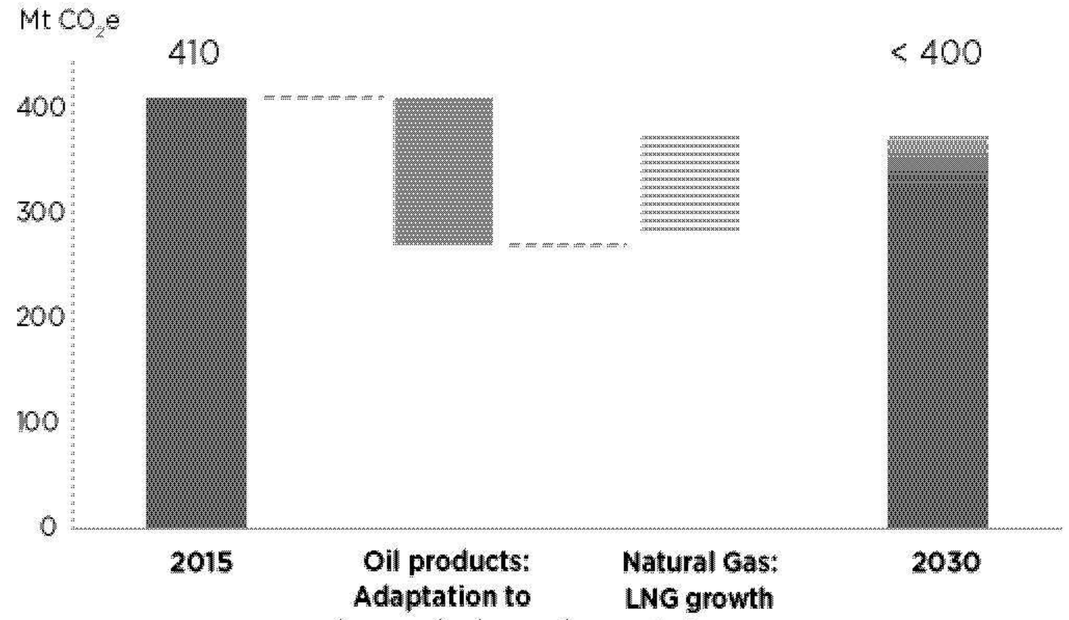
Decarbonization levers used to achieve reduction targets

The decarbonization levers enabling the Company to reach the reduction target of net[1] Scope 1+2 GHG emissions of operated facilities are described in the graph below.



(a) NBS credits will be used from 2030.

The decarbonization levers enabling the Company to reach its Scope 3 target are described in the graph below.



B. INDICATORS

ENERGY CONSUMPTION AND MIX (E1-5)

Final energy consumption and mix	2023	2024
1) Fuel consumption from coal and coal products *(MWh)*	0	0
2) Fuel consumption from crude oil and petroleum products *(MWh)*	66,900,000	62,600,000
3) Fuel consumption from natural gas *(MWh)*	108,200,000	105,400,000
4) Fuel consumption from other fossil sources *(MWh)*	0	0
5) Consumption of purchased or acquired electricity, heat, steam and cooling from fossil sources *(MWh)*	6,500,000	4,200,000
6) Total fossil energy consumption *(MWh)* (calculated as the sum of lines 1 to 5)	**181,600,000**	**172,200,000**
Share of fossil sources in total energy consumption (%)	**98.3%**	**96.9%**
7) Consumption from nuclear sources *(MWh)*	**1,400,000**	**1,100,000**
Share of consumption from nuclear sources in total energy consumption *(%)*	**0.8%**	**0.6%**
8) Fuel consumption from renewable sources, including biomass (also comprising industrial and municipal waste of biologic origin, biogas, renewable hydrogen, etc.) *(MWh)*	<100,000	<100,000
9) Consumption of purchased or acquired electricity, heat, steam and cooling from renewable sources *(MWh)*	1,800,000	4,400,000
10) Consumption of self-generated non-fuel renewable energy *(MWh)*	<100,000	<100,000
11) Total renewable energy consumption *(MWh)* (calculated as the sum of lines 8 to 10)	**1,800,000**	**4,500,000**
Share of renewable sources in total energy consumption *(%)*	**1.0%**	**2.5%**
Total energy consumption *(MWh)* (calculated as the sum of lines 6, 7 and 11)	**184,800,000**	**177,800,000**

Given the orders of magnitude, the data in the above table have been rounded to the nearest 100,000 MWh.

The Company has estimated the information on its energy consumption and mix taking into consideration the following assumptions:

- the perimeter applied is the same as for the accounting of Scope 1+2 GHG emissions, i.e. the ESRS perimeter extended to companies and/or assets over which the Company has operational control, regardless of their financial consolidation method;
- the self-consumption of Upstream oil & gas activities, corresponding to the consumption of fuel gas produced at these facilities to generate energy, has been allocated to the "Consumption of fuel from natural gas" line;
- the self-consumption of Downstream oil & gas activities, which corresponds to the consumption of refinery by-products to produce energy, has been allocated to the "Consumption of fuel from crude oil and petroleum products" line;
- consumption of fuels from coal, other fossil sources or renewable sources, including biomass, has been considered as zero or non-material;
- renewable electricity purchases backed by guarantees of origin are taken into account on the same basis as market-based Scope 2 GHG emissions. For other electricity purchases, as well as heat, steam and cooling purchases, the breakdown by primary source has been estimated on the basis of the "Electricity and heat" global mix data, excluding renewables, provided by the IEA in its latest World Energy Outlook report.

(1) The calculation of net emissions takes into account nature-based carbon sinks projects from 2030.

Moreover, in 2024, the non-renewable energy production of the Company reached 1,429 TWh (hydrocarbons and electricity produced by flexible gas-powered capacities) and its renewable energy production reached 30 TWh (electricity from renewable sources, biofuels and biogas).

Energy intensity based on net revenue

In the table below, the Company has estimated its ratio of energy intensity to net revenues[1]. The net revenue corresponds to the Revenues from sales as presented in the consolidated statement of income, i.e. sales minus excise taxes (refer to point 8.2 of chapter 8). However, it is important to note that TotalEnergies' revenue is largely correlated with oil and gas prices, which are volatile and over which it has no influence. Consequently, the energy intensity ratio per net revenue is not a relevant indicator for assessing changes in the Company's energy consumption.

Energy intensity per net revenue	2023	2024	% N/N-1
Total energy consumption from activities in high climate impact sectors per net revenue from activities in high climate impact sectors *(MWh/M$)*	844	909	+8%
Total energy consumption from activities in high climate impact sectors *(MWh)*	184,800,000	177,800,000	-4%
Net revenue from activities in high climate impact sectors *(M$)*	218,945	195,610	-11%

GROSS SCOPES 1, 2, 3 AND TOTAL GHG EMISSIONS (E1-6)

		Retrospective							
		ESRS perimeter				Operated perimeter			
Scope 1 GHG emissions *(t CO2e)*		2015	2023	2024	%N/N-1	2015	2023	2024	%N/N-1
Gross Scope 1 GHG emissions	**a+b+c**	**52,600,000**	**44,100,000**	**43,200,000**	**-2%**	**41,800,000**	**32,200,000**	**32,900,000**	**-13%**
Percentage of Scope 1 GHG emissions from regulated emissions trading schemes			53%	47%	-11%		59%	54%	-8%
of which emissions from the consolidated accounting group	*a+b*	*40,200,000*	*34,300,000*	*34,200,000*	*0%*	*29,300,000*	*22,400,000*	*23,900,000*	*+7%*
of which emissions from the consolidated accounting group - operated perimeter	*a*	*29,300,000*	*22,400,000*	*23,900,000*	*+7%*	*29,300,000*	*22,400,000*	*23,900,000*	*+7%*
of which emissions from the consolidated accounting group - outside the operated perimeter	*b*	*10,800,000*	*11,900,000*	*10,300,000*	*-13%*	*–*	*–*	*–*	
of which emissions outside the consolidated accounting group - operated perimeter	*c*	*12,400,000*	*9,800,000*	*8,900,000*	*-9%*	*12,400,000*	*9,800,000*	*8,900,000*	*-9%*

		Retrospective							
		ESRS perimeter				Operated perimeter			
Scope 2 GHG emissions *(t CO2e)*		2015	2023	2024	% N/N-1	2015	2023	2024	% N/N-1
Gross market-based Scope 2 GHG emissions	**d+e+f**	**–**	**2,700,000**	**1,700,000**	**-37%**	**4,000,000**	**2,300,000**	**1,400,000**	**-5%**
of which emissions from the consolidated accounting group	*d+e*	*–*	*2,300,000*	*1,500,000*	*-35%*	*3,600,000*	*1,900,000*	*1,100,000*	*-42%*
of which emissions from the consolidated accounting group - operated perimeter	*d*	*–*	*1,900,000*	*1,100,000*	*-42%*	*3,600,000*	*1,900,000*	*1,100,000*	*-42%*
of which emissions by the consolidated accounting group - outside the operated perimeter	*e*	*–*	*400,000*	*300,000*	*-25%*	*–*	*–*	*–*	*–*
of which emissions outside the consolidated accounting group - operated perimeter	*f*	*–*	*400,000*	*300,000*	*-25%*	*400,000*	*400,000*	*300,000*	*-25%*
Gross location-based Scope 2 GHG emissions (t CO2e)	*g+h+i*	*–*	*2,600,000*	*2,600,000*	*–*		*2,200,000*	*2,200,000*	*–*
of which emissions from the consolidated accounting group	*g+h*	*–*	*2,200,000*	*2,200,000*	*–*		*1,800,000*	*1,800,000*	*–*
of which emissions from the consolidated accounting group - operated perimeter	*g*	*–*	*1,800,000*	*1,800,000*	*–*		*1,800,000*	*1,800,000*	*–*
of which emissions from the consolidated accounting group - outside the operated perimeter	*h*	*–*	*400,000*	*400,000*	*–*		*–*	*–*	*–*
of which emissions outside the consolidated accounting group - operated perimeter	*i*	*–*	*400,000*	*400,000*	*–*		*400,000*	*400,000*	*–*

	Retrospective							
	ESRS perimeter				Operated perimeter			
Scope 1+2 GHG emissions *(t CO2e)*	2015	2023	2024	% N/N-1	2015	2023	2024	% N/N-1
Scope 1+2 GHG emissions (market based)	**–**	**46,800,000**	**44,900,000**	**-4%**	**45,800,000**	**34,600,000**	**34,300,000**	**-1%**
of which oil & gas facilities	*–*	*42,600,000*	*40,000,000*	*-6%*	*45,800,000*	*30,300,000*	*29,400,000*	*-3%*
of which CCGT	*–*	*4,300,000*	*4,900,000*	*+14%*	*–*	*4,300,000*	*4,900,000*	*+14%*

(1) All the Company's activities have been considered as high climate impact sectors, and the Company's total energy consumption and total net revenues have therefore been taken into account.

Significant Scope 3 GHG emissions	Retrospective ESRS perimeter 2023	2024	% N/N-1
Total gross indirect GHG (Scope 3) emissions *(t CO_2e)*	351,000,000	**342,000,000**	-3%
1) Purchased goods and services	n.s.	n.s.	
2) Capital goods	n.s.	n.s.	
3) Fuel and energy-related activities (not included in Scope 1 or Scope 2)	n.s.	n.s.	
4) Upstream transportation and distribution	n.s.	n.s.	
5) Waste generated in operations	n.s.	n.s.	
6) Business travel	n.s.	n.s.	
7) Employee commuting	n.s.	n.s.	
8) Upstream leased assets	n.s.	n.s.	
9) Downstream transportation	n.s.	n.s.	
10) Processing of sold products	n.s.	n.s.	
11) Use of sold products	351,000,000	342,000,000	-3%
Breakdown by products			
Petroleum products	227,000,000	218,000,000	-4%
Gas	124,000,000	124,000,000	0%
12) End-of-life treatment of sold products	n.s.	n.s.	
13) Downstream leased assets	n.s.	n.s.	
14) Franchises	n.s.	n.s.	
15) Investments	n.s.	n.s.	

n.s.: not significant

TotalEnergies has carried out an estimate of the 15 Scope 3 categories for the years 2023 and 2024 and has retained category 11 as significant, based in particular on the magnitude of its estimated GHG emissions, in line with its practice since 2017 and in continuity of the statement of extra-financial performance.

Total GHG emissions[a] *(t CO_2e)*	Retrospective ESRS perimeter 2023	2024	% N/N-1
Total GHG emissions (market-based)	398,000,000	**387,000,000**	-3%
Total GHG emissions (location-based)	*398,000,000*	*388,000,000*	*-3%*

(a) Corresponding to the sum of Scope 1, Scope 2 and Scope 3 (Category 11) GHG emissions.

Biogenic CO_2 emissions *(t CO_2e)*	Retrospective ESRS perimeter 2023	2024	% N/N-1
Biogenic CO_2 emissions from the combustion or biodegradation of biomass excluded from Scope 1	100,000	200,000	*x2*
Biogenic CO_2 emissions from the combustion or biodegradation of biomass excluded from Scope 2	0	0	–
Biogenic CO_2 emissions from the combustion or biodegradation of biomass excluded from Scope 3	10,000,000	10,000,000	–

Given the orders of magnitude, the data in the above tables have been rounded to the nearest 100,000 t CO_2e for Scopes 1 and 2, and to the nearest 1 million t CO_2e for Scope 3.

For GHG emissions, the ESRS perimeter includes that used for the financial statements excluding equity affiliates, as well as subsidiaries not financially consolidated because they are not material from a financial standpoint, but are material from a sustainability standpoint. This ESRS perimeter is extended to companies and/or assets over which the Company has operational control, irrespective of their financial consolidation method.

Compared with the operated perimeter, this ESRS perimeter is therefore broader, and also includes some 70 jointly-controlled assets operated by third parties in Exploration & Production as well as the jointly-controlled companies Naphtachimie, Appryl (both divested on 01 April 2024) and BASF TotalEnergies Petrochemicals (Refining & Chemicals segment). For the year 2024, the operated perimeter of Scope 1+2 GHG emissions represents 76% of the ESRS perimeter.

Consolidation methods are also described in point 5.1.1.1 (BP-1).

CLIMATE-CHANGE RELATED DEFINITIONS AND INDICATORS

Decarbonization: Actions aimed at reducing the carbon intensity of activities or products and/or greenhouse gas emissions from activities.

Enabled emissions reductions by LNG sales and renewables: difference between the emissions associated to a reference electricity generation (alternative source) and the emissions associated with solution proposed by the Company, either electricity generated thanks to gas supplied by TotalEnergies (by regasifying LNG) or electricity generated by renewable power plants owned by the Company (solar and wind). For LNG sales, the Company has identified, for each LNG-receiving country or region, the likely source of competing flexible power generation (alternative source). When the final use for power generation is established and the alternative source of power is identified, the difference between emissions from the alternative fuel (fuel oil or coal) and natural gas has been calculated, by using power generation emission factors of each country or region[1] for each of these sources[2]. For the countries where the final use of LNG sales is not

(1) France, Luxembourg, Belgium, the Netherlands and Germany are considered as a single electricity and gas network.
(2) Emission factors associated with combustion published in September 2024 by IEA for the year 2022, except for France where the emission factors published by RTE France were used.

identified, this method is applied to LNG sales volumes weighed by the percentage of gas used for power generation in the overall local natural gas consumption[1]. For renewable power generation, the methodology compares emissions from the country's alternative non-renewable mix (alternative source according to IRENA's methodology) and the ones from solar or wind generation. The applied emission factors (published by IEA) cover the entire life cycle of power generation[2]. Non-renewable production mixes are based on IEA data[3] by country or continent[4].

Energy mix of sales: the mix is calculated by taking into account electricity sales, marketable gas production from Exploration & Production and LNG sales, sales of petroleum products (from Marketing & Services and bulk refining sales) and distribution of biofuels, biomass and H2 sales. Electricity is placed on an equal footing with fossil fuels, taking into account average capacity factors and average efficiency ratios.

GHG: the six greenhouse gases in the Kyoto protocol, namely CO_2, CH_4, N_2O, HFCs, PFCs and SF_6, with their respective 100-year time horizon GWP (Global Warming Potential) as described in the 2021 IPCC report[5]. HFCs, PFCs and SF_6 are virtually absent from the Company's emissions or are considered as non-material, and are therefore no longer counted with effect from 2018. In CO_2 equivalent terms, nitrous oxide (N_2O) represents less than 1% of the Company's Scope 1+2 emissions.

Intensity of CO_2 equivalent emissions: Scope 1+2 GHG emissions from the facilities operated by the Company for its upstream oil & gas activities (kg) divided by the Company's operated hydrocarbon production in barrels of oil equivalent (boe).

Intensity of methane emissions: the volume of methane emissions divided by the volume of commercial gas produced, from all facilities operated by the Company (oil and/or gas) for its upstream oil & gas activities.

Lifecycle Carbon intensity of energy products sold: this indicator measures the average GHG emissions of a unit of energy products used by the Company's customers across its lifecycle (i.e., Scope 1+2+3), from production to end use by customers. This indicator is calculated as a division which takes into account:

- for the numerator:
  - emissions connected to the production and conversion of energy products used by the customers of the Company;
  - emissions connected to the end use of energy products sold to the Company's customers. For each product, stoichiometric emission factors[6] are applied to these sales to obtain an emission volume. For the biofuel value chain, lifecycle emissions (production, processing and end use) are calculated on the basis of the emissions of the equivalent fossil fuel to which a standard abatement rate is applied[7]. Non-energy use products (bitumen, lubricants, plastics, etc.) are not taken into account;
  - negative emissions stored through the use of Carbon Capture and Storage and nature-based carbon sinks projects (these volumes are nil up to 2024).
- for the denominator: the quantity of energy sold, this being the sum of:
  - the energy quantities associated with the highest points in the oil and gas value chains, as determined in the Scope 3 calculation;
  - energy quantities associated with sales of biofuels (Marketing & Services sales and bulk refining sales), biogas and hydrogen;
  - quantities of electricity sold, based on sales by marketing entities in Europe, sales linked to aggregation activities (corresponding to medium/long-term purchases), production outside Europe and sales of EV charging station entities outside Europe. Electricity is placed on an equal footing with fossil fuels, taking into account average capacity factors and average efficiency ratios.

The carbon intensity indicator therefore corresponds to the average emissions associated with each unit of energy used by customers. To track changes in the indicator, it is expressed in base 100 compared to 2015.

Native CO_2: CO_2 naturally present in the reservoir before any hydrocarbon production or CO_2 injection.

Non-routine flaring: flaring other than routine flaring and safety flaring occurring primarily during occasional and intermittent events.

Operated oil & gas facilities: Facilities operated by the Company as part of its Upstream oil and gas activities as well as in its Refining & Chemicals and Marketing & Services segments. Facilities for power generation from renewable sources or natural gas, such as combined-cycle natural gas power plants are therefore excluded from this perimeter.

Operated perimeter

Activities, sites and industrial assets of which TotalEnergies SE or one of its subsidiaries has operational control, i.e. has the responsibility of the conduct of operations on behalf of all its partners..

Routine flaring: flaring during normal production operations conducted in the absence of sufficient facilities or adequate geological conditions for the reinjection, on-site utilization or sale of the gas produced (as defined by the working group of the Global Gas Flaring Reduction program as part of the World Bank's Zero Routine Flaring initiative). Routine flaring does not include safety flaring.

Safety flaring: flaring to ensure the safe performance of operations conducted at the production site (emergency shutdown, safety-related testing, etc.).

Scope 1 GHG emissions: direct emissions of greenhouse gases from sites or activities that are included in the scope of reporting for climate change-related indicators. Direct biogenic CO_2 emissions are excluded from Scope 1 and reported separately. The percentage of Scope 1 GHG emissions resulting from regulated emissions trading schemes has been estimated for 2024, taking into account the countries referenced by the World Bank as implementing such a scheme.

Scope 2 GHG emissions: indirect emissions attributable to brought-in energy (electricity, heat, steam), net from potential energy sales, excluding purchased industrial gases (H_2). Unless stated otherwise, TotalEnergies reports Scope 2 GHG emissions using the market-based method defined by the GHG Protocol.

Scope 3 GHG emissions: other indirect emissions. If not stated otherwise, TotalEnergies reports Scope 3 GHG emissions, category 11, which correspond to indirect GHG emissions related to the direct use-phase emissions of sold products over their expected lifetime (i.e., the scope 1 and scope 2 emissions of end users that occur from the combustion of fuels) in accordance with the definition of the GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard Supplement. The Company follows the oil & gas industry reporting guidelines published by IPIECA, which comply with the GHG Protocol methodologies. In order to avoid double counting, this methodology accounts for the largest volume in the oil and gas value chains, i.e. the higher of the two production volumes or sales for end use. For TotalEnergies, in 2024, the calculation of Scope 3 GHG emissions for the oil value chain considers products sales (higher than production) and for the gas value chain, the marketable gas and condensates production (higher than gas sales, either as LNG or as direct sales to B2B/B2C customers). A stoichiometric emission factor (oxidation of molecules to carbon dioxide) is applied to these sales or production to obtain an emission volume. In accordance with the Technical Guidance for Calculating Scope 3 Emissions Supplement to the Corporate Value Chain (Scope 3) Accounting and Reporting Standard which defines end users as both consumers and business customers that use final products,

(1) Distribution of gas use and electricity production mix for 2023 provided by Enerdata.
(2) Combustion and upstream emission factors published in September 2024 by IEA for the year 2022.
(3) STEPS scenario of the World Energy Outlook 2024.
(4) Europe is considered as a single electricity network.
(5) For data published from 2024. For historical data up to 2023, the Company based its calculation on the IPCC 4th Assessment Report (2007) and has not restated the published figures given a very low impact (less than 1% of the Company's Scope 1 emissions).
(6) The emission factors used are taken from a technical note of the CDP: Guidance methodology for estimation of scope 3 category 11 emissions for oil and gas companies.
(7) The abatement rates applied to the emissions of biofuels compared to equivalent fossil fuels are in line with the minimums required by European regulations (RED II). An average value of approximately -56% is used in the calculation for 2024.

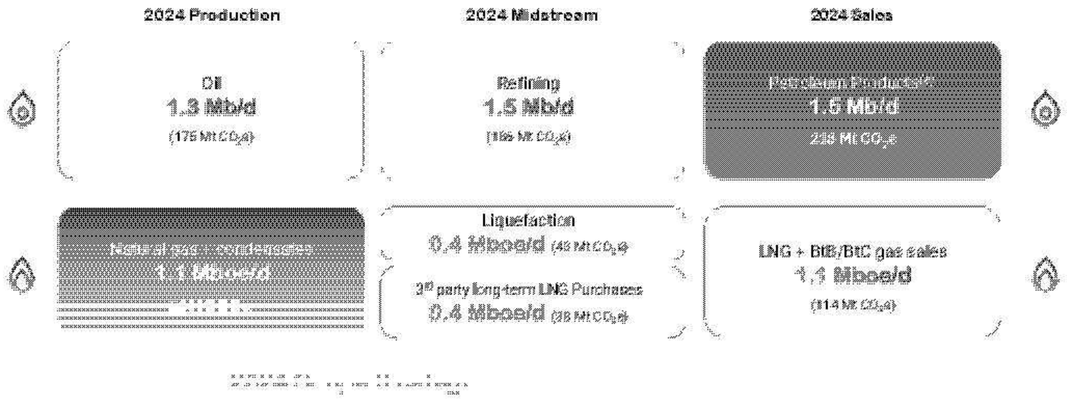
and with IPIECA's Estimating petroleum industry value chain (Scope 3) greenhouse gas emissions guidelines, under which reporting of emissions from fuel purchased for resale to non-end users (e.g. traded) is optional, TotalEnergies does not report emissions associated with trading activities.

In accordance with ESRS, biogenic CO_2 emissions from the combustion or biodegradation of biomass (from sales of biofuels and biogas) are excluded from Scope 3 and disclosed separately. The biofuels value chain which was previously reported in Scope 3 Category 11 is not included anymore and the 2023 and 2024 data have been consequently restated.

Upstream oil & gas operations

Upstream oil and gas exploration and production operations of the Exploration & Production and Integrated LNG segments. Facilities for power generation from renewable sources or natural gas, such as combined-cycle natural gas power plants are therefore excluded from this perimeter.

Accounting for Scope 3 Category 11 emissions
Considering the largest volume in the oil and gas value chains



(a) Includes bulk refining sales.

GHG intensity based on net revenue

The Company has estimated the ratio of its GHG intensity per net revenue in the table below. The net revenue corresponds to the Revenues from sales as presented in the consolidated statement of income, i.e. sales minus excise taxes (refer to point 8.2 of chapter 8). However, it is important to note that TotalEnergies' revenue is largely correlated with oil and gas prices, which are volatile and over which it has no influence. Consequently, the GHG intensity ratio per net revenue is not a relevant indicator for assessing changes in the Company's GHG emissions.

GHG intensity per net revenue *(t CO_2e/M$)*	2023	2024	% N/N-1
Total GHG emissions (market-based) per net revenue	1,818	1,978	+9%
Total GHG emissions (location-based) per net revenue	*1,818*	*1,984*	*+9%*

Total GHG emissions *(t CO_2e)*	2023	2024	% N/N-1
Total GHG emissions (market-based)	398,000,000	387,000,000	-3%
Total GHG emissions (location-based)	*398,000,000*	*388,000,000*	*-3%*

Net revenue *(M$)*	2023	2024	% N/N-1
Net revenue	218,945	195,610	-11%

	Operated perimeter		
GHG emissions - Methane[a]	2020	2023	2024
Gross methane emissions *(kt CH_4)*	64	34	29

(a) Excluding biogenic methane emissions, equal to around 1 kt CH_4 in 2024. Biogenic methane is nevertheless included in the calculation of Scope 1.

Intensity indicators		2015	2023	2024
Life cycle carbon intensity[a] of energy products sold (73 g CO_2e/MJ in 2015)	Base 100 in 2015	100[b]	87	83.5
Intensity of methane emissions from operated oil & gas facilities (Upstream)	%	0.23	0.11	0.10

(a) Lifecycle carbon intensity of energy products sold (refer to the definition in this chapter).
(b) Indicator developed in 2018, with 2015 as the baseline year.

Other indicators		2015	2023	2024
Flared gas[a] (Upstream oil & gas operations)	Mm^3/d	7.2	2.5	2.5
of which routine flaring	*Mm^3/d*	*2.3[b]*	*0.3*	*0.5*

(a) This indicator includes safety flaring, routine flaring and non-routine flaring.
(b) Volumes estimated upon historical data.

GHG REMOVALS AND GHG MITIGATION PROJECTS FINANCED THROUGH CARBON CREDITS (E1-7)

GHG removal and storage in TotalEnergies' own activities and its upstream and downstream value chain

As per the ESRS, the GHG removal referred to in ESRS E1-7 means the removal of GHG from the atmosphere as a result of deliberate human activities. It covers, for example, the capture of carbon dioxide from the atmosphere (Direct Air Capture or DAC) and the production of BioEnergy (or BE). Since the technology for the capture and geological storage of carbon from industrial sources cannot by itself remove CO_2 from the atmosphere, the carbon capture and storage (CCS) activities that the Company is carrying out or developing to reduce its own emissions, or that it may offer to major industrial customers to reduce their own emissions (refer to point 1.3.3.3 of chapter 1) do not constitute "GHG removal and storage operations" in the meaning of ESRS E1-7. They are part of the Company's actions to reduce emissions (refer to point 5.2.1.2 B. (E1-3, Action 5).

To its knowledge, TotalEnergies' activities have not generated any leaks during the transportation and storage of CO_2.

GHG mitigation projects financed through carbon credits

Use of carbon credits in regulatory frameworks, customer offset offers or voluntary cancellation

In 2024, TotalEnergies used[1] carbon credits within national regulatory frameworks:

- the Company retired 2,337 carbon credits certified by VCS (Verra) from the Envira Amazonia project to compensate emissions associated with exceptional flaring linked to its Upstream operated activity in Brazil in 2023 in accordance with the request of IBAMA, the Brazilian Environment Agency;
- as part of the national application of the European Fuel Quality Directive (Directive 98/70/EC), the Company has used 105,000 UER (Upstream Emission Reduction) credits in Germany, 14,000 UER credits in Luxembourg and 5,300 UER credits in the Czech Republic.

As part of offset offer contracts with corporate customers signed in 2023, TotalEnergies retired 34,709 VCS credits related to gas sales in the United Kingdom in 2023 and 1,316 VCS credits related to aviation fuel sales in 2023. TotalEnergies ceased offering this compensation service activity in July 2023.

In addition, as part of commitments made in 2017 to the GoodPlanet Foundation, the Company used 55,588 carbon credits in 2024 for its employees' air travel in 2023. Indeed, since 2022, TotalEnergies has been voluntarily using carbon credits at a rate of one carbon credit for every metric ton of CO_2 emitted by its employees' air travel - thanks to the Adilabad biogas project in India developed by the GoodPlanet Foundation. This project, which has deployed some 8,400 biodigesters, aims to avoid releasing around 460 kt of CO_2 into the atmosphere over 10 years, generating Gold Standard certified carbon credits while improving the lives of 40,000 people.

Financing of NBS projects to offset the Company's residual Scope 1+2 emissions

TotalEnergies invests in GHG mitigation projects outside its value chain, financed by carbon credits, in particular nature based carbon sinks (Nature Based Solutions or NBS). The Company is working to build a high-quality portfolio and is paying close attention to the integrity and permanence of the emissions reductions and sequestration achieved by the activities financed in this way. The Company plans to use the NBS carbon credits financed by the Company outside its value chain that it will have in stock from 2030 to offset only the Company's residual Scope 1+2 emissions.

At 2024 year end, the stock of NBS carbon credits financed by the Company outside its value chain stood at 13.7 million. These NBS carbon credits are certified by leading international standards such as Verified Carbon Standard (VCS or Verra), ACR (American Carbon Registry) or ANREU. They derive from nature-based carbon sink projects, i.e. sequestration projects such as reforestation or regenerative agriculture, or conservation projects ensuring the protection of environments already storing significant quantities of carbon. At the end of 2024, they represent a cumulative committed budget of nearly $770 million pledged to date over their cumulative lifespan, for an expected cumulative volume of verified credits of 37 million in 2030 and 53 million in 2050, taking into account methodological revisions for certification and technical updates. Between 2025 and 2030, TotalEnergies will continue to develop new projects in order to build up a stock of carbon credits of around 50 million by 2030[2]. In this context and based on a consumption rate of 10% of the stock per year from 2030, TotalEnergies would consume around 5 million credits per year from 2030 onwards to partially offset the Company's remaining Scope 1+2 emissions after the priority actions to avoid and reduce its GHG emissions have been carried out (refer to point 5.2.1.3 A. (E1-4) for the Company's GHG emission reduction targets).

(1) The term "used" this section corresponds to the term "cancelled" as defined in the CSRD.
(2) The final tally of carbon credits obtained will depend on the actual completion of the NBS projects, and may vary according to any additional projects and investments that the Company may decide during these periods.

Information on credits used in 2024 and the volumes of carbon credits acquired and certified at the end of 2024 that are scheduled to be used in the future as voluntary offset for Scope 1+2.

Carbon credits used in the reference year (2024)	0
Number of certified credits in stock at the end of the reference year (2024) scheduled to be used from 2030 onwards	**13 700 000**
Part relating to removal projects *(%)*	0.43%
Part relating to reduction projects *(%)*	99.57%
Part relating to VCS[a] certifications *(%)*	80.5%
Part relating to Anreu[b] certifications *(%)*	0.1%
Part relating to ACR[c] certifications *(%)*	19.5%
Part issued in the context of EU projects *(%)*	0.0%
Part that can be considered as a corresponding adjustment under Article 6 of the Paris Agreement	0.0%

(a) Verra's Verified Carbon Standard (VCS).
(b) Australian National Registry of Emissions Units.
(c) American Carbon Registry.

Use of carbon credits by 2050

In a scenario where low-carbon electrification continues to grow, both in power generation and uses, and which would enable an affordable low-carbon molecules on a large scale, TotalEnergies shares a possible vision of what its own activities could be as part of its ambition of carbon neutrality by 2050, together with society.

By 2050, the Company would produce:

- about 50% of its energy in the form of electricity, including the corresponding storage capacity, totaling around 500 TWh/year, on the premise that TotalEnergies would develop about 400 GW of gross renewable capacity;
- about 25% of its energy, equivalent to 50 Mt/year of low-carbon energy molecules in the form of biogas, hydrogen, or synthetic liquid fuels from the circular reaction: $H_2 + CO_2 \rightarrow$ *e-fuels;*
- around 1 Mboe/d of Oil & Gas, primarily liquefied natural gas (about 0.7 Mboe/d, or 25 to 30 Mt/year) and very low-cost oil accounting for the rest. Most of that oil would be used in the petrochemicals industry to produce about 10 Mt/year of polymers, of which two thirds would come from the circular economy.

This oil and gas would represent:

- about 10 Mt CO_2e/year of Scope 1 residual emissions, including methane emissions aiming towards zero (below 0.1 Mt CO_2/year); those emissions would be offset in full by nature-based carbon sinks projects;
- scope 3[1] emissions totaling about 100 Mt CO_2e/year. As part of its ambition of carbon neutrality by 2050, together with society, TotalEnergies would contribute to "eliminate" the equivalent of 100 Mt/year of CO_2 generated by its customers by developing carbon utilization (CCU) and carbon capture and storage (CCS) solutions.

INTERNAL CARBON PRICING (E1-8)

Even though CO_2 pricing does not currently apply in all the countries where the Company operates, TotalEnergies includes as a base case, a CO_2 price of $100/t in its investment criteria (or the prevailing price in a given country, if higher); beyond 2030, the CO_2 price is inflated by 2% per year

The internal price of CO_2 provides a relevant economic signal associated with these emissions and allows their social cost[2] to be integrated into all decisions.

The internal price of CO_2 applies to Scope 1+2 GHG emissions[3] from all of the Company's activities. It is integrated like other prices (crude oil price, exchange rate, etc.) into investment decisions, including the exploration, acquisition or development of oil and gas projects. In addition, Carbon Capture and Storage (CCS) and Nature Based Solutions (NBS) projects are evaluated based on the cost per ton of CO_2 (internal threshold in $/t$CO_2$).

Resilience tests at $200/t$CO_2$ are carried out and are described in point 5.2.1.1 B. Sensitivity to CO_2, oil and gas prices.

The Company carries out impairment tests on its assets, which are described in note 3 of the notes to the consolidated financial statements (refer to point 8.7 of chapter 8). The determination of recoverable amounts includes, for all identified assets, the impact of their CO_2 emissions. The future scope 1 and 2 emissions of the assets concerned over the lifetime of the assets are valued at $100/t or the prevailing price in a given country, if higher, including the existing free quota systems in Europe. Beyond 2030, the price of CO_2 is inflated by 2%/year.

In addition, the Company carries out sensitivity tests on the internal price of CO_2 on the impairments recognized:

- for the Exploration & Production sector, taking into account a CO_2 cost of $200/t, inflated by 2%/year from 2030 on all assets, would have an additional negative impact of $0.2 billion on the net income attributable to TotalEnergies for the 2024 financial year;
- with regard to the Integrated LNG sector, taking into account a CO_2 cost of $200/t, inflated by 2%/year from 2030 on all assets, would have an additional negative impact of $0.5 billion on the net income share of TotalEnergies for the 2024 financial year.

The Company's accounts incorporate the regulatory carbon prices in force. The internal price of CO_2 is not applied to actual emissions in the current year but is used for the Company's valuations to ensure that the cost of carbon and possible future regulations are taken into account in all investment decisions.

(1) GHG Protocol – Category 11.
(2) Economic indicator estimating the monetary value of the environmental, economic, human and social damage caused by the emission of an additional ton of CO_2 into the atmosphere.
(3) Excluding actual or anticipated free allowances.

5.2.2 Pollution (E2)

5.2.2.1 Policy adopted to protect the environment and limit the environmental footprint of TotalEnergies' activities (E2-1)

TotalEnergies considers respect for the environment and nature as one of its priorities. Everyone must, at every level, in the exercise of his functions, demonstrate the greatest demands in the environmental protection. The Company's activities, such as those linked to its value chain, can generate emissions to the natural environment (water, air, soil, biodiversity) such as combustion fumes, emissions to the air from various transformation processes, or even wastewater discharges. TotalEnergies pursues a policy of avoidance, reduction and, when this is necessary and possible, to compensate for the footprint of its activities on the environment and nature. TotalEnergies carried out the mapping of its Dependencies, Impacts, Risks and Opportunities (DIRO) linked to nature, the methodology of which is presented in point 5.1.4 "IRO-1". The list of families of pollutants specific to the activities of the Company is the result of this analysis. These families of pollutants contain gaseous pollutants (SO2, NOx, NMVOC, PM) and pollutants more commonly present in aqueous effluents (nitrogen, heavy metals, BTEX, Hydrocarbons). The Company does not carry out deliberate releases to soil although risks of soil contamination linked to the activities carried out by TotalEnergies may come from mainly accidental spills. The situations of accidental spills are monitored and analyzed specifically.

In addition to complying with applicable legislation, TotalEnergies has drawn up rules and guidelines that the Subsidiaries can use to limit the quantities discharged. The Company also develops new processes, products and services for its customers, with the aim of reducing their environmental footprint.

TotalEnergies has established rules for its operated sites which include management measures to reduce pollution.

Firstly, these rules stipulate that installations and equipment designed to measure and limit discharges into the environment must be identified, maintained and provided with performance targets. Secondly, they provide for specific measures to manage the following aspects:

- Chronic environmental risks;
- Accidental pollution risks;
- Chemical management, chemical storage, drilling fluid specification;
- Air emissions management, water emissions management, soil protection.

For its non-operated sites, TotalEnergies strives to share and promote best practices with the operators concerned.

For the upstream part of its value chain (purchases of goods and services), the Company has a responsible purchasing program detailed in point 5.4.3.1.

A. MANAGEMENT OF CHRONIC AND ACCIDENTAL POLLUTION AT OPERATED FACILITIES

To prevent accidental risks and in particular spills able to reach the environment, TotalEnergies implements risk management policies described in point 5.3.1.2.B.

The Company's policy for the management of major industrial accident risks applies from the facilities design stage, and throughout their lifespan, in order to minimize the potential impacts associated with its activities. These mainly concern measures to prevent accidents but also include mitigation measures. They are technical and organizational. These analyses are updated periodically, at least every five years, or when facilities are modified.

With regard to the design and construction of facilities, technical standards include applicable regulatory requirements and refer to industry best practices.

For example, in order to control the integrity of pipelines operated by the Company, they are subject to periodic surveys such as cathodic protection checks, ground or aerial surveillance or in line inspections. These actions are planned as part of the pipeline monitoring and maintenance programs. These verifications and their frequency are reinforced in areas with high human or environmental risks identified by the risk analysis.

In order to manage a major accidental spill efficiently, TotalEnergies has implemented a global crisis management system. For the sites operated by the Company exposed to the risk of accidental spills that reach the surface water, this system is supplemented by requirements of the One MAESTRO *(Management and Expectations Standards Toward Robust Operations)* reference framework. These requirements demand that the oil spill contingency plans be regularly reviewed and tested in exercises. These plans are specific to each site and are adapted to their structure, activities and environment while complying with Company recommendations.

B. MANAGEMENT AND STORAGE OF CHEMICAL PRODUCTS AND DRILLING FLUIDS AT OPERATED SITES

Chemical products whose use is necessary for the Company's activities and that are likely to affect the environment, even accidentally, are selected on the basis of a risk assessment and with the aim of minimizing this impact.

In countries with no regulatory framework, the criteria of minimum toxicity, minimum bioaccumulation potential and maximum biodegradability are used to select chemicals. A documented chemical management procedure must be implemented to limit risks to the environment, taking into account the selection, storage, transportation, use, possible associated emissions and disposal of these products.

In the specific case of drilling fluids, specifications set maximum levels for aromatic hydrocarbon compounds.

The Company's standards require compliance with specifications for the design of chemical storage facilities, in order to limit the risk of releases into the environment.

TotalEnergies fully shares the desire to replace and/or minimize the use of substances of concern and to phase out the use of substances of very high concern in the industry. The Company regularly monitors product safety in order to eliminate and/or replace, where possible, substances of concern and extremely high concern that may be present in its industrial processes.

C. AIR AND WATER EMISSIONS MANAGEMENT, SOIL PROTECTION OF OPERATED SITES

In addition to complying with applicable legislation, TotalEnergies has drawn up rules and guidelines on which the Company's operated sites can rely to limit the quantities discharged into the atmosphere or water.

For new facilities operated by the Company, internal rules require impact assessments to be carried out and, if necessary, actions to be taken to limit the impact of atmospheric and water emissions. For discharges into water, the Company specifies maximum levels for hydrocarbon discharges that are specific to its oil and gas activities.

The risks of soil pollution related to TotalEnergies' operated activities basically come from accidental spills. TotalEnergies has drawn up a pollution prevention and control guide that its subsidiaries can rely on. The recommended approach is based on four pillars:

- preventing leaks, by implementing, in the majority of sites, industry best practices in engineering, operations and transport;
- carrying out maintenance at appropriate frequency to minimize the risk of leaks;
- overall monitoring of the environment to identify any soil and groundwater pollution; and
- managing any pollution from previous activities by means of containment and reduction or elimination operations.

D. MANAGING POLLUTION RISKS IN THE DOWNSTREAM VALUE CHAIN

Unless specific precautions are taken, part of the petroleum or chemical products marketed by TotalEnergies may pose environmental risks. Respecting regulatory requirements is the main measure to limit risk throughout the life cycle of these products.

TotalEnergies has also defined the minimum requirements to be observed in order to market its petroleum or chemical products worldwide with the goal of reducing potential impacts on the environment. These include the identification and assessment of the risks inherent to these products and their use, as well as providing information to consumers. The material safety data sheets that accompany the petroleum or chemical products marketed by the Company, including those not classified as dangerous, available in at least one of the languages used in the relevant country, as well as product labels, are two key sources of information.

The implementation of these requirements is monitored by teams of regulatory experts and ecotoxicologists within the Refining & Chemicals and Marketing & Services segments of the Company. These teams draw up the safety and registration data sheets under REACH[1] (or equivalent regulations in other geographical regions) if necessary.

5.2.2.2 Targets, actions and resources related to pollution at operated sites (E2-2, E2-3)

The HSE division and the HSE departments within the Company's entities seek that both applicable local regulations and internal requirements of One MAESTRO and the Company's additional commitments are respected. The Company's steering bodies, led by the HSE division, are tasked with:

- monitoring TotalEnergies' environmental performances, which are reviewed annually by the Company, for which multi-annual improvement targets are set;
- handling, in conjunction with the business segments, the various environment-related subjects of which they are in charge;
- promoting the internal standards to be applied by the Company's operational entities.

For its operated perimeter, the Company has set itself environmental progress targets for 2030. TotalEnergies seeks to share with all employees its environmental care and nature protection requirements.

A. COMBATING POLLUTION

TotalEnergies is implementing action plans to address the situations of accidental pollution, carries out tests each year of necessary equipment and monitors indicators to assess the preparing of the sites operated by the Company for pollution control.

Oil spill preparedness	2024	2023	2022
Number of sites whose risk analysis identified at least one risk of major accidental pollution to surface water	115	122	113
Proportion of those sites with an operational oil spill contingency plan	100%	100%	100%
Proportion of those sites that have performed an oil spill response exercise or whose exercise was prevented following a decision by the authorities	97%	99%	92%

Furthermore, TotalEnergies monitors, in accordance with the practices of the profession, accidental spills of liquid hydrocarbon with a volume greater than one barrel. Those who exceed a threshold of predetermined severity are subject to a monthly review and a annual statistical information is transmitted to the Performance Committee of the Company. Any spill is followed by remedial action aiming for a return as quickly as possible of the environment to a state acceptable.

In 2024 a crisis exercise was organized between several entities of the Company: maritime transport teams based in Paris and Geneva, an offshore crude oil production and export subsidiary, the Exploration - Production segment and central anti-pollution expertise. This exercise based on a scenario involving multiple impacts (human, on the installations and on the environment) made it possible to test the capacity of the company to manage a complex incident and demonstrated effective coordination between the different entities involved.

For hydrocarbon exploration-production activities, measurements of control to avoid accidental risks of pollution linked to blowout or leak on a well focus first on the design of wells in compliance with the Company standard which is based on international standards and best practices the industry. This includes a verification process by the headquarters of the well design, an RTSC (Real Time Support Center) which allows the real-time monitoring, by headquarters specialists, of construction operations of sensitive wells, skills development, personnel certifications and equipment audits for prevention of well incidents. Well integrity management is described in point 5.3.1.2.B.

(1) EU regulation on the Registration, Evaluation, Authorization and Restriction of Chemicals.

In the event of an incident on a well in very deep water, seabed well closure equipment (subsea capping) and leak capture (subsea containment), mobilizable by air or maritime, have been positioned since 2014 in different parts of the world (South Africa, Brazil, Norway, Singapore). They allow you to have access to solutions more quickly in the event of an oil blowout or gas during underwater drilling. From these locations, these equipment can thus benefit TotalEnergies' operations all over the world. These devices come from the work of a group of nine oil companies including TotalEnergies part and are managed by the cooperative organization for the fight against pollution Marine Oil Spill Response Ltd (OSRL). Moreover, since 2018, a system intended to facilitate capping operations by shallow water depth, the Offset Installation Equipment (OIE), is positioned in Trieste (Italy). Managed by OSRL, it can be transported by plane or boat anywhere in the world if necessary. In addition, TotalEnergies has designed and developed its own system of capping (Subsea Emergency Response System) to stop the most quickly possible a potential blowout occurring on a well in during drilling or during production. Since 2015, equipments are positioned in Angola and the Republic of Congo, thus covering the entire Gulf of Guinea region.

Concerning activities for onshore or shallow water wells, various contracts with specialized companies are in place to assist the Company's teams in the event of an incident on a well. These means of intervention to manage an incident on a well are constantly improved by the search for the best techniques available in the industry. Intervention and crisis management plans are regularly updated and tested, to enable a response effective in the event of an incident on a well, with the possibility of mobilizing a headquarters team (BOTF – Blow Out Task Force) to strengthen the local teams and resolve the incident as quickly as possible.

B. CONTROLLING EMISSIONS TO AIR AND WATER

In addition to local regulations and based on its long-term plan, TotalEnergies has set the following voluntary environmental targets for its operated sites:

- reduce emissions of sulfur dioxide (SO2) into the air by 75% between 2015 and 2030, which means emitting less than 15 kt in 2030. In 2015, SO2 emissions reached 59 kt.
- limit the hydrocarbon content of continuous liquid discharges to less than 30 mg/l for offshore sites (permanent target)
- limit the hydrocarbon content of continuous liquid discharges to less than 1 mg/l for onshore sites by 2030

After analysis, the sites concerned are equipped with reduction systems that include organizational measures (managing sulfur content of fuels, improving the management of combustion processes, etc.) and specific technical measures depending on the sites (wastewater treatment plants, desulfurization units, etc.).

The Company does not discharge into the ground although risks of soil contamination linked to the activities carried out by TotalEnergies could mainly come from accidental spills. Accidental spill situations are subject to a monitoring and specific analysis.

C. REPLACING AND REDUCING SUBSTANCES OF CONCERN OR VERY HIGH CONCERN

For its operated polymer production processes, the Company carries out a continuous assessment of the substances used, in compliance with the strictest local regulations for the protection of health and the environment, and in particular with REACH regulations in the EU, where most of the operated production sites are located

For Marketing and Services segment products, traceability of the substances used and associated certifications are ensured from purchase to delivery of batches to customers.

In addition, action has been taken on operated facilities to:

- eliminate asbestos: in accordance with its internal rules, TotalEnergies prohibits the use of materials containing asbestos in new buildings and installations. These components are gradually being removed from the plants as part of a comprehensive asbestos removal plan launched several years ago.
- eliminate PCB (polychlorinated biphenyls): the Company prohibits the use of equipment containing PCBs. These components have been progressively eliminated from the installations as part of our global PCB elimination plan launched several years ago.
- eliminate HFCs and HCFCs: in accordance with European Union regulations relating to fluorinated GHGs, the Company has banned since years the use of the targeted HFC and HCFC gases.

5.2.2.3 Quantitative data on substance releases to water, air and soil (E2-4)

All TotalEnergies operated sites use the environmental reporting system of the Company which covers in particular the entire operated perimeter, to consolidate, control and communicate their data relating to discharges. These indicators are subject to regular monitoring using quantification and analytical systems which are controlled according to a frequency defined by the site in depending on their criticality. The regulations applicable to normalization of analyzes are applied. Data collection aggregation and calculations are carried out each year at the level of the Company, filters set up on the reporting tool allow to aggregate data according to the different reporting scopes. In the absence of regulatory obligations similar to those of the European Union in a number of countries where the Company operates, the collection of reliable data may be made more difficult. In view of the announcement by the European Commission on February 26, 2025 of the plan to eliminate half of the data points under the ESRSs, the Company is still working on the collection of reliable data for a number of substances and will take into account future regulatory developments.

Tables below show the evolution of discharges which are the subject of an target set by the Company for the operated domain (100%), i.e. SO_2 emissions into the air and the hydrocarbon content of emissions into water as indicated in point 5.2.2.2.B:

Atmospheric chronic emissions	2024	2023	2022
SO_2 emissions *(kt)*	17	12	13

SO_2 emissions that are likely to cause acid rain are regularly checked and reduced. In 2024, SO_2 emissions have increased mainly due to the entry into the perimeter of the Ratawi project (Iraq) which historically burns large quantities of sulfur containing gas. The Ratawi project aims precisely, in the long term, to valorize this gas and therefore reduce associated SO_2 emissions.

Chronic releases to water	2024	2023	2022
Hydrocarbon content of offshore continuous water discharges *(in mg/l)*	11.2	11.6	12.9
% of sites that meet the target for the quality of offshore discharges *(30 mg/l)*	93%	92%	93%
Hydrocarbon content of onshore continuous water discharges *(in mg/l)*	2.0	1.9	1.8
% of sites that meet the 2030 target for onshore discharges quality *(1 mg/l)*	82%	86%	73%

In 2024, the integration of a new site into the scope explains the deterioration of the % of onshore sites compliant with the 2030 objective. Studies have been launched to improve discharges from sites not yet compliant.

In addition, in 2024, the following quantities of pollutants were emitted by the operated sites (within the ESRS perimeter and above the reporting threshold values provided for in the E-PRTR[1] regulation):

Emissions into air or water[a]	Units	Total quantities
Sulfur oxide/dioxide (SO_x/SO_2) into the air	t/year	16,000
Carbon monoxide (CO) into the air	t/year	12,000
Non-methane volatile organic carbon (NMVOC) into the air	t/year	35,000
Nitrogen oxide/dioxide (NO_x/NO_2) into the air	t/year	57,000
Dust (PM) - into the air	t/year	3,000
Total Organic Carbon (TOC) or Chemical Oxygen Demand (COD)/3 in water	t/year	15,000
Total nitrogen (N, TKN) into water	t/year	8,000
Total phosphorus (P) into water	t/year	70
Polycyclic aromatic hydrocarbons (PAHs) into water	t/year	4

(a) Rounded numbers.

5.2.2.4 E2-5 Category Substances

In Europe, in accordance with the regulations, the Company's operated sites maintain an up-to-date list of substances of concern (Substances of Concern – SoC) and substances of very high concern (Substances of Very High Concern – SVHC) present in their purchases and sales (with the associated quantities). Outside Europe, the regulations in force do not provide for similar monitoring. The Company has asked its operated sites located outside of Europe to engage in this process. Based on the data collected, it is not possible at this stage for the Company to publish an estimate of the quantities concerned in accordance with its quality assurance approach for published data.

Without taking special precautions, granules (balls of diameter less than 5 mm) can be disseminated in the environment during the production and transport of polymers. As a producer, TotalEnergies integrates this issue through its participation and promotion to its customers and partners (carriers and logistics agents) to certification programs such as Operation Clean Sweep®, a voluntary sector initiative that promotes good practices to avoid the dispersion of plastic granules in the environment. TotalEnergies aims for certification of all its operated polymer production sites in Europe and the United States by the end 2025. TotalEnergies is working to implement the methodology proposed by Operations Clean Sweep® to determine the volume of microplastics disseminated. As a first approximation, this volume is estimated to be around 0.0001% of TotalEnergies' total polymer production.

For the 2024 financial year, the company has implemented a collection of data relating to emissions into air and water from operators of its non-operated sites. This collection made it possible to collect data on emissions to water from only 14% of sites. Of all the operators contacted, 46% did not provide any data, the remaining fraction provided incomplete data which could not be exploited.

Due to the diversity of sites and processes involved and the absence of activity data, it was not possible to carry out estimation of missing data. Quantities of pollutants emitted by the Company's non-operated sites into water and microplastics are therefore not available for the 2024 exercise.

Concerning air emissions, for material emissions of the Company's non-operated sites, the collection made it possible to bring together between 0 and 40% of site data depending on the type of emissions, which is insufficient. The quantities of pollutants emitted by sites not operated by the Company into the air are therefore not available for fiscal year 2024. For the 2025 financial year, the Company reiterates its requests for information with the operators of non-operated sites in order to improve the rates of collections. However, 94% of the Company's non-operated production comes from operators not subject to European regulations who have no obligation to provide this data.

Regarding operated sites accidental spills greater than one barrel reaching the environment global data in 100% are presented in the table below:

Accidental spills of liquid hydrocarbons reaching the environment and having a volume greater than one barrel, excluding theft or acts of sabotage	2024	2023	2022
Number of spills	24	27	49
Total volume of spills *(in thousands of m^3)*	0.6	1.7	0.1
Total volume recovered *(in thousands of m^3)*	~0.0[b]	~0.0[a]	0.1

(a) Precisely 40 m^3.
(b) Precisely 28 m^3.

(1) European Pollutants Releases and Transfer Register.

The Company has also questioned the operators of its non-operated sites to collect their information concerning SoC and SVHC. The operators of these sites are mainly located in countries not subject to European regulations and have no obligation to collect and make this information public. In 2024, less than 15% of third-party operated entities provided SoC and SVHC data, and the Company is therefore unable to publish this information. The Company has not identified any reasonable scientific basis for making estimates of these missing data at this stage.

5.2.3 Water and marine resources (E3)

5.2.3.1 Policies related to water and marine resources (E3-1)

TotalEnergies places the environment at the heart of its ambition of being a responsible company with a goal to improve the environmental performance of its operated facilities, specifically by encouraging responsible and sustainable water management. The process of assessing dependencies, impacts, risks and opportunities, including the analysis of water resources, is described in point 5.1.4.1 (IRO-1). TotalEnergies does not use marine resources for its operations.

TotalEnergies' policy provides that a full life-cycle environmental risk assessment must be carried out prior to any development project or product launch.

The Company requires existing operated sites to control their use of natural resources. Thus, TotalEnergies follows its principles of action in terms of risk management related to water resources, by carrying out the:

- identification of priority sensitive sites by monitoring water withdrawals, and then a risk assessment;
- improvement of water resources management depending on local or national identified needs, by adapting the priority sites' environmental management system.

In addition, an internal rule relating to the management and protection of the environment for the operated domain specifies that sites located in water stress areas and withdrawing more than 500,000 m^3 of fresh water per year must draw up a detailed analysis of the actual risk of dependence on water resources. This analysis takes all stakeholders into account. The rule also calls for the assessment of means to optimize freshwater consumption aligned with the level of risk. Operated site discharges to surface water are dealt with in point 5.2.2.

As regards its non-operated sites, TotalEnergies strives to share and promote best practices with the concerned operators, including in water stressed areas.

For the upstream part of its value chain (purchases of goods and services), the Company has a responsible purchasing program detailed in point 5.4.3 (G1-2).

5.2.3.2 Managing water stress areas

To identify sites at risk of water stress, TotalEnergies conducts a survey of freshwater withdrawals at all its operated sites and evaluates them according to the WRI's[1] "Aqueduct" current and future water stress indices, which consider withdrawals by local stakeholders and three IPCC scenarios (SSP1 RCP2.6, SSP3 RCP7.0, SSP5 RCP8.5).

Material operated sites for water resources are defined as those located in water stress areas and withdrawing more than 500,000 m^3 of water per year, i.e. 11 sites identified in 2024:

Activity	Site name	Catchment area
Refining, polymers and olefins	Antwerp platform	Scheldt, Belgium
Refining and petrochemicals	Normandy platform	Seine, France
Petrochemicals	Feluy plant	Sambre, Belgium
Refining	Leuna refinery	Elbe River, Germany
Biorefinery	Grandpuits platform	Seine, France
Biorefinery	La Mède platform	Rhône, France
Gas power plant	Pont-sur-Sambre CCGT	Maas/Sambre, France
Gas power plant	Marchienne CCGT	Maas/Sambre, Belgium
Gas power plant	Castejón CCGT	Ebro, Spain
Gas power plant	Colorado Bend CCGT	Gulf Coast, USA
Production of natural gas	Barnett sector	Gulf Coast, USA

5.2.3.3 Voluntary targets related to water resources (E3-3)

TotalEnergies has voluntarily set a freshwater resource target for 2030 for these sites, based on the identification of the material operated sites in water stress areas, and beyond regulatory requirements. The Company's target is to reduce its freshwater withdrawal in water stress areas by 20% between 2021 and 2030. The 2030 target of a maximum of 44 million m^3 of water withdrawal from water stressed areas, for a 2021 value of 55 million m^3 is based on the Company's long-term plan.

Targets related to operated site discharges to surface waters are dealt with in point 5.2.2.

Indicator for 11 material operated sites (100%)	Unit	2024	2023	2022
Fresh water withdrawal in water stress area[a]	10^6 m^3	51	50	54

(a) The basin of Carling - St Avold sites in France is excluded because the withdrawal of groundwater is administratively imposed there for environmental reasons.

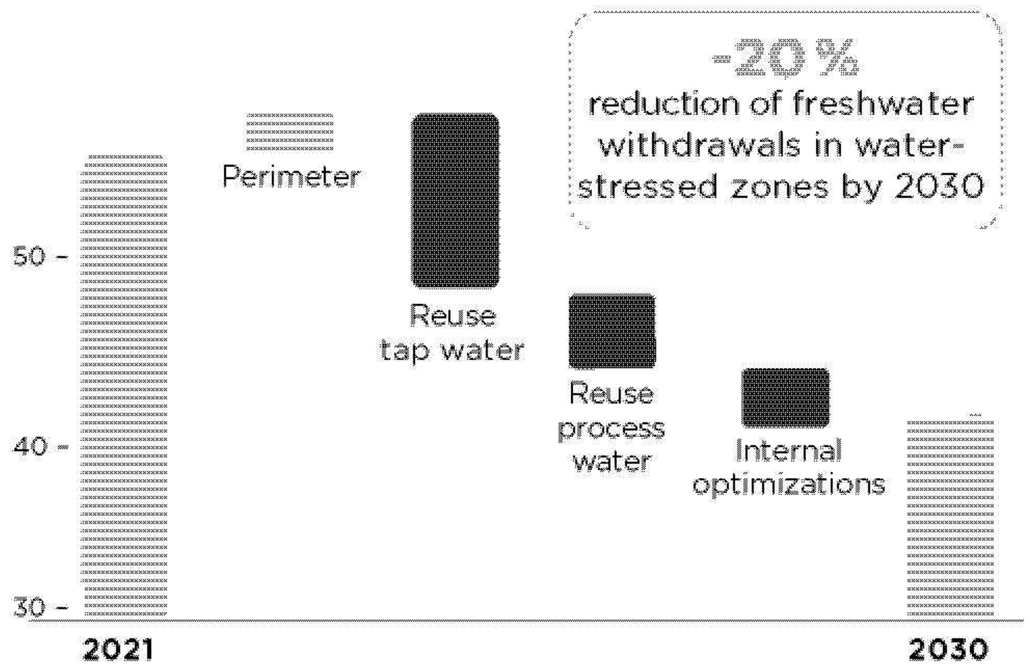
The freshwater withdrawal increase in 2024 is essentially linked to the acquisition of a new site.

(1) World Resources Institute - Baseline Water Stress and its projection to 2030.

5.2.3.4 Actions and resources (E3-2)

The various types of action shown in the chart below are expected to enable the Company to achieve its 2030 target.

TotalEnergies' action-levers to reduce its water withdrawals at its material operated sites (in million of m³)



Some operated sites, including the material sites covered by the voluntary 2030 target, have initiated detailed studies to reduce their freshwater withdrawals, in order to define actions adapted to the local context, site practices and sources of water used.

The Antwerp platform was the first Refining & Chemicals facility to approve, in 2022, a large-scale project to reduce freshwater withdrawals. The project involves reusing treated domestic wastewater to supply the Antwerp refinery. This initiative is part of the Flemish government's Blue Deal program. This project should enable the refinery to reduce its uptake of drinking water by more than 9 million cubic meters per year, or nearly 65% of its freshwater withdrawals by 2027. An investment of €1.1 million is planned. The site has carried out technical studies to identify the projects needed to adapt to the new type of water coming from the urban wastewater treatment plant. Two main actions are being studied: the construction of a new pipeline for the drinking water network, which will be separated from the new water supply network, and the installation of new flow meters.

The Normandy Platform plans to reduce its water consumption through actions including steam driven pump electrification of flare steam use optimization, further to implementing process optimization actions during previous years, such as the water reuse of a unit and the reduction of heaters steam purges. Furthermore, an urban wastewater reuse opportunity assessment is ongoing.

The Leuna Refinery is conducting technical studies on condensate recovery projects.

The La Mède biorefinery, further to installing a variable flow pump on its main water intake, is assessing various water withdrawals reduction measures including the optimization of its osmosis units and of various cooling equipments.

Studies are also being carried out to optimize water resources for the Combined Cycle Gas Turbine plants (CCGT) located at:

- Pont-sur-Sambre (France): in 2024, a consultation was launched with suppliers for the implementation of, on the one hand, decarbonated water storage to preserve it in the event of a shutdown, and on the other hand the treatment of cooling tower purge water with a view to reuse it.
- Castejón (Spain): the site has been equipped with additional flow meters in 2024 to fine tune its water balance. This will enable the identification of additional water reduction actions. Work is also underway to test the COLDEP pilot system, a vacuum floatation technology. This aims at improving the quality of water that is recycled in the ultrafiltration and reverse osmosis treatment unit. These pilot tests are scheduled for 2025.

The TotalEnergies EP Barnett production site completed a water resource vulnerability assessment in 2024, which confirmed that these sites did not have a high water vulnerability (freshwater withdrawals represents only 0.034% of the total demand in the watershed).

5.2.3.5 Water indicators (E3-4)

All of TotalEnergies operated sites use the Company's environmental reporting system, which covers the entire operated domain, to consolidate, monitor and communicate their water-related data. Volumes of water withdrawals and liquid effluent discharge are reported. These indicators are subject to continuous monitoring at the material operated sites, by means of flow meters, which are checked according to a frequency defined by the site according to their criticality, and daily calculations of the mass balance, in particular in the event of failure of the flow meters. Aggregated data collection and calculations are carried out annually at Company level.

In the course of its operated activities, the Company does not store any significant quantities of water.

Operated sites within ESRS perimeter

Indicators	Unit	2024
Fresh water withdrawals excluding open loop cooling	10^6 m³	92
Fresh water withdrawal in water stress area[a]	10^6 m³	56
Fresh water consumption	10^6 m³	45
Fresh water consumption in water stress areas	10^6 m³	26
Volume of water recycled or reused[b]	10^6 m³	11

(a) The withdrawal values in water stress areas are evaluated from the WRI *Projected Water Stress 2030 V4.0* of August 2023.
(b) Internal water reuse (e.g. reuse of process water for crude oil desalting or semi-open cooling loops purges, produced water reinjection), projects to reuse sites' effluents discharges.

The company has implemented a collection of data relating to water resources from its non-operated sites operators for the 2024 financial year. This collected data made it possible to compile data relating to the water resources of 73% of these sites. However, only 3 of the 9 non-operated sites located in water stress areas provided their data. Therefore, the information collected from non-operated sites is not representative. The Company is therefore unable to publish this information for 2024. Furthermore, in the absence of information from non-operated sites, calculation of water intensity as per the ESRS scope cannot be carried out. The Company will reiterate its requests for information from operators of non-operated sites to improve collection rates for the 2025 financial year. However, 94% of the Company's non-operated production comes from operators not subject to European regulations which have no obligation to provide this data.

5.2.4 Biodiversity and ecosystems (E4)

5.2.4.1 Transition plan and consideration of biodiversity and ecosystems in strategy and business model (E4-1)

TotalEnergies pays particular attention to the necessity of preserving biodiversity, ecosystems and to protect nature, ensuring they are duly addressed in all its activities. TotalEnergies has an ambition in terms of biodiversity.

TotalEnergies' biodiversity ambition is a contribution to the Global Biodiversity Framework (GBF) adopted at COP15 in 2022, which aims "to halt and reverse biodiversity loss and put nature on the path to recovery for the benefit of people and the planet."

The Company intends to contribute to this ambitious framework and its nationally implemented plans, such as the 2023 French National Biodiversity Strategy (SNB), through nature conservation and restoration concrete measures at its operated sites and projects as well as their surrounding areas. In 2016, the Company pledged to contribute to the achievement of the United Nations' Sustainable Development Goals (SDGs), including those relating to biodiversity, namely SDG 14 "Life below Water" and SDG 15 "Life on Land".

TotalEnergies has carried out an analysis of its material impacts and risks in relation to biodiversity and ecosystems, identifying its operated and non-operated sites that are material for biodiversity.

This analysis is described in points 5.1.4.1 (IRO-1) and 5.2.5 (E2-5), and its material sites for biodiversity are presented in point 5.2.4.2.

TotalEnergies has assessed the resilience of its strategy and business model to systemic, physical and transition risks associated with biodiversity and ecosystems. This assessment was carried out for its activities and raw material supplies.

It focused on the inclusion of nature-related Dependencies, Impacts, Risks and Opportunities (DIRO) in the Company's main activities long-term plans (all oil & gas and renewable energy operations, transport, battery production, biogas and biofuels, natural carbon sinks), including raw material supplies and considering the Company's products and services user expectations identified by its business units. External stakeholders were not directly involved in this assessment. The time horizon used corresponds to the duration of the plans that were analysed, or the duration of the projects when it was possible and relevant.

This assessment did not reveal any vulnerability of the Company's business model in relation to biodiversity or ecosystems.

5.2.4.2 Material impacts, risks and opportunities and their interaction with strategy and business model (ESRS 2 SBM-3)

The Company defines its material sites for biodiversity as sites that are material for the environment (refer to definition in point 5.1.4.1 (IRO-1)) located in biodiversity sensitive areas, as per its biodiversity ambition, namely UNESCO natural World Heritage sites, wetlands under the Ramsar Convention and IUCN category I to IV protected areas.

The materiality of sites in terms of biodiversity is assessed based on their overlap with these areas.

By the end of 2024, 82 sites operated by the Company are considered material for the environment. Six of these sites (four production sites and two projects) overlap with an IUCN category I to IV and/or Ramsar protected area. Regarding non-operated sites that fall into the category of material sites for the environment, six non-operated sites overlap with a UNESCO WHS, IUCN I to IV and/or Ramsar protected area. In total, by the end of 2024, 12 of the Company's sites (operated and non-operated) are thus considered material for biodiversity.

The activities carried out on these sites have the potential to impact biodiversity:

- plant construction activities may lead to a change in land use and thus have an impact on biodiversity;
- the presence of certain projects can lead to an influx of people towards them because of the associated economic opportunities, thus increasing the risk of over-exploitation of local natural resources (firewood, timber, bushmeat hunting, fishing, etc.);
- discharges into the natural environment from construction activities and operations may represent a risk to species and ecosystems, and potentially to threatened species;
- these activities can contribute to the introduction of alien invasive species which impact native species and the proper functioning of ecosystems, and potentially threatened species.

List of material sites for biodiversity identified by TotalEnergies (operated and non-operated according to ESRS perimeter)

The table below provides a breakdown of material sites based on the potential impacts identified in the context of the Company's own activities. It specifies which activities potentially affect negatively biodiversity-sensitive areas, and indicates the sensitive areas concerned[1].

In the table below, potential impacts are essentially generated by the sites and related to land use change ("land") and to a lesser extent to noise and light nuisances ("nuisance"). Some impact drivers are linked to construction phases and are therefore temporary. For non-operated sites or projects (OBO: Operated By Others) over which the Company has less control, information is unknown, except for some specific cases.

(1) In the absence of a recognized methodology, the ecological status (with reference to the specific ecosystem baseline level) of the areas in which sites and projects are located is not determined. Land degradation, desertification or soil waterproofing are not part of the material impacts identified by the Company.

N°	Branch and name of the site	Country	Operated /OBO	Protected areas, key biodiversity areas/ presence of IUCN VU, EN or CR[a] species	Main impact driver	Comments
1	EP Gladstone LNG (onshore/offshore)	Australia	OBO	UNESCO WHS « Great Barrier Reef »/NR[d]	Land	BAP[b] Net Gain[c] No overlap with the "Great Barrier" itself
2	EP Ratawi project (onshore)	Iraq	Operated	Ramsar « Hammar Marsh »/yes	Land, nuisance	BAP Net Gain 0.08% overlap on the Ramsar area
3	EP Djeno oil terminal (onshore)	Republic of the Congo	Operated	Ramsar « Cayo-Loufoualeba»/yes	Land	BAP
4	EP Halfaya production site (onshore)	Iraq	OBO	Ramsar « Hawizeh Marshes »/NR	Land	NR
5	EP OML 22, 28, 36 (onshore)	Nigeria	OBO	Ramsar « Apoi Creek Forests »/NR	Land	NR
6	EP Tilenga oil project (onshore)	Uganda	Operated	IUCN II « Murchison Falls National Park »/yes	Land, nuisance (temporary)	BAP Net Gain 0.03% overlap on the National Park
7	EP Tempa Rossa oil production site (onshore)	Italy	Operated	IUCN II « Parco nazionale dell'Appennino Lucano - Val d'Agri - Lagonegrese »/no	Nuisance	BAP
8	EP Gladstone LNG upstream (onshore)	Australia	OBO	IUCN II « Expedition National Park »/NR	Land	NR
9	EP BLOCKS K1A (offshore)	Netherlands	Operated	IUCN IV « Klaver Bank »/no	Nuisance	BAP
10	EP BLOCKS - E16A, J3B (offshore)	Netherlands	OBO	IUCN IV « Klaver Bank »/NR	Nuisance	NR
11	RC Zeeland refinery jetty (onshore)	Netherlands	Operated	IUCN IV « Westerschelde & Saeftinghe »/no	Nuisance	BAP
12	EP ADNOC oil site, Block 1 (onshore)	United Arab Emirates	OBO	IUCN IV « Al Ghadha protected area »/NR	Land	NR

(a) VU: Vulnerable, EN: Endangered, CR: Critically Endangered.
(b) Biodiversity Action Plan.
(c) According to the International Finance Corporation Performance Standard 6 definition.
(d) NR: not reported.

5.2.4.3 Policies related to biodiversity and ecosystems (E4-2)

TotalEnergies' policy for managing its material impacts and risks related to biodiversity and ecosystems at its operated sites and projects is based on the application of the Avoid - Reduce/Restore - Offset mitigation hierarchy.

It is part of a biodiversity ambition set in four axes, with voluntary commitments and an environmental framework (including biodiversity) applied to the operated perimeter.

For non-operated sites, the Company strives to promote its principles among its partners, including by sharing industry guides and best practices, as well as return on experience.

Biodiversity issues are also included in a section related to the procurement of goods and services as part of the Company's Responsible Purchasing program described in point 5.4.3, as well as in a policy for the purchasing of agricultural products (raw materials) to supply biorefineries described in point 5.2.5. Lastly, the ecotoxicological risks to biodiversity and ecosystems of TotalEnergies' chemical products are considered in the value chain downstream segment.

A. IDENTIFYING THE RISKS AND IMPACTS ASSOCIATED WITH BIODIVERSITY IN PROJECTS

The Company's HSE framework states that the risks and impacts associated with biodiversity in new projects, whether operated or not, is identified using financial thresholds specific to each activity in the operated and non-operated perimeters, in order to determine:

- the sensitivity of the project area or natural environment in terms of biodiversity (species and habitats), including vulnerability status, ecological values present, importance of ecosystem services, regulatory protection of natural areas (i.e. protected areas) and recognition of the importance of biodiversity values present. Local and indigenous knowledge is identified in these processes and integrated into Biodiversity and Ecosystem Action Plans where appropriate.
- the modalities for implementing the Avoid - Reduce/Restore - Offset mitigation hierarchy.

For other projects, a company rule requires the identification of impacts on biodiversity and ecosystem services, the implementation of the Avoid - Reduce/Restore - Offset mitigation hierarchy and the management of implementation performance. It also requires the implementation of a Biodiversity Action Plan for sites located in sensitive areas and recalls the Company voluntary exclusion zones.

B. MANAGING THE RISKS AND IMPACTS ASSOCIATED WITH BIODIVERSITY IN PROJECTS AND OPERATIONS

In operated projects

Axes 1 and 2 of the Company's biodiversity ambition specify the principles by which the risks and impacts associated with biodiversity in operated projects are managed.

Axis 1 of the biodiversity ambition ('Respecting our voluntary exclusion zones') specifies that the Company recognizes the universal value of UNESCO World Natural Heritage areas, by not conducting any oil or gas exploration or extraction activities in these areas, and commits not to conduct any oil field exploration operations in Arctic sea ice areas.

Axis 2 ('Managing biodiversity in our new projects') specifies that the Company puts in place a Biodiversity Action Plan (BAP) for each new site located in an area of interest for biodiversity, namely IUCN (International Union for Conservation of Nature) protected area category I to IV or Ramsar areas. In addition, for each new project located in an IUCN category I or II protected area or a Ramsar area, the Company commits to implementing measures to produce a net positive impact (gain) for biodiversity, confirmed by a third-party institution. The action plan is in place, at the latest, at the time of commissioning of the site.

In addition, the Company implements a "zero net deforestation" policy for its new projects located in new sites for which the investment decision is made after 2022.

In the operated perimeter operations

The minimum HSE requirements for managing the risks of environmental damage in the affiliate's operations are set out in the referential of the Company. In particular, the impacts of operations on biodiversity and ecosystem services must be identified and consultations carried out with affected communities, as part of the management of impacts. The referential foresees, where appropriate, the defining and implementation of the Avoid - Reduce/Restore Offset mitigation hierarchy actions to manage these impacts, and monitoring of the associated performance. The management is carried out by the affiliates.

In addition, Axis 3 of the Company's biodiversity ambition ('Managing biodiversity at our existing sites') specifies that, on each of the material sites for the environment in the operated perimeter, a biodiversity action plan must be defined by 2025 and deployed by 2030 at the latest, and a report on the implementation of this plan must be developed for stakeholders.

Axis 3 also requires, when a site ceases operations, that the creation of biodiversity rich areas (e.g. rare species habitats, biodiversity sanctuaries, etc.) be assessed as one of the options for the site's rehabilitation.

Beyond operations

Axis 4 of TotalEnergies' biodiversity ambition (Promoting biodiversity) calls for the sharing of biodiversity data collected as part of its environmental studies with the scientific community and the public.

C. MANAGING THE IMPACTS AND RISKS OF PRODUCTS ON BIODIVERSITY

TotalEnergies has defined the minimum requirements to market its petroleum or chemical products worldwide with the goal of reducing potential impacts on the environment, including biodiversity and ecosystems. These include the identification and assessment of the ecotoxicological risks inherent to these products and their use, as well as providing information to consumers on preventing spills into the natural environment. The safety data sheets associated with the petroleum and chemical products marketed by the Company, including those not classified as hazardous, as well as the product labelling are two key sources of information. The implementation of these requirements is monitored by teams of regulatory experts and ecotoxicologists within the Refining & Chemicals and Marketing & Services branches of the Company.

5.2.4.4 Targets related to biodiversity and ecosystems (E4-4)

TotalEnergies has set biodiversity and ecosystem-related targets as part of the process of defining and implementing its biodiversity ambition to manage the impacts and risks of its operated sites and projects as identified in its materiality assessment described in point 5.1.4.1 (IRO-1). The Company has not set any target on the value chain downstream segment, but aims for its Lubricants line of business to market products with the lowest possible eco-toxicity to mitigate biodiversity and ecosystems risks, replacing raw materials that are classed hazardous or reformulating finished products that would be classed as H400, H410 or H411.

The commitments and targets relating to the impacts and risks associated with biodiversity and ecosystems identified by the Company for its operated sites and projects are as follows:

Avoidance

- **No** oil and gas exploration or production activity in UNESCO natural World Heritage Site areas.
- **No** exploration activity in oil fields located in Arctic sea ice areas.

Reduction/Restoration

- Permanent target - implementation of a Biodiversity Action Plan (BAP) for **100%** of our new projects located in an area of interest for biodiversity, that is, IUCN category I to IV protected areas or Ramsar areas. The action plan is in place, at the latest, at the time of commissioning of the site.
- Deployment of a BAP at **100%** of material sites for the environment by 2025 and communication on the implementation of the plan to stakeholders over the period 2025 - 2030.

Offset

- Permanent target - Production of a net positive impact on biodiversity, confirmed by a third-party institution, for **100%** of new projects located in an area of priority interest for biodiversity, that is, IUCN category I or II areas or Ramsar areas.
- Permanent target - **Zero** net deforestation in new projects located in new sites approved from 2022 onwards.

Additional Conservation Actions (ACA)

- Each year, sharing a minimum of **five** biodiversity datasets collected as part of environmental studies with the scientific community and the public.
- Supporting biodiversity related awareness programs, youth education and research actions concerning the ocean and coastal environments as part of TotalEnergies Foundation's Climate, Coastal and Oceans program.
- Promoting the civic engagement of the Company's employees as part of the TotalEnergies Foundation's "Action!" program, by offering employees dedicated workdays to conduct actions in favour of biodiversity.

These commitments and targets meet the SMART criteria[1] required by the Act4nature initiative promoted by the French Association 'Entreprises pour l'Environnement', to which TotalEnergies has been a signatory since 2018. These commitments have been the subject of detailed public annual reporting since the first quarter of 2021. This reporting indicates the number of sites concerned by the various commitments.

These targets incorporate the concepts of local ecological thresholds as follows:

- the target concerning the avoidance of UNESCO Natural World Heritage areas is compatible with the SBTN[2] nature-related avoidance 'interim targets', as it results in the absence of conversion of natural habitat, representing the avoidance of a maximum potential total area of approximately 535 million hectares at the end of 2024;
- the net gain target is set in relation to a state of reference for projects located in priority biodiversity areas such as IUCN categories I and II and Ramsar areas;
- project-specific targets regarding the state of biodiversity are set to ensure that the impact on biodiversity induced by the project is offset, and that the net gain exceeds the loss, compared to a local baseline scenario. The target is therefore in line with, or even exceeds, the SBTN nature-related avoidance 'interim targets' for projects of the extractive segment in terms of no net loss of natural habitat.

The geographical scope of the targets is the operated perimeter of the Company. In defining some of its targets, the company has used measures to offset the loss of biodiversity, as explained in the 'Offset' paragraph. The targets adopted by the Company constitute a contribution to the Kunming-Montreal Global Biodiversity Framework, relevant aspects of the EU Biodiversity Strategy for 2030 and other national biodiversity policies and legislations without claiming alignment with these different frameworks. The current status of these targets is presented in point 5.2.4.5.

5.2.4.5 Actions and resources related to biodiversity and ecosystems (E4-3)

The actions implemented as part of the biodiversity ambition deployment on the Company's operated perimeter are described below.

Axis 1: Voluntary exclusion zones

This commitment is respected (based on the UNESCO sites listed at the end of 2024 which represent 535 million hectares). Similarly to previous years, in 2024 the Company did not conduct any oil field exploration activity in Arctic sea ice areas. The list of its licenses in the Arctic area is available on the Company's website.

Axis 2: New projects

In 2024, 3 projects located in material sites for biodiversity (cf. above list) are concerned, the three projects having a biodiversity net gain target:

- the net gain BAP of the Tilenga oil project (Uganda), partly located in an IUCN II area, has 100% completed its design phase and its implementation has begun with the launch of the five programs of the net gain plan. The first report of TotalEnergies EP Uganda detailing the actions of its Biodiversity Programme over the last two years was published in 2024. Achievements include raising awareness of local stakeholders, such as the participation of 60 teachers and 2,880 students from 10 schools in Phase I of the Chimpanzee Conservation Education Program. The partnership with the Uganda Wildlife Authority (UWA) has allowed the completion of 101 patrols covering an area of more than 1,800 km². Regarding the monitoring of biodiversity in Murchison Falls, a carnivore census was conducted and the movements of 15 elephants are being studied using GPS collars, in partnership with the Wildlife Conservation Society (WCS). Finally, 140,000 trees were planted to enhance local biodiversity and 350 hectares of degraded forest have been restored with the NGO Ecotrust. In addition, to take advantage of the mining sector's expertise regarding biodiversity net gain, the Tilenga project (Uganda) initiated an exchange program with Anglo American on the Venetia Limpopo Nature Reserve (South Africa), by involving the Ugandan authorities with the support of South African National Parks. This BAP is designed to be aligned with the International Finance Corporation (IFC) performance standards;
- the EACOP pipeline project (Tanzania), which runs along an IUCN III area, includes a net gain BAP with a land and marine components. In 2024, the planning of EACOP's net-gain program is complete (including critical habitat assessment, residual impact assessment, offsets' planning). This BAP is designed to be aligned with the IFC performance standards;
- the design of the net gain BAP of the Ratawi gas-photovoltaic hybrid project (Iraq), partially located in a Ramsar area, is completed; Biodiversity net gain options are being evaluated. Studies related to the presence of spiny-tailed lizards are underway to identify burrows and relocate individuals prior to construction works. This BAP is designed to be aligned with the IFC performance standards;
- furthermore, with regard to the zero net deforestation target, in 2024 a total of 186 ha of forest have been replanted for a deforestation of 156 ha. The reforestation balance is therefore 30 ha.

(1) Specific, Measurable, Achievable, Relevant, Time-bound.
(2) Science Based Targets Network.

Axis 3: Existing Sites

Since 2021, all 77 material sites for the environment led a biodiversity survey, i.e. 100% of the 2025 target (the 5 newly acquired sites have 2 years to conduct their biodiversity survey and design their Biodiversity Action Plan). The BAPs resulting from these surveys have been prepared, and some are in the process of being deployed. The BAPs consist in the implementation of Avoid - Reduce/Restore - Offset mitigation hierarchy measures which include the avoidance of key habitats for biodiversity (e.g. avoidance of approximately 16 ha of tropical secondary forest as part of the Ubeta site project in Nigeria), the protection of sensitive species (e.g. installation of protective barriers around the nests of oystercatchers against predators at the Zeeland refinery in the Netherlands), reducing light pollution (e.g. adjustments of light intensity and direction of lighting on natural areas of the Castejón CCGT in Spain), nature-based solutions (e.g. planting reeds for water treatment at certain sites of Marketing & Services), the salvaging of sensitive species (e.g. collection and relocation of reptiles as part of a soil remediation project at the Donges refinery in France), the management of invasive species (e.g. eco-grazing by goats to combat Himalayan knotweed on the Landivisiau CCGT in France), the restoration of natural habitats (e.g. restoration of a 3 ha meadow area as part of a green belt around the Leuna refinery in Germany; revegetating of former 1 ha well pad and restoration of a 1.5 ha quarry by the Aguada Pichana EP site in Argentina), the restoration of ecological connectivity at the landscape level (e.g. creation of biodiversity rich hedges along the highway at the Feyzin refinery in France), enhancement of existing habitats (e.g. creation of nesting boxes for birds and bats, planting of hedges, fruit bearing groves and flowering meadows on the Marchienne-au-Pont CCGT in France), the protection of sensitive species through the development of partnerships with key stakeholders locally (e.g. monitoring of a sea turtle spawning area adjacent to the Djeno Congo site with a partner NGO). These measures are complemented by Additional Conservation Actions (ACA) such as the contribution to a scientific publication on the discovery of a new species of tree frog (Litoria: Pelodryadidae) in Papua New Guinea as part of the Papua LNG project, or external awareness actions conducted by the Tempa Rossa oil site (Italy) regarding biodiversity education/awareness in schools (organization of visits in partnership with the Gallipoli Cognato Piccole Dolomiti Lucane park). The breakdown of mitigation actions is as follows: 7% of the actions are Avoidance actions, 37% of the actions concern Reduction actions, 11% are Restoration actions, 19% of the actions lead to Offsetting and the remaining 26% are dedicated to ACA. The 10 most used levers of action by the sites are: 1) the implementation of awareness and training actions (internal/external), 2) the reduction of pollution (sound, light), 3) the creation of micro-habitats and refuges for species (bird nests, bat roosts, hibernacula, pollard trees), 4) the implementation of monitoring indicators and the acquisition of new biodiversity data, 5) the implementation of measures to control invasive species, 6) the development of partnerships or sponsorships in connection with key local stakeholders for biodiversity, 7) the implementation of a differentiated management of green spaces, 8) the avoidance, restoration, creation or maintenance of wetland/pond type of natural habitat, 9) planning activities outside sensitive periods for species, 10) measures to remove ecological traps (from windows, fences, ponds, etc.).

In addition, the affiliate responsible for the rehabilitation of industrial sites of the Company, has undertaken the study or the implementation of actions to restore biodiversity on 14 of former sites that are ceasing operations. For example, the work program to enhance the wetland at the Villers-St-Paul site began in 2024 with the opening of the sedge beds and the removal of invasive exotic species.

Axis 4: Promotion of biodiversity

In 2019, the Company joined the international public platform GBIF (Global Biodiversity Information Facility) with the aim of sharing its biodiversity data with the scientific community. In 2024, TotalEnergies is the third largest worldwide contributor company to the platform[1]. 11 datasets were uploaded in 2024 and concern the Company's projects in Brazil, South Africa and Namibia. The data published by TotalEnergies now constitute 52,000 occurrences in the database and have been cited 230 times in scientific publications. Under the Danish Underground Consortium (DUC) and in collaboration with the Danish Hydraulic Institute (DHI), TotalEnergies Denmark launched in 2024 the public internet portal 'North Sea Environment Portal' which brings together almost 40 years of data on the seabed and biodiversity in the North Sea, providing its stakeholders with an innovative tool to inform their decisions for the preservation of the marine environment and share their data. In 2024, TotalEnergies continued its work on developing a biodiversity footprint measurement methodology called BFIS (Biodiversity Footprint Indicator for Sites) which will allow local measurement at the level of a site and consolidation at the Company level. An independent critical review committee composed of representatives of international institutions and NGOs (IUCN, UNE-WCMC[2], WCS) supports the Company in carrying out its work. The plan is to make this tool available to the public when finalized.

Biodiversity research activities are carried out by the EP affiliate in the Netherlands through the voluntary monitoring program on an offshore platform to collect data on the behaviour of breeding kittiwakes (Rissa tridactyla). The objective is to identify opportunities for improving artificial nesting sites.

By the end of 2024, the Action! Program of the TotalEnergies Foundation has raised awareness on biodiversity among 2725 employees through various actions such as waste collection in the Rodrigo de Freitas lagoon by the employees of TotalEnergies EP Brazil. The program contributes to raising employees' awareness on biodiversity, as well as the sharing of examples of good biodiversity management practices (creation of a protection zone for land tortoises for offsetting purposes on a photovoltaic project in Uzbekistan, in partnership with local herders communities) on the interactive platform « One Biodiversity » which brings together the biodiversity content enabling all employees to contribute to the Company's ambition in terms of preserving biodiversity and nature.

The biodiversity and ecosystems actions are spearheaded out by the Corporate HSE Environment & Social Department with the affiliates teams support.

(1) GBIF statistics.
(2) United Nations Environment - World Conservation and Monitoring Center.

5.2.4.6 Impact indicators related to biodiversity and ecosystems change (E4-5)

TotalEnergies uses available indicators or those required by various reporting frameworks, while recognizing that, in a constantly evolving field, there is currently no commonly accepted and shared impact indicator.

The company pays particular attention to the impact of its own activities on biodiversity-sensitive areas (e.g. the Natura 2000 network, UNESCO World Heritage sites, key biodiversity areas, and other protected areas). TotalEnergies defines the proximity of its activities to these areas with the help of the Integrated Biodiversity Assessment Tool (IBAT) and the World Database on Protected Areas (WPDA).

According to GRI 304: Biodiversity 2016: Disclosure 304-1 "Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas.", the sites that TotalEnergies operates within or adjacent to protected areas or areas of high biodiversity value that have the potential to negatively impact these areas are 175 sites operated by the Company, representing 6769 hectares.

In 2024, the Company requested operators the following indicators related information to monitor biodiversity and ecosystems actions implemented of at its non-operated sites:

Avoidance

- Number of sites overlapping a biodiversity-sensitive area (UNESCO World Natural Heritage Site, IUCN category I to IV area, Ramsar wetland)

Reduction

- Total area of sites owned, leased or managed in or near protected areas or key biodiversity areas negatively affected by activities
- Number of sites implementing a Biodiversity Action Plan to manage impacts on biodiversity.

Offset

- Number of sites implementing biodiversity offsets as part of Biodiversity Action Plans

The collection rate of these indicators varies between 19 and 66% and is therefore insufficient to present a complete information set. However, the use of the Company's Geographic Information System enhanced with WDPA data allowed for the estimation of the data presented in the table below.

Indicators estimated or collected from operators of non-operated sites	Results
Number of sites overlapping a biodiversity-sensitive area (UNESCO World Natural Heritage site, IUCN category I to IV area, Ramsar wetland)	6
Total area of sites owned, leased or managed in or near protected areas or key biodiversity areas negatively affected by activities (hectares)	3095

The Company will reiterate for the 2025 reporting period its requests for information to operators of non-operated sites to improve collection rates. However, 94% of the Company's production from non-operated sites originates from operators that are not subject to European regulations and have no obligation to provide this data.

5.2.5 Resource use and circular economy (E5)

5.2.5.1 Becoming a player in the circular economy (E5-1)

For TotalEnergies, making progress in the circularity of its products and waste is a way of reducing its environmental footprint. The Company's HSEQ charter stipulates that TotalEnergies ensures the management of its natural resource use and that any development project or product launch is undertaken after a risk assessment over its entire life cycle. TotalEnergies strives, wherever possible, to reduce its consumption of raw virgin resources or materials and to substitute part of them with circular economy derived raw materials. Lastly, the Company is careful to control its waste production and to encourage its recovery through appropriate external channels, so that it can be used by others as a raw material.

TotalEnergies' commitment to the circular economy can be summed up in three general axes:

Creating value from circular raw materials[1] by expanding production of:

- biofuels, which emit 50% less CO_2e than their fossil equivalents over their life cycle (in accordance with European standards[2]) and therefore represent an element for the reduction of the carbon footprint of liquid fuels. In addition to first-generation biofuels, the Company produces second-generation biofuels, i.e. biofuels obtained from waste and residues, which both reduces the use of virgin raw materials (and therefore the conflict of use and impact on arable land) and recovers post-consumption waste as a resource.
- biogas from organic and agro-industrial waste. Biomethane[3], which consists of the same methane molecule as natural gas, is renewable due to the way it is produced and it leads to very low-carbon emissions over its entire life cycle. The methanization process generates a co-product, digestate, a natural fertilizer with high agronomic value.

Offering customers a range of circular polymers

Polymers including circular raw materials ("circular polymers") include:

- polymers obtained by mechanical recycling of plastic waste from sorting and collection centers;
- polymers obtained by chemical recycling of non-mechanically recyclable waste;
- biopolymers derived from the processing of biofeedstock (vegetable oils and used cooking oils).

(1) This includes renewable raw materials and secondary raw materials (e.g. recycled waste), as classified in the report "A circular economy vision for a competitive Europe" by the Ellen MacArthur Foundation, the SUN Institute for Environment & Sustainability and the McKinsey Center for Business & Environment (p.24).
(2) Directive (EU) 2018/2001 of the European Parliament and of the Council of December 2018 on the promotion of the use, of energy from renewable sources.
(3) Biogas is used to produce electricity and heat, in co-generation. Biogas, once purified, in particular of carbon dioxide, becomes biomethane, which has the same characteristics as natural gas.

Producing more responsibly

TotalEnergies has adopted a waste management policy that sets out the minimum requirements to be met by the Company's operated sites. Waste management is carried out in four basic stages: waste identification (technical and regulatory); waste storage (soil protection and emissions management); waste traceability, from production to disposal (e.g., transfer notes, waste manifests, statements); and waste treatment, with technical and regulatory knowledge of the relevant processes, under the site's responsibility. A Company rule requires subsidiaries to control the processing of the waste produced by all operated sites, at every stage of their operations. This approach is based on the following four principles, listed in decreasing order of priority:

- reducing waste at source by designing products and processes that generate as little waste as possible, as well as minimizing the quantity of waste produced by the Company's operations;
- reusing products for a similar purpose in order to prevent them from becoming waste;
- recycling residual waste as far as possible;
- recovering non-recycled products wherever possible.

For all its renewable raw materials (i.e. those from biomass) TotalEnergies also has a policy specifying that all biofuels and biopolymers must comply with the sustainability, traceability and certification criteria (ISCC, RSPO, etc.) set by the various national regulations (carbon balance sheet, non-deforestation, good land use). These criteria apply to the entire production and distribution chain of biofuels and biopolymers.

In addition, SAFT, the Company's battery manufacturing subsidiary, has adopted a specific policy for critical metals, of which it is the main consumer within the Company. This policy includes the sustainable use of resources and the introduction of circular economy principles in operations, notably through the implementation of eco-design tools enabling the design of recyclable and sustainable batteries, and the incorporation of an increasing proportion of recycled materials in its products.

As far as critical metals are concerned, TotalEnergies complies with all the requirements for batteries set out in Regulation (EU) 2023/1542, specifically those relating to sustainability, extended producer responsibility and waste collection and treatment.

For sites operated by third parties, TotalEnergies strives to share and promote best practices with the concerned operators.

5.2.5.2 Targets related to resource use and the circular economy (E5-3)

Over and above the regulatory requirements in force in the countries where it operates, TotalEnergies has made a voluntary commitment to double the circularity of its businesses by 2030 (compared with 2021), i.e. to double the quantity of circular raw materials[1] used in products (in Mt) as well as sales of circular products (in billions of dollars) within the equity share perimeter. The equity interest perimeter, which is distinct from the operated perimeter, includes all the assets in which the consolidated subsidiaries (including equity-accounted companies) have a financial interest or rights to production. This scope also includes subsidiaries that are not financially consolidated but are material from a sustainability point of view. Under the equity interest perimeter, the indicators are consolidated based on the Company's equity interest in the assets or its share of production for oil and gas production assets.

The Company's commitment to circularity involves increasing the use of recycled materials, using renewable raw materials (biomass) and increasing circularity in product design.

The circular raw materials used by TotalEnergies can be divided into two main families: renewable raw materials (for which TotalEnergies ensures sustainability and traceability: carbon balance sheet, non-deforestation and good land use) and waste materials used by the Company increasingly to replace fossil resources in its processes.

Examples include:

- vegetable oils, animal fats and used cooking oils used in the production of biofuels,
- lactic acid (obtained by fermentation of sugarcane extracts) used by the Company at its Rayong plant in Thailand (in JV with Corbion) to produce biopolymers,
- waste plastics of fossil origin (Polyethylene, Polypropylene and Polystyrene), recycled mechanically or chemically to produce recycled polymers (rPE, rPP, rPS),
- biowaste, animal by-products and agricultural sludge used as raw materials for biogas production through biomethanization.

The quantity of circular raw materials used to manufacture the Company's products in 2021 was 3.4 Mt. The target is to double this figure and thus reach 6.8 Mt/year of circular raw materials by 2030.

Circular products are obtained by substitution:

- in the production processes operated by TotalEnergies, of all or part of the raw materials by circular raw materials. Example: use of plastic waste as a substitute for raw materials of fossil origin in the production of recycled polymers;
- at sales level, of all or part of the fossil-based products by products of renewable origin. Example: incorporation of ethanol of renewable origin into fuels.

The Company's total sales of circular products amounted to $4.2 billion in 2021. The target is to double this figure to $8.4 billion/year in circular sales by 2030.

The table below shows the progress of the Company's global circularity target. In 2024, the quantity of circular raw materials used to manufacture products reached 4.6 Mt, representing an increase of 33% compared to 2021. This increase is mainly due to the development of the biogas production business and the inclusion of Polska Grupa Biogazowa in the reporting scope in 2024. Sales of circular products, by contrast, were slightly down (-4% compared with 2021), mainly due to the lower economic value of biofuels in 2024 (compared to 2021, 2022 and 2023).

The quantities of circular raw materials and circular sales are monitored and reported annually by the Branches in the environmental reporting tool, which ensures traceability and archiving.

(1) This includes renewable raw materials and secondary raw materials (e.g. recycled waste), as classified in the report "A circular economy vision for a competitive Europe" by the Ellen MacArthur Foundation, the SUN Institute for Environment & Sustainability and the McKinsey Centre for Business & Environment (p.24).

Circular Economy - Company's global commitment (equity share view)					
	Units	2024	**2023**	**2022**	**2021**
Quantity of circular feedstock	Mt	4.6	3.8	3.4	3.4
	vs. 2021	+33%	+10%	–	–
Sales from circular products	G$	4.0	4.5	5.4	4.2
	vs. 2021	-4%	+8%	+30%	–

TotalEnergies' global voluntary target has also been broken down into more specific targets (also in equity share view), in line with the Company's activities:

- produce 1.5 Mt of more sustainable aviation fuel (SAF) by 2030[1],
- achieve 75% waste and residues in its biofuel production by the end of 2024,
- achieve a gross production capacity of 10 TWh in 2030,
- produce 1 Mt/year of circular polymers by 2030, including mechanically and chemically recycled polymers and biopolymers.

The results of these specific targets are presented in point 5.2.5.5.

Lastly, the Company has set itself a voluntary target of recovering 70% of the waste produced by its operated sites, including preparation for reuse, recycling and other waste recovery operations (such as energy recovery).

5.2.5.3 Actions relating to resource use and the circular economy (E5-2)

A. Creating value from circular raw materials

Biogas

TotalEnergies pursued the expansion of its biogas production business in 2024, with the ambition of becoming a key player in the sector in France,in Europe, and certain key international markets such as the United States. In France, two projects under construction have moved ahead, including BioNorrois, the Company's first biomethane production unit in Normandy. For this project, which will produce 153 GWh/year, TotalEnergies has joined forces with the French sugar group Cristal Union to recycle beet pulp residues, which will supply the unit for 15 years.

In Poland, two new biogas units, which simultaneously produce electricity and heat in a cogeneration process, brought the portfolio of the subsidiary Polska Grupa Biogazowa to twenty installations.

In the United States, TotalEnergies and Vanguard Renewables, a US company active in the production of biomethane from organic waste mainly from the food industry, signed an agreement in April to create a 50/50 joint-venture to develop, build and operate biomethane projects on farms. The agreement provides for the development of ten projects, with a combined capacity of 0.8 TWh/year. Three of these projects, each with a capacity of almost 75 GWh/year, have entered the construction phase in the states of Wisconsin and Virginia.

In 2024, TotalEnergies' total production capacity increased to 1.2 TWh eq. of biomethane. This represents the treatment of approximately 1.35 Mt/year of organic waste to provide renewable gas to the equivalent of 240,000 inhabitants[2], making it possible to avoid the emission of around 240 kt CO_2e/year. With the digestate from anaerobic digestion, more than 30 kt/y of chemical fertilizers are replaced by a natural fertilizer. To date, the 8 French sites operated by TotalEnergies that are subject to the RED (Renewable Energy Directive) have been awarded RED certification.

Biofuels and more Sustainable Aviation Fuels (SAF)

TotalEnergies has transformed its La Mède refinery in France into a world-class biorefinery to meet its ambition to be a leader in the biofuels market and its objective of producing 1.5 Mt/y of SAF worldwide by 2030. Started up in July 2019, it uses a technology for converting vegetable oils, animal fats and used cooking oils into biofuels. The plant now produces HVO for biodiesel and SAF, and co-products for mobility and heating uses. TotalEnergies has also made a new investment at La Mède in 2024 in order to have the technical capacity to process 100% of waste and residues from the circular economy and to produce SAF from 2025.

The Grandpuits platform is the second refinery being transformed into a zero-oil platform. In 2022, TotalEnergies has joined forces with SARIA to secure the supply of fatty raw materials, animal fats and used cooking oils. The biorefinery is scheduled to come on stream in 2026. It plans to process 420 kt/year of feedstock, mainly waste and residues, to produce up to 210 kt/year of SAF.

In the Middle East, SATORP, a partnership between TotalEnergies and Saudi Aramco, has succeeded in co-processing used cooking oil in 2023 to produce a fuel that meets all the quality criteria of ISCC Plus-certified SAF. Based on this evidence, partners approved the launch of a project to process 25 kt/year of used cooking oil from 2026.

In China, TotalEnergies strengthened its partnership with SINOPEC to develop a 230 kt/year SAF production unit derived from locally collected waste and residues.

In 2024, TotalEnergies signed partnerships with major players in the aviation industry: in February, it signed an agreement with Airbus to supply SAF for more than half of its needs in Europe and launched a programme to develop 100% sustainable aviation fuels; in July, it signed an agreement with Air France-KLM to supply up to 1.5 Mt of SAF over 10 years.

(1) For biofuels in Europe, sustainability rules are defined by the RED (Renewable Energy Directive), which sets the criterion that the carbon footprint of biofuels should be 50% lower than that of fossil fuels, over the entire product life cycle. The RED also requires this criterion to be verified by an approved body.
(2) According to the first quarter 2021 report from the Energy Regulatory Commission on retail gas markets and key figures from ADEME for methanization.

B. Offering customers a range of circular polymers

Mechanically recycled polymers

TotalEnergies is expanding its mechanical recycling business: its Synova subsidiary, acquired in 2019, produces high-performance recycled polypropylene with a production capacity of 45 kt/year. Since 2021, the Antwerp (Belgium) plant has also been producing recycled polyethylene, with a production capacity of 8 kt/year. TotalEnergies' Iber Resinas subsidiary (Spain), integrated in 2023, produces high-performance recycled polypropylene, polyethylene and polystyrene with a capacity of almost 30 kt/year. This capacity will be increased by 10 kt/year in 2025. Lastly, in October 2024, the Carling polymers plant (France) opened a new production line for high-performance recycled polypropylene for the automotive industry, with a production capacity of 15 kt/year.

Chemically recycled polymers

Since 2020, TotalEnergies has been producing recycled polymers at its polymers plant in Antwerp (Belgium) from Tacoil, a pyrolysis oil produced by its partner Plastic Energy. A pyrolysis oil supply agreement has been signed with Indaver, and TotalEnergies plans to increase its Tacoil production capacity to 25 kt/year by 2025. In 2025, TotalEnergies Grandpuits platform (France) will start up the first unit in France to chemically recycle plastic waste, with a processing capacity of 15 kt/year of plastic waste. The unit was built in partnership with Plastic Energy and benefits from a long-term commercial agreement between TotalEnergies and Paprec to secure the plant supply and develop France's first chemical recycling industrial stream for plastic film waste.

In the United States, TotalEnergies signed two partnerships in 2022 with Lummus Technology and New Hope Energy to supply pyrolysis oil to its Texas plants. In 2024, the La Porte (Texas) plant produced its first polymers from chemical recycling thanks to this partnership. TotalEnergies has also joined forces with Freepoint EcoSystems and Plastic Energy in October 2021, Honeywell in February 2022, New Hope Energy in May 2022 and Indaver in October 2022 to promote the chemical recycling of plastics in the United States and Europe.

Biopolymers

TotalEnergies offers its customers biopolymers from the processing of biosourced feedstocks (such as vegetable oils or used cooking oils) processed today at the La Mède biorefinery (France), and tomorrow also at that of Grandpuits. The TotalEnergies Corbion joint-venture produces PLA (polylactic acid), a biosourced, recyclable and biocompostable bioplastic, at its factory in Rayong (Thailand) with a capacity of 75 kt/year.

C. Producing more responsibly

Recovering waste produced at the Company's operated sites

To meet its target of recovering over 70% of the waste produced by its operated sites, TotalEnergies has set up waste management contracts that clearly define the Company's requirements in this area and, particularly, its expectations in terms of waste recovery.

In addition, in 2024, TotalEnergies, with the help of an external partner, conducted a study on the waste managing process of its main African E&P subsidiaries and on the local waste treatment market. This study highlighted the diversity of situations in African countries in terms of waste management and identified areas for improvement in the recovery of waste produced by E&P in this geographical area. These include, for example, the introduction of waste sorting at source, the composting of organic waste, the search for co-processing solutions with local waste handlers, and the search for synergies with other waste producers to massify flows and enable the development of new waste management routes.

Lastly, specific action plans have been defined for certain plants and subsidiaries where the waste recovery rate could be improved.

Implement responsible sourcing of biomass raw materials

The TotalEnergies Trading SA (TOTSA) team is responsible for purchasing renewable raw materials. It applies specifications that include a biodiversity sustainability criterion, purchases raw materials that meet the European ISCC standard and applies a due diligence process to ensure that suppliers comply with biodiversity requirements.

Developing recycling solutions for batteries

Saft has developed a take-back and recycling network for its nickel batteries that recovers at least 75% by weight of collected batteries, notably at its Oskarshamm recycling plant in Sweden. Today, lithium-ion batteries are processed at the end of their life cycle using the best available techniques. Saft is also leading an R&D project with Orano, Paprec, MTB Manufacturing and the CEA on the recycling of vehicle batteries, under which pilots for the deactivation of electrical modules and the hydrometallurgical treatment of black mass were started up in 2024.

Using critical metals responsibly

TotalEnergies' Purchasing division has implemented strategies to diversify suppliers and qualify, substitute or reuse resources to optimize the security of its supply chains.

In 2022, TotalEnergies conducted a technical study based on a specific materiality assessment and a risk analysis, which identified three priorities: cobalt, polysilicon and conflict minerals (gold, tungsten, tin, tantalum).

Cobalt: Saft has been conducting an annual campaign since 2021 to collect information from its suppliers as cobalt is sometimes used in the manufacture of certain batteries. Saft relies on the Extended Minerals Reporting Template (EMRT) provided by the Responsible Minerals Initiative® (RMI®) to identify the processing units in its supply chain and the country of origin of the cobalt ores. Based on the results and using the RMI® database, Saft checks whether its cobalt supply chains include suppliers at risk in terms of human and environmental rights and, if so, takes specific action to mitigate these risks. Saft has also been, since 2023, a member of the Cobalt Institute, a global association of cobalt producers and users, whose aim is to ensure that cobalt is produced and used ethically and sustainably, while meeting the needs of industry and society.

Polysilicon is used in the solar panels manufacturing. TotalEnergies Global Procurement conducts traceability audits upstream of the Supplier's selection or commissions an independent third party to conduct them. TotalEnergies has joined a pool of US developers who jointly commission and share traceability audits.

Conflict minerals: the qualification process identifies suppliers using minerals from conflict zones for the Company's purchases. Thus, pursuant to Rule 13p-1 of the U.S. Securities Exchange Act of 1934, as amended, which implemented certain provisions of the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010, since 2014, TotalEnergies has filed with the United States Securities and Exchange Commission (SEC) an annual document relating to "minerals from conflict zones" sourced from the Democratic Republic of the Congo or neighbouring countries. This document indicates whether, during the preceding calendar year, any such minerals were necessary for the operation or to produce a product manufactured by TotalEnergies SE or one of its consolidated companies, the aim of this regulation being to prevent the direct or indirect financing of armed groups in central Africa. For more information, please refer to TotalEnergies' most recent publication, available on the TotalEnergies website or sec.gov.

As conflict minerals may potentially be present in electrical and electronic components used in the manufacture of batteries, Saft conducts an annual information collection campaign with its Suppliers, relying, as for cobalt, on the Conflict Minerals Reporting Template (CMRT) made available by the Responsible Minerals Initiative® (RMI®).

Lastly, in 2024, the Company analysed its exposure to the critical materials needed for renewable projects, battery chemistry and distribution networks (lithium, copper, aluminum, rare earths, nickel, cobalt, etc.). The study focused on the outlook for supply and demand, the technical and economic fundamentals of upstream mining, the concentrations and value chains associated with processing, the projected recycling capacities of the main user industries and the regulatory framework in the main countries or regions where these materials are produced and consumed. The transverse affiliate in charge of purchasing which is responsible for developing a better understanding of the Company's supply chain and analysing the risks associated with it, continues to monitor these critical materials.

5.2.5.4 Raw materials used by TotalEnergies for its activities (E5-4)

In 2024, the main raw materials used by TotalEnergies were:

- water: for more details on the use of this resource, refer to point 5.2.3,
- hydrocarbons, for which consumption in 2024 amounted to almost 40 Mt for production operations in the EP sector within the ESRS perimeter, and to more than 53 Mt for other operations within the ESRS perimeter excluding OBOs (for which data could not be collected in 2024 and for which a new request will be sent to operators in 2025),
- circular raw materials, which include renewable raw materials (i.e. from biomass) and secondary raw materials (i.e. waste and residues) for which the Company's consumption increased in 2024, mainly in connection with the development of its biogas, biofuels and circular polymers production activities,
- metals, for which the Company has collected data from its purchasing teams. This process led to the collection of data related to certain purchasing categories, but it was not possible to collect data on projects in 2024, which represent a significant proportion of metal purchases. Consequently, the information currently collected is not representative and the Company is therefore unable to publish it for 2024. For 2025, the Company will repeat its requests for information from suppliers to improve collection rates. However, a large number of suppliers are not subject to European regulations, who are under no obligation to provide this data.

Quantities of circular raw materials used by TotalEnergies in 2024 in the equity share perimeter (Mt)	2024	2023	2022	2021
Waste and residues	1.5	0.8	0.6	0.5
Renewable raw materials	3.1	3.0	2.9	2.9
Total circular raw materials	4.6	3.8	3.4	3.4

Water consumption as well as the quantities of secondary raw materials and renewable raw materials are monitored and reported annually by the Branches in the environmental reporting tool, which ensures traceability and archiving.

The total quantity of hydrocarbons is estimated annually at Company level based on information collected from the purchasing and supply teams and stored in the Company's environment reporting tool.

5.2.5.5 TotalEnergies products from the circular economy and waste (E5-5)

Products from the circular economy

TotalEnergies' main products resulting from its production process (equity share view) and designed according to the principles of the circular economy are:

- biofuels and sustainable aviation fuels (SAF), produced mainly from animal fats and used cooking oils;
- biogas, produced mainly from agricultural waste, the production residue of which - known as digestate - can be used as an agricultural soil improver in place of chemical fertilizers;
- recycled polymers obtained by mechanical or chemical recycling of plastic waste;
- biopolymers derived from the processing of biofeedstock (vegetable oils, used cooking oils).

Circular economy products - Tracking targets (equity share view)	Units	2024	2023	2022	2021
Production of SAF	kt	26	12	10	–
% of waste and residues in biofuels	%	77	73	61	38
Biogas gross production capacity	TWh	1.20	1.17	0.55	0.55
Production of circular polymers	kt	89	78	52	56

The quantities of waste used as raw materials and renewable raw materials are tracked and reported annually by the Branches in the environmental reporting tool, which ensures traceability and archiving.

So far, information on packaging is not available as it is not systematically declared by packaging producers.

Waste

Since 2022, TotalEnergies has set itself a target of 70% in terms of waste recovery for its 100% operated sites. This target was reached in 2024 with a recovery rate of 71% for the Company's 100% operated sites. The improvement in the recovery rate is the result of the action plans deployed at the Company's sites and subsidiaries and of the implementation of stringent waste management contracts and partnerships with international waste treatment players in all the countries in which TotalEnergies operates.

Waste recovery in the 100% operated perimeter	Units	2024	2023	2022
Waste recovery rate[a]	%	71	61	61

(a) Recovery includes preparation for re-use, recycling and other types of recovery (e.g. energy recovery).

Moreover, in 2024, TotalEnergies' operated sites generated 513 kt of waste within the ESRS perimeter. Details are given in the table below. NORM (Naturally Occuring Radioactive Material) waste is accounted for separately from production waste.

Waste balance sheet ESRS perimeter for operated sites[a]	Units	Waste tonnage
Total volume of waste produced	**kt**	**513**
Total volume of waste recovered	**kt**	**371**
Recovery rate[b]	**%**	**72**
Hazardous waste	**kt**	**178**
of which, hazardous waste prepared for reuse	*kt*	*Accounted with recycled hazardous waste*
of which, recycled hazardous waste	*kt*	70
of which, hazardous waste incinerated with energy recovery	*kt*	24
of which, hazardous waste recovered by other processes	*kt*	10
of which, hazardous waste incinerated without energy recovery	*kt*	20
of which hazardous waste sent to landfill	*kt*	24
of which, hazardous waste disposed of (without recovery) by another process	*kt*	30
Non-hazardous waste	**kt**	**334**
of which, non-hazardous waste prepared for re-use	*kt*	*Accounted with recycled non-hazardous waste*
of which non-hazardous waste recycled	*kt*	209
of which, non-hazardous waste incinerated with energy recovery	*kt*	33
of which, non-hazardous waste recovered by other processes	*kt*	25
of which, non-hazardous waste incinerated without energy recovery	*kt*	3
of which, landfilled non-hazardous waste	*kt*	48
of which, non-hazardous waste disposed of (without recovery) by another process	*kt*	16
NORM (Naturally Occurring Radioactive Material) waste	**kt**	**2**

(a) Excluding drilling cuttings, excluding digestate from biogas units, excluding sites that have ceased operations and are in the process of being remediated.
(b) Recovery includes reuse, recycling, material recovery and energy recovery.

For the 2024 reporting exercise, the Company has organised the collection of data relating to waste resources from the operators of its non-operated sites. This process resulted in the collection of waste data for 27% of these sites. Consequently, the information collected from non-operated sites is not representative. The Company is therefore unable to publish this information for 2024. For 2025, the Company will repeat its requests for information from operators of non-operated sites to improve collection rates. However, 94% of the Company's non-operated production comes from operators not subject to European regulations, who are under no obligation to provide this data.

5.2.6 European Taxonomy

The Taxonomy regulation (EU) 2020/852 ("the Regulation") establishes a classification system common to the European Union, the objective of which is to identify the economic activities considered as sustainable, with reference to six environmental objectives.

These six environmental objectives defined at article 9 of the Regulation are as follows:

- climate change mitigation,
- climate change adaptation,
- the sustainable use and protection of water and marine resources,
- the transition to a circular economy,
- pollution prevention and control,
- the protection and restoration of biodiversity and ecosystems.

Within the meaning of article 3 of the Regulation, an economic activity shall qualify as environmentally sustainable where that economic activity:

- contributes substantially to one or more of the environmental objectives set out in Article 9,
- does not significantly harm any of the environmental objectives set out in Article 9,
- is carried out in compliance with the minimum safeguards laid down in Article 18 of the Regulation, and
- complies with technical screening criteria that have been established by the Commission.

The delegated regulation (EU) 2021/2139 of 4 June 2021 supplementing regulation (EU) 2020/852 of the European Parliament and of the Council, and amended by delegated regulation (EU) 2023/2485 of 27 June 2023, establishes the technical screening criteria for determining the conditions under which an economic activity qualifies as contributing substantially to climate change mitigation or climate change adaptation. It also determines, for each of the environmental objectives listed in article 9 of the Regulation, the technical screening criteria for assessing whether that economic activity causes no significant harm to one or several of those environmental objectives.

The delegated regulation (EU) 2023/2486 of 27 June 2023 supplementing regulation (EU) 2020/852 of the European Parliament and of the Council establishes the technical screening criteria relating to the four other environmental objectives (the sustainable use and protection of water and marine resources; the transition to a circular economy; the pollution prevention and control; the protection and restoration of biodiversity and ecosystems).

The minimum safeguards of article 3 of the Regulation are procedures implemented by an undertaking to ensure the alignment with the OECD Guidelines for Multinational Enterprises and the UN Guiding Principles on Business and Human Rights, including the principles and rights set out in the eight fundamental conventions identified in the Declaration of the International Labour Organisation on Fundamental Principles and Rights at Work and the International Bill of Human Rights.

In order to acknowledge "the role of natural gas as an important technology in reducing greenhouse gas emissions"[1], the delegated regulation (EU) 2021/2139 of 4 June 2021 has been supplemented with a supplementing delegated the regulation (EU) 2022/1214 of 9 March 2022 on the activities related to natural gas and nuclear energy.

REPORTING FRAMEWORK

Article 8 of the Regulation requires undertakings[2] to include in their *"consolidated non-financial statement information on how and to what extent the undertaking's activities are associated with economic activities that qualify as environmentally sustainable under Articles 3 and 9 of this Regulation"*.

In particular, the undertakings concerned shall disclose the following:

- the proportion of their Turnover derived from products or services associated with economic activities that qualify as environmentally sustainable,
- the proportion of their capital expenditure ("CapEx") and the proportion of their operating expenditure ("OpEx") related to assets or processes associated with economic activities that qualify as environmentally sustainable.

The delegated regulation (EU) 2021/2178 of 6 July 2021, amended by delegated regulation (EU) 2023/2486 of 27 June 2023, supplementing the Regulation specifies the content and presentation of information to be disclosed by undertakings concerning environmentally sustainable economic activities and specifying the methodology to comply with that disclosure obligation.

The delegated regulation specifies the following definitions:

- a taxonomy-eligible economic activity ("Eligible Activity") is an economic activity that is described in the delegated regulations (EU) 2021/2139 of 4 June 2021 (amended by the delegated regulation (EU) 2023/2485 of 27 June 2023), and (UE) 2023/2486 of 27 June 2023, irrespective of whether that economic activity meets any or all of the technical screening criteria laid down in this delegated act,
- a taxonomy-non-eligible economic activity is any economic activity that is not described in the delegated regulations (EU) 2021/2139 of 4 June 2021 (amended by the delegated regulation (EU) 2023/2485 of 27 June 2023), and (UE) 2023/2486 of 27 June 2023,
- a taxonomy-aligned economic activity ("Aligned Activity") is an economic activity that complies with the requirements laid down in Article 3 of the Regulation.

The indicators (Turnover, CapEx, OpEx) are disclosed in the point 5.2.6.3.

5.2.6.1 Eligibility Of TotalEnergies' activities

TotalEnergies has calculated the proportion of its eligible and non-eligible economic activities under the Regulation on the basis of the provisions of the delegated regulation (EU) 2021/2139 of 4 June 2021, the delegated regulation (EU) 2021/2178 of 6 July 2021 and the delegated (EU) 2023/2486 of 27 June 2023.

The table below thus presents the proportion of its eligible economic activities of TotalEnergies on three financial indicators: turnover ("Turnover"), capital expenditure ("CapEx") and operating expenditure ("OpEx"), within the meaning of the Taxonomy regulation, on the scope of entities exclusively controlled and consolidated by TotalEnergies SE.

The table also presents, in a voluntary approach, proposed by the delegated regulation of 6 July 2021, a proportional view of the indicators Turnover and CapEx, including the contribution of joint-ventures and associates in which TotalEnergies SE has significant influence, accounted for by the equity method up to the amount of the interest held by TotalEnergies.

Given the size of the Company and the adopted development model using partnership to develop its strategy in the electricity and renewables sector, the proportional view is more relevant for TotalEnergies than the consolidated view.

Summary of the ratios of Eligible Activities

	Controlled scope			Proportional view	
Eligible Activities (Financial year 2024)	Turnover	CapEx	OpEx	Turnover	CapEx
Electricity and renewables	2.1%	16.8%	8.3%	2.9%	24.5%
including electricity generation from natural gas	*0.7%*	*3.0%*	*0.7%*	*0.8%*	*2.8%*
Biofuels and chemicals	4.7%	3.1%	8.4%	5.9%	4.8%
Other eligible activities	0.4%	1.0%	2.0%	0.4%	1.1%
Total 2024	*7.2%*	*20.9%*	*18.7%*	*9.2%*	*30.4%*
Total 2023	*6.5%*	*28.1%*	*15.5%*	*8.6%*	*33.9%*
Total 2022	*7.5%*	*17.4%*	*15.8%*	*8.9%*	*34.0%*

(1) Refer to (28) of delegated regulation (EU) 2021/2139 of 4 June 2021.
(2) Undertakings which are subject to the obligation to publish an extra-financial statement or a consolidated extra-financial statement pursuant to Article 19a or Article 29a of Directive 2013/34/EU.

ELIGIBLE ACTIVITIES OF TOTALENERGIES

TotalEnergies' Eligible Activities focus mainly on the climate change mitigation objective.

- For the Integrated Power segment, main Eligible Activities are as follows:
  - renewable energy activities include the electricity generation from renewable sources (wind [CCM 4.3], solar [CCM 4.1], and hydroelectricity [CCM 4.5]), the manufacture, installation, maintenance and repair of renewable energy technologies [CCM 7.6 & CCM 3.1], as well as the manufacture of rechargeable batteries [CCM 3.4], battery packs and accumulators [CCM 4.10] (refer to points 2.4.2 and 2.4.4 in chapter 2),
  - electricity generation from natural gas [CCM 4.29 & 4.30], corresponding to the portfolio of combined cycle gas turbine (CCGT) power plants (refer to point 2.4.3 of chapter 2).
- For the Integrated LNG segment, main Eligible Activities are as follows:
  - activities related to the production of biogas by anaerobic digestion of bio-waste [CCM 5.7] (refer to point 2.3.6 in chapter 2),
  - hydrogen manufacturing activities [CCM 3.10] (refer to point 2.3.7 of chapter 2).
- For the Refining & Chemicals segment, main Eligible Activities are as follows:
  - activities related the production of biofuel for transportation [CCM 4.13] (refer to point 2.5.1.1 in chapter 2),
  - activities related to the manufacture of basic organic chemicals [CCM 3.14] and the manufacture of basic plastic materials [CCM 3.17] cover a significant portion of the Company's petrochemical activities. Some of these activities may constitute "transitional activities" within the meaning of the European taxonomy regulation, as long as they meet the technical screening criteria of the delegated regulation (EU) 2021/2139 of 4 June 2021, in particular in the fields of biopolymer production and mechanical or chemical recycling of plastics (refer to point 2.5.1.1 of chapter 2).
- For the Exploration & Production segment, main eligible activities are those related to carbon sinks: CO_2 capture and storage [CCM 5.10] and the development of nature-based carbon sinks [CCM 1.1] (refer to points 2.2.2.2 and 2.2.2.3 in chapter 2).
- For the Marketing & Service segment, main Eligible Activities are those related to new energy mobility infrastructures: construction and operation of infrastructure enabling low-carbon road transport and public transport [CCM 6.15 & 7.6], such as electric charging stations and hydrogen fueling stations (refer to point 2.6.1 in chapter 2).

The Eligible Activities reported under the line Electricity and renewables include renewable energy activities and electricity generation from natural gas [CCM 4.29 & 4.30] of the Integrated Power segment, as well as construction and operation of electric charging stations [CCM 7.6] of the Marketing & Service segment.

The Eligible Activities reported under the line Biofuels and chemicals include the production of biofuel for transportation [CCM 4.13], the manufacture of basic organic chemicals [CCM 3.14] and the manufacture of basic plastic materials [CCM 3.17] of the Refining & Chemicals segment.

The analysis of the texts has led TotalEnergies to consider that, among its activities, are notably not eligible under the taxonomy regulation:

- electricity marketing activities, if the electricity is not produced by the Company (refer to point 2.4.5 of chapter 2,
- the construction and operation of infrastructures for the distribution of energy from natural gas, such as NGV stations and marine natural gas supply infrastructures (refer to point 2.6.1 of chapter 2),
- activities related to the use of means of transportation (road, sea) if the vessels or vehicles are dedicated to the transport of fossil fuels (refer to point 2.5.2.2 in chapter 2).

DEFINITION OF FINANCIAL INDICATORS AND METHODOLOGY

The proportion of Eligible Activities and the proportion of Aligned Activities in the Turnover, the CapEx and the OpEx (the "Ratios") are calculated by dividing respectively the Turnover, the CapEx and the OpEx associated with the Eligible Activities and Aligned Activities of the Company (the numerator) by the total Turnover, CapEx and OpEx of TotalEnergies (the denominator).

The financial indicators, on which the Ratios of the controlled scope are founded, are determined from the financial data used for the preparation of the consolidated financial statements of TotalEnergies SE, established in compliance with the IFRS international accounting standards.

- Turnover corresponds to Revenues from sales as presented in the consolidated statement of income (refer to point 8.2 of chapter 8), i.e. consolidated external sales excluding excise taxes.
- CapEx corresponds to the additions to tangible and intangible assets, *i.e.* to the cost of construction or acquisition of new properties, plants and equipments and intangible assets recognized in the consolidated balance sheet (refer to point 8.4 of chapter 8), including in connection with a business combination. These additions are considered before depreciation, amortisation and any re-measurements, including those resulting from revaluations and impairments, and excluding fair value changes. It includes rights of use under new lease agreements and it excludes acquisitions of shares in equity affiliates and non-consolidated companies, as well as loans granted to these companies. The reconciliation of CapEx with cash flow used in investing activities as presented in the consolidated statement of cash flow (refer to point 8.5 of chapter 8) is available in point 5.2.6.3.
- OpEx corresponds only to direct non-capitalized costs that relate to research and development, short-term lease, building renovation measures and maintenance and repair. These costs are included in the Other operating expenses in the consolidated statement of income (refer to point 8.2 of chapter 8).

The Ratios calculated using the proportional view are based on the Turnover and CapEx financial indicators but extend the scope of the contributing entities, for the numerator like the denominator, to the joint-ventures and associates in which TotalEnergies SE has significant influence, accounted for by the equity method up to the amount of the interest held by TotalEnergies. The scope of consolidation as of December 31, 2023, including the list of companies accounted for by the equity method, is available in note 18 of the appendix to the consolidated financial statements in chapter 8.

An internal procedure documents the methodology for determining Eligible Activities and Aligned Activities, the precise definition of financial indicators and all the criteria and assumptions used. Methodology and definitions may evolve depending on future changes in regulations and interpretations.

5.2.6.2 Alignment of TotalEnergies' activities

The tables below present the proportion of the Eligible Activities and the proportion of the Aligned Activities on the Turnover and CapEx indicators, on the scope of the entities controlled by TotalEnergies, as well as a proportional view, proposed by the delegated regulation of 6 July 2021, including the contribution of joint-ventures and associates in which TotalEnergies SE has significant influence, accounted for by the equity method.

These data have been assessed on the basis of year 2024 with a reminder of the data published for the years 2023 and 2022.

Summary of the ratios of Eligible Activities and Aligned Activities

	Eligible activities		Aligned activities	
Controlled scope - 2024	Turnover	CapEx	Turnover	CapEx
Electricity and renewables	2.1%	16.8%	1.3%	13.7%
including electricity generation from natural gas	*0.7%*	*3.0%*	*0.0%*	*0.0%*
Biofuels and chemicals	4.7%	3.1%	0.2%	1.4%
Other eligible activities	0.4%	1.0%	0.4%	0.4%
Total 2024	*7.2%*	*20.9%*	*1.9%*	*15.5%*
Total 2023	*6.5%*	*28.1%*	*1.4%*	*25.7%*
Total 2022	*7.5%*	*17.4%*	*1.3%*	*14.5%*

	Eligible activities		Aligned activities	
Proportional view - 2024	Turnover	CapEx	Turnover	CapEx
Electricity and renewables	2.9%	24.5%	1.9%	21.6%
including electricity generation from natural gas	*0.8%*	*2.8%*	*0.0%*	*0.0%*
Biofuels and chemicals	5.9%	4.8%	0.4%	2.4%
Other eligible activities	0.4%	1.1%	0.4%	0.8%
Total 2024	*9.2%*	*30.4%*	*2.7%*	*24.8%*
Total 2023	*8.6%*	*33.9%*	*2.5%*	*31.7%*
Total 2022	*8.9%*	*34.0%*	*1.7%*	*30.8%*

According to this classification, defined by the Taxonomy, eligible or aligned CapEx represent respectively 30% and 25% of investments on proportional view in 2024, confirming the dynamic initiated since 2020.

"SUBSTANTIAL CONTRIBUTION" CRITERION

With regard to the assessment of the regulatory criterion named "Substantial Contribution":

- the Eligible Activities related to renewables have a substantial contribution to the objective of climate change mitigation as soon as they qualify as eligible, except of the manufacture of rechargeable batteries, battery packs [CCM 3.4] and accumulators [CCM 4.10], which complies with this criterion if they result in substantial greenhouse gases (GHG) emission reductions in transport, stationary and off-grid energy storage and other industrial applications,
- the electricity generation from natural gas [CCM 4.29 & 4.30] complies with this criterion for plants, the GHG emissions of which are lower than 100 g CO_2e/kWh or in transient configurations, for plants whose permit is granted before 31 December 2030, if:
  - the GHG emissions of the activity are lower than 270 g CO_2e/kWh or the average annual GHG emissions over 20 years are lower than 550 kg CO_2e/kW,
  - a duly documented management commitment is taken for a switch to 100% renewable and/or low-carbon gas before end 2035,
  - the activity in question replaces a preexisting coal or liquid fuel activity, and
  - a comparative assessment will have demonstrated that no 100% renewable alternative was possible.
- the manufacture of biofuels for use in transports [CCM 4.13] complies with that criterion if the process uses a biomass that is not food-and feed crops that complies with the sustainability criteria of the Renewable Energies Directive (RED) and that allows savings in GHG emissions due to the manufacturing of these biofuels of at least 65% compared to fossil fuels,
- the manufacture of basic organic chemicals [CCM 3.14] complies with that criterion if (i) the GHG emissions (manufacture) by product are lower than a threshold, or (ii) those products are manufactured from renewable feedstock and the lifecycle GHG emissions, verified by a third party, are lower than the equivalent chemical manufactured from fossil fuel feedstock,
- the manufacture of plastic in primary form [CCM 3.17] complies with that criterion if it is (i) fully manufactured by mechanical recycling of plastic waste or (ii) where mechanical recycling is not technically feasible or economically viable, fully manufactured by chemical recycling and the lifecycle GHG emissions of the manufactured plastic, verified by a third party, are lower than the lifecycle GHG emissions of the equivalent plastic in primary form manufactured from fossil fuel feedstock or (iii) derived wholly or partially from renewable feedstock if its lifecycle GHG emissions, verified by a third party, are lower than the lifecycle GHG emissions of the equivalent plastics in primary form manufactured from fossil fuel feedstock,
- the manufacture of biogas by anaerobic digestion of bio-waste [CCM 5.7] complies with that criterion if the methane leakage and the traceability of the feedstock and digestates are under control and if the share of food-and feed crops is lower than 10%.

"DO NO SIGNIFICANT HARM" CRITERION

With regard to the regulatory criterion named "Do no significant harm" any of the environmental objectives, TotalEnergies relies on the HSE division and the HSE departments within the Company's entities which seek to ensure that applicable local regulations, internal requirements of One MAESTRO reference framework and the Company's additional commitments are respected (refer to point 5.1.4) to analyze if its Eligible Activities comply with this criterion.

- For activities located in the European Union, compliance with European and national laws helps document compliance with technical screening criteria.
- For activities located outside the European Union, the analysis of compliance with the technical screening criteria of delegated regulation (EU) 2021/2139 of 4 June 2021 is based in particular on the following elements:
  - sustainable use and protection of water and marine resources: risks related to water quality and the avoidance of water stress are identified and covered through a water use and protection management plan,
  - pollution prevention and control regarding use and presence of chemicals: the activities do not lead to the manufacture, placing on the market or use of substances, on their own, in mixtures or in articles, listed or defined in European Regulations 2019/1021, 2017/852, 1005/2009, 2011/65 and 1907/2006,
  - protection and restoration of biodiversity and ecosystems: an environmental impact assessment or an appropriate screening is completed for each activity,
  - analysis of technical screening criteria specific to certain Eligible Activities.

More specifically concerning the analysis of the criteria related to the environmental objective "Climate change adaptation", TotalEnergies relies on its specific process for identifying and assessing physical risks associated with climate change (refer to points 5.1.4.1 and 5.2.1).

"MINIMUM SAFEGUARDS" CRITERION

With regard to the regulatory criterion named "Minimum Safeguards", various TotalEnergies policies cover these issues, through the adoption of a set of norms, principles, guidelines and best practices applicable to its operations, the establishment of specialized teams and networks of correspondents responsible for particular attention to these subjects, as well as procedures, reports and audits aimed at ensuring their daily application. Thus, the TotalEnergies Code of Conduct includes respect for the Universal Declaration of Human Rights, the Fundamental Conventions of the International Labour Organization (ILO), the U.N. Guiding Principles on Business and Human Rights, the OECD guidelines for multinational enterprises and the Voluntary Principles on Security and Human Rights (VPSHR).

The Company refers to those standards in the analysis of the compliance of its Eligible Activities. For a more detailed presentation of TotalEnergies' policies and procedures in terms of respect for human rights, refer to points 3.3.3 and 3.6 of chapter 3 and point 5.3, respect for competition law, refer to points 3.3.3 and 3.6 of chapter 3, fighting corruption refer to points 3.3.3 and 3.6 of chapter 3 and point 5.4.2 and fighting tax evasion refer to point 1.4 of chapter 1.

In the context of activities carried out by joint-ventures and associates in which TotalEnergies has significant influence, accounted for by the equity method, the Company uses its leverage with its business partners to apply similar standards, as explained in these same points.

CONTEXTUAL INFORMATION

In 2024, the Turnover associated with Aligned Activities on the scope of entities controlled by TotalEnergies amount to $3,713 million ($3,170 million in 2023). The increase in Turnover is mainly due to the contribution of Total Eren, whose acquisition was finalized in July 2023.

In 2024, CapEx associated with Aligned Activities on the scope of the entities controlled by TotalEnergies amount to $3,043 million ($5,998 million in 2023). They include $2,368 million related to additions to tangible assets, $577 million related to additions to intangible assets and $98 million related to new leases (respectively $4,849 million, $835 million and $314 million in 2023).

In 2023, CapEx associated with Aligned Activities included $3,207 million in connection with a business combination, mainly resulting from TotalEnergies' takeover of Total Eren in July 2023.

CapEx associated with Aligned Activities are either related to assets or processes that are associated with Aligned Activities, or related to *CapEx Plans*, within the meaning of the regulation, or related to purchases of products from Aligned Activities or to individual measures, also among the Aligned Activities, enabling the target activities to become low-carbon or to lead to greenhouse gas emissions reductions.

CapEx related to *CapEx Plans* are part of a plan to expand Aligned Activities or allow Taxonomy Eligible Activities to align with it. CapEx related to purchases of products from Aligned Activities or to individual measures correspond, mainly to the solarization of TotalEnergies' sites.

TotalEnergies is maintaining an annual capital expenditures target of $16-18 billion over the next 5 years. Since several years, TotalEnergies has consistently maintained a significant investment effort in low carbon energies, mainly in low-carbon electricity. However, the Company maintains a downward flexibility of $2 billion per year in case of a sharp decrease of prices. Through cycles, TotalEnergies expects net investments of between $14 billion and $18 billion per year. Net investments in low-carbon energies are expected to amount to 4 to 5 billion dollars a year. They include investments in Integrated Power (approximatively $4 billion), low-carbon molecules (including biofuels, biogas, recycled plastic, biopolymers, synthetic fuels, hydrogen and CCS) as well as the nature-based carbon sinks projects allowing, from 2030, to contribute to reduction of the Company's carbon footprint, (refer to point 1.5 of chapter 1).

5.2.6.3 Key performance indicators within the taxonomy

Proportion of Turnover from products or services associated with Taxonomy-aligned economic activities

Fiscal year 2024

Activity	Code	Turnover (M€)	Turnover %	Substantial contribution: Climate Change: Mitigation	Substantial contribution: Climate Change: Adaptation	Substantial contribution: Water protect.	Substantial contribution: Circular eco.	Substantial contribution: Pollution	Substantial contribution: Biodiversity	Does not significantly harm: Climate Change: Mitigation	Does not significantly harm: Climate Change: Adaptation	Does not significantly harm: Water protect.	Does not significantly harm: Circular eco.	Does not significantly harm: Pollution	Does not significantly harm: Biodiversity	Minimum Safeguards	Proportion of Taxonomy-aligned (A.1) or -eligible (A.2) Turnover, year N -1 %	Enabling (E) activity	Transitional (T) activity
A. Taxonomy-eligible activities																			
A.1. Environmentally sustainable activities (taxonomy-aligned)																			
Manufacture of batteries	CCM 3.4	1,066	0.5%	Y	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0.5%	E	
Manufacture of energy efficiency equipment for buildings	CCM 3.5	27	0.0%	Y	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0.0%	E	
Manufacture of plastics in primary form	CCM 3.17	38	0.0%	Y	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0.0%		T
Manufacture of automotive and mobility components	CCM 3.18	408	0.2%	Y	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0.3%	E	
Manufacture of rail constituents	CCM 3.19	78	0.0%	Y	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0.0%	E	
Electricity generation using solar photovoltaic technology	CCM 4.1	257	0.1%	Y	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0.1%		
Electricity generation from wind power	CCM 4.3	311	0.2%	Y	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0.0%		
Electricity generation from hydropower	CCM 4.5	12	0.0%	Y	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0.0%		
Storage of electricity	CCM 4.10	32	0.0%	Y	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0.0%	E	
Manufacture of biogas/biofuels for use in transport and of bioliquids	CCM 4.13	438	0.2%	Y	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0.2%		
District heating/cooling distribution	CCM 4.20	28	0.0%	Y	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0.0%		
Production of heat/cool using waste heat	CCM 4.25	1	0.0%	Y	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0.0%		
Anaerobic digestion of bio-waste	CCM 5.7	84	0.0%	Y	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0.0%		
Landfill gas capture and utilization	CCM 5.10	4	0.0%	Y	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0.0%		
Infrast. enabling low-carbon road transport and public transport	CCM 6.15	143	0.1%	Y	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0.0%	E	
Installation, maintenance and repair of charging stations for electric vehicles in buildings	CCM 7.4	52	0.0%	Y	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0.0%	E	
Installation, maintenance and repair of renewable energy tech.	CCM 7.6	64	0.0%	Y	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0.0%	E	
Professional services related to energy performance of buildings	CCM 9.3	670	0.3%	Y	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0.1%	E	
Turnover of environmentally sustainable activities (Taxonomy-aligned) (A.1.)		**3,713**	**1.9%**	**1.9%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	Y	Y	Y	Y	Y	Y	Y	**1.4%**		
Including enabling			***1.3%***	***1.3%***	***0.0%***	***0.0%***	***0.0%***	***0.0%***	***0.0%***	*Y*	*Y*	*Y*	*Y*	*Y*	*Y*	*Y*	***1.0%***		
Including transitioning			***0.0%***							*Y*	*Y*	*Y*	*Y*	*Y*	*Y*	*Y*	***0.0%***		
A.2. Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned)																			
Treatment of hazardous waste	CE 2.4	23	0.0%	N/EL	N/EL	N/EL	EL	N/EL	N/EL								0.0%		
Manufacture of batteries	CCM 3.4	285	0.1%	EL	N/EL	N/EL	N/EL	N/EL	N/EL								0.1%		
Manufacture of organic basic chemicals	CCM 3.14	3,265	1.7%	EL	N/EL	N/EL	N/EL	N/EL	N/EL								1.5%		
Manufacture of plastics in primary form	CCM 3.17	5,233	2.7%	EL	N/EL	N/EL	N/EL	N/EL	N/EL								2.4%		
Electricity generation using solar photovoltaic technology	CCM 4.1	17	0.0%	EL	N/EL	N/EL	N/EL	N/EL	N/EL								0.0%		
Transmission and distribution of electricity	CCM 4.9	2	0,0%	EL	N/EL	N/EL	N/EL	N/EL	N/EL								0,0%		
Manufacture of biogas/biofuels for use in transport and of bioliquids	CCM 4.13	123	0.1%	EL	N/EL	N/EL	N/EL	N/EL	N/EL								0.1%		
District heating/cooling distribution	CCM 4.15	46	0.0%	EL	N/EL	N/EL	N/EL	N/EL	N/EL								0.0%		
Cogeneration of heat/cool and power from bioenergy	CCM 4.20	7	0.0%	EL	N/EL	N/EL	N/EL	N/EL	N/EL								0.0%		
Electricity generation from fossil gaseous fuels	CCM 4.29	1,317	0.7%	EL	N/EL	N/EL	N/EL	N/EL	N/EL								0.9%		
High-efficiency co- generation of heat/cool and power from fossil gaseous fuels	CCM 4.30	24	0.0%	EL	N/EL	N/EL	N/EL	N/EL	N/EL								0.0%		
Construction, extension and operation of water collection, treatment and supply systems	CCM 5.1	4	0.0%	EL	N/EL	N/EL	N/EL	N/EL	N/EL								0.0%		
Construction, extension and operation of waste water collection and treatment	CCM 5.3	6	0.0%	EL	N/EL	N/EL	N/EL	N/EL	N/EL								0.0%		
Anaerobic digestion of bio-waste	CCM 5.7	1	0.0%	EL	N/EL	N/EL	N/EL	N/EL	N/EL								0.0%		
Infrastructure for rail transport	CCM 6.14	1	0.0%	EL	N/EL	N/EL	N/EL	N/EL	N/EL								0.0%		
Turnover of Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities) (A.2.)		**10,354**	**5.3%**	**5.3%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**								**5.0%**		
A. Total activities Taxonomy-eligible (A.1.+A.2.)		14,067	7.2%	7.2%	0.0%	0.0%	0.0%	0.0%	0.0%										
B. Taxonomy-Non-Eligible activities																			
Turnover of Taxonomy-non-eligible activities (B)		181,543	92.8%																
Total activities (A+B)		195,610	100%																

Proportion of CapEx from products or services associated with Taxonomy-aligned economic activities

Fiscal year 2024

Activity	Code	CapEx (M€)	CapEx %	Substantial contribution: Climate Change: Mitigation	Substantial contribution: Climate Change: Adaptation	Substantial contribution: Water protect.	Substantial contribution: Circular eco.	Substantial contribution: Pollution	Substantial contribution: Biodiversity	Does not significantly harm: Climate Change: Mitigation	Does not significantly harm: Climate Change: Adaptation	Does not significantly harm: Water protect.	Does not significantly harm: Circular eco.	Does not significantly harm: Pollution	Does not significantly harm: Biodiversity	Minimum Safeguards	Proportion of Taxonomy-aligned (A.1) or -eligible (A.2) CapEx, year N -1 %	Enabling (E) activity	Transitional (T) activity
A. Taxonomy-eligible activities																			
A.1. Environmentally sustainable activities (taxonomy-aligned)																			
Afforestation	CCM 1.1	4	0.0%	Y	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0.0%		
Manufacture of batteries	CCM 3.4	67	0.3%	Y	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0.2%	E	
Manufacture of energy efficiency equipment for buildings	CCM 3.5	1	0.0%	Y	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0.0%	E	
Manufacture of hydrogen	CCM 3.10	27	0.1%	Y	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0.0%	E	
Manufacture of organic basic chemicals	CCM 3.14	0	0.0%	Y	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	1.5%		T
Manufacture of plastics in primary form	CCM 3.17	43	0.2%	Y	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0.2%		T
Manufacture of automotive and mobility components	CCM 3.18	23	0.1%	Y	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0.1%	E	
Manufacture of rail constituents	CCM 3.19	1	0.0%	Y	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0.0%	E	
Electricity generation using solar photovoltaic technology	CCM 4.1	1,212	6.2%	Y	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	15.0%		
Electricity generation from wind power	CCM 4.3	849	4.3%	Y	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	3.6%		
Electricity generation from hydropower	CCM 4.5	13	0.1%	Y	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0.0%		
Storage of electricity	CCM 4.10	222	1.1%	Y	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	2.0%	E	
Manufacture of biogas/biofuels for use in transport and of bioliquids	CCM 4.13	224	1.1%	Y	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0.6%		
Cogeneration of heat/cool and power from bioenergy	CCM 4.20	19	0.1%	Y	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0.4%		
Production of heat/cool from bioenergy	CCM 4.24	3	0.0%	Y	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0.0%		
Production of heat/cool using waste heat	CCM 4.25	16	0.1%	Y	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0.0%		
Anaerobic digestion of bio-waste	CCM 5.7	18	0.1%	Y	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0.1%		
Underground permanent geological storage of CO_2	CCM 5.12	30	0.2%	Y	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0.3%		
Infrast. enabling low-carbon road transport and public transport	CCM 6.15	230	1.2%	Y	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	1.1%	E	
Installation, maintenance and repair of charging stations for electric vehicles in buildings (and parking spaces attached to buildings)	CCM 7.4	3	0.0%	Y	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0.0%	E	
Installation, maintenance and repair of renewable energy tech.	CCM 7.6	32	0.2%	Y	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0.5%	E	
Professional services related to energy performance of buildings	CCM 9.3	6	0.0%	Y	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0.1%	E	
CapEx of environmentally sustainable activities (Taxonomy-aligned) (A.1.)		**3,043**	**15.5%**	**15.5%**	**0%**	**0%**	**0%**	**0%**	**0%**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**25.7%**		
Including enabling			***3.1%***	***3.1%***	***0%***	***0%***	***0%***	***0%***	***0%***	***Y***	***Y***	***Y***	***Y***	***Y***	***Y***	***Y***	***4.0%***		
Including transitioning			***0.2%***	***0.2%***						***Y***	***Y***	***Y***	***Y***	***Y***	***Y***	***Y***	***1.7%***		
A.2. Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned)																			
Treatment of hazardous waste	CE 2.4	19	0.1%	N/EL	N/EL	N/EL	EL	N/EL	N/EL								0.0%		
Manufacture of batteries	CCM 3.4	25	0.1%	EL	N/EL	N/EL	N/EL	N/EL	N/EL								0.1%		
Manufacture of organic basic chemicals	CCM 3.14	230	1.2%	EL	N/EL	N/EL	N/EL	N/EL	N/EL								1.1%		
Manufacture of plastics in primary form	CCM 3.17	90	0.5%	EL	N/EL	N/EL	N/EL	N/EL	N/EL								0.4%		
Electricity generation using solar photovoltaic technology	CCM 4.1	1	0.0%	EL	N/EL	N/EL	N/EL	N/EL	N/EL								0.2%		
Transmission and distribution of electricity	CCM 4.9	2	0.0%	EL	N/EL	N/EL	N/EL	N/EL	N/EL								0.0%		
Transmission and distribution of electricity	CCM 4.13	19	0.1%	EL	N/EL	N/EL	N/EL	N/EL	N/EL								0.0%		
Cogeneration of heat/cool and power from bioenergy	CCM 4.20	3	0.0%	EL	N/EL	N/EL	N/EL	N/EL	N/EL								0.0%		
Electricity generation from fossil gaseous fuels	CCM 4.29	581	3.0%	EL	N/EL	N/EL	N/EL	N/EL	N/EL								0.3%		
Construction, extension and operation of water collection, treatment and supply systems	CCM 5.1	0	0.0%	EL	N/EL	N/EL	N/EL	N/EL	N/EL								0.0%		
Construction, extension and operation of waste water collection and treatment	CCM 5.3	3	0.0%	EL	N/EL	N/EL	N/EL	N/EL	N/EL								0.0%		
Anaerobic digestion of bio-waste	CCM 5.7	2	0.0%	EL	N/EL	N/EL	N/EL	N/EL	N/EL								0.0%		
Construction of new buildings	CCM 7.1	51	0.3%	EL	N/EL	N/EL	N/EL	N/EL	N/EL								0.2%		
Acquisition and ownership of buildings	CCM 7.7	7	0.0%	EL	N/EL	N/EL	N/EL	N/EL	N/EL								0.2%		
Data processing, hosting and related activities	CCM 8.1	8	0.0%	EL	N/EL	N/EL	N/EL	N/EL	N/EL								0.0%		
CapEx of Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities) (A.2.)		**1,041**	**5.4%**	**5.3%**	**0.0%**	**0.0%**	**0.1%**	**0.0%**	**0.0%**								**2.4%**		
A. Total activities Taxonomy-eligible (A.1.+A.2.)		4,084	20.8%	20.8%	0.0%	0.0%	0.1%	0.0%	0.0%										
B. Taxonomy-Non-Eligible activities																			
CapEx of Taxonomy-non-eligible activities (B)		15,501	79.1%																
Total activities (A+B)		19,585	100%																

Proportion of OpEx from products or services associated with Taxonomy-aligned economic activities

Fiscal year 2024

Activity	Code	OpEx (M€)	OpEx %	Substantial contribution: Climate Change: Mitigation	Substantial contribution: Climate Change: Adaptation	Substantial contribution: Water protect.	Substantial contribution: Circular eco.	Substantial contribution: Pollution	Substantial contribution: Biodiversity	Does not significantly harm: Climate Change: Mitigation	Does not significantly harm: Climate Change: Adaptation	Does not significantly harm: Water protect.	Does not significantly harm: Circular eco.	Does not significantly harm: Pollution	Does not significantly harm: Biodiversity	Minimum Safeguards	Proportion of Taxonomy-aligned (A.1) or -eligible (A.2) OpEx, year N -1 %	Enabling (E) activity	Transitional (T) activity
A. Taxonomy-eligible activities																			
A.1. Environmentally sustainable activities (taxonomy-aligned)																			
Manufacture of batteries	CCM 3.4	85	2.1%	Y	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	1.8%	E	
Manufacture of energy efficiency equipment for buildings	CCM 3.5	1	0.0%	Y	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0.0%	E	
Manufacture of hydrogen	CCM 3.10	12	0.3%	Y	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0.3%	E	
Manufacture of plastics in primary form	CCM 3.17	27	0.7%	Y	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0.6%		T
Manufacture of automotive and mobility components	CCM 3.18	49	1.2%	Y	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	1.1%	E	
Electricity generation using solar photovoltaic technology	CCM 4.1	28	0,7%	Y	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	1,0%		
Electricity generation from wind power	CCM 4.3	59	1,5%	Y	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0.9%		
Electricity generation from hydropower	CCM 4.5	2	0.0%	Y	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0.0%		
Storage of electricity	CCM 4.10	30	0.7%	Y	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0.8%	E	
Manufacture of biogas/biofuels for use in transport and of bioliquids	CCM 4.13	54	1.3%	Y	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0.8%		
Production of heat/cool using waste heat	CCM 4.25	1	0.0%	Y	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0.0%		
Anaerobic digestion of bio-waste	CCM 5.7	8	0.2%	Y	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0.1%		
Landfill gas capture and utilization	CCM 5.10	2	0.0%	Y	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0.1%		
Underground permanent geological storage of CO_2	CCM 5.12	47	1,2%	Y	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0.9%		
Infrast. enabling low-carbon road transport and public transport	CCM 6.15	14	0.3%	Y	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0.2%	E	
Installation, maintenance and repair of renewable energy tech.	CCM 7.6	1	0.0%	Y	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0.0%	E	
OpEx of environmentally sustainable activities (Taxonomy-aligned) (A.1.)		**420**	**10.5%**	**10.5%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**8.6%**		
including enabling			*4.8%*	*4.8%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*Y*	*Y*	*Y*	*Y*	*Y*	*Y*	*Y*	*4.2%*		
including transitioning			*0.7%*	*0.7%*						*Y*	*Y*	*Y*	*Y*	*Y*	*Y*	*Y*	*0.6%*		
A.2. Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned)																			
Treatment of hazardous waste	CE 2.4	2	0.0%	N/EL	N/EL	N/EL	EL	N/EL	N/EL								0.0%		
Manufacture of batteries	CCM 3.4	28	0.7%	EL	N/EL	N/EL	N/EL	N/EL	N/EL								0.5%		
Manufacture of organic basic chemicals	CCM 3.14	134	3.3%	EL	N/EL	N/EL	N/EL	N/EL	N/EL								3.2%		
Manufacture of plastics in primary form	CCM 3.17	117	2.8%	EL	N/EL	N/EL	N/EL	N/EL	N/EL								2.7%		
Manufacture of biogas and biofuels for use in transport and of bioliquids	CCM 4.13	6	0.1%	EL	N/EL	N/EL	N/EL	N/EL	N/EL								0.0%		
District heating/cooling distribution	CCM 4.15	1	0.0%	EL	N/EL	N/EL	N/EL	N/EL	N/EL								0.0%		
Electricity generation from fossil gaseous fuels	CCM 4.29	27	0.7%	EL	N/EL	N/EL	N/EL	N/EL	N/EL								0.3%		
High-efficiency co- generation of heat/cool and power from fossil gaseous fuels	CCM 4.30	2	0.0%	EL	N/EL	N/EL	N/EL	N/EL	N/EL								0.0%		
Construction, extension and operation of water collection, treatment and supply systems	CCM 5.1	2	0.0%	EL	N/EL	N/EL	N/EL	N/EL	N/EL								0.0%		
Construction, extension and operation of waste water collection and treatment	CCM 5.3	1	0.0%	EL	N/EL	N/EL	N/EL	N/EL	N/EL								0.0%		
Collection and transport of non-hazardous waste in source segregated fractions	CCM 5.5	1	0.0%	EL	N/EL	N/EL	N/EL	N/EL	N/EL								0.0%		
Infrastructure for rail transport	CCM 6.14	1	0.0%	EL	N/EL	N/EL	N/EL	N/EL	N/EL								0.0%		
Renovation of existing buildings	CCM 7.2	3	0.1%	EL	N/EL	N/EL	N/EL	N/EL	N/EL								0.0%		
Installation, maintenance and repair of energy efficiency equipment	CCM 7.3	7	0.2%	EL	N/EL	N/EL	N/EL	N/EL	N/EL								0.0%		
Opex of Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities) (A.2.)		**332**	**8.2%**	**8.2%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**								**6.8%**		
A. Total activities Taxonomy-eligible (A.1+A.2.)		752	18.7%	18.7%	0.0%	0.0%	0.0%	0.0%	0.0%										
B. Taxonomy-Non-Eligible activities																			
OpEx of Taxonomy-non-eligible activities (B)		3,267	81.3%																
Total activities (A+B)		4,019	100%																

Key performance indicators by environmental objective

The tables below are required by the delegated regulation (EU) 2023/2486 of 27 June 27 2023. They make it possible to declare the degree of eligibility and alignment by environmental objective, including alignment with each of the environmental objectives for activities contributing substantially to several objectives including: climate change mitigation (CCM), climate change adaptation (CCA), sustainable use and protection of water and marine resources (WTR), transition to a circular economy (CE), pollution prevention and control (PPC) and protection and restoration of biodiversity and ecosystems (BIO).

Proportion of eligible Turnover and proportion of aligned Turnover by environmental objective

	Proposition of turnover/Total turnover	
	Taxonomy-aligned per objective	Taxonomy-eligible per objective
CCM	1.9%	7.2%
CCA	0.0%	0.0%
WTR	0.0%	0.0%
CE	0.0%	0.0%
PPC	0.0%	0.0%
BIO	0.0%	0.0%

Proportion of eligible CapEx and proportion of aligned CapEx by environmental objective

	Proposition of CapEx/Total CapEx	
	Taxonomy-aligned per objective	Taxonomy-eligible per objective
CCM	15.5%	20.8%
CCA	0.0%	0.0%
WTR	0.0%	0.0%
CE	0.0%	0.1%
PPC	0.0%	0.0%
BIO	0.0%	0.0%

Proportion of eligible OpEx and proportion of aligned OpEx by environmental objective

	Proportion of OpEx/Total OpEx	
	Taxonomy-aligned per objective	Taxonomy-eligible per objective
CCM	10.5%	18.7%
CCA	0.0%	0.0%
WTR	0.0%	0.0%
CE	0.0%	0.0%
PPC	0.0%	0.0%
BIO	0.0%	0.0%

Key performance indicators on the activities related to natural gas and nuclear energy

The tables below are required by supplementing delegated regulation (EU) 2022/1214 of 9 March 2022 on the activities related to natural gas and nuclear energy. The scope of Eligible Activities related to natural gas is limited and therefore does not acknowledge the role of natural gas as an important technology in reducing greenhouse gas emissions. For information and in addition to European regulations, the share of Eligible Activities and non-eligible activities related to natural gas, on the scope of the entities controlled by TotalEnergies, stands in 2024 at 10% of Turnover, 25% of CapEx and 10% of OpEx. In 2023, it stood at 12% of Turnover, 14% of CapEx and 26% of OpEx.

Fiscal year 2024

Line		
	Nuclear energy related activities	
1.	The undertaking carries out, funds or has exposures to research, development, demonstration and deployment of innovative electricity generation facilities that produce energy from nuclear processes with minimal waste from the fuel cycle.	No
2.	The undertaking carries out, funds or has exposures to construction and safe operation of new nuclear installations to produce electricity or process heat, including for the purposes of district heating or industrial processes such as hydrogen production, as well as their safety upgrades, using best available technologies	No
3.	The undertaking carries out, funds or has exposures to safe operation of existing nuclear installations that produce electricity or process heat, including for the purposes of district heating or industrial processes such as hydrogen production from nuclear energy, as well as their safety upgrades.	No
	Fossil gas related activities	
4.	The undertaking carries out, funds or has exposures to construction or operation of electricity generation facilities that produce electricity using fossil gaseous fuels.	Yes
5.	The undertaking carries out, funds or has exposures to construction, refurbishment, and operation of combined heat/cool and power generation facilities using fossil gaseous fuels.	Yes
6.	The undertaking carries out, funds or has exposures to construction, refurbishment and operation of heat generation facilities that produce heat/cool using fossil gaseous fuels.	No

Taxonomy-aligned economic activities (denominator)

Financial year 2024		Proportion - Turnover					
		CCM + CCA		Climate change mitigation		Climate change adaptation	
Line	Economic activities	Amount M$	%	Amount M$	%	Amount M$	%
1	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.26 of Annexes I and II to Delegated Regulation 2021/2139 on the denominator of Turnover	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.27 of Annexes I and II to Delegated Regulation 2021/2139 on the denominator of Turnover	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.28 of Annexes I and II to Delegated Regulation 2021/2139 on the denominator of Turnover	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.29 of Annexes I and II to Delegated Regulation 2021/2139 on the denominator of Turnover	0	0%	0	0%	0	0%
5	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.30 of Annexes I and II to Delegated Regulation 2021/2139 on the denominator of Turnover	0	0%	0	0%	0	0%
6	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.31 of Annexes I and II to Delegated Regulation 2021/2139 on the denominator of Turnover	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
7	**Amount and proportion of other taxonomy-aligned economic activities not referred to in rows 1 to 6 above on the denominator of Turnover**	**3,713**	**1.9%**	**3,713**	**1.9%**	**0**	**0%**
8	Total Turnover	195,610	100%	195,610	100%	195,610	100%

Taxonomy-aligned economic activities (denominator)

Financial year 2024		Proportion - CapEx					
		CCM + CCA		Climate change mitigation		Climate change adaptation	
Line	Economic activities	Amount M$	%	Amount M$	%	Amount M$	%
1	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.26 of Annexes I and II to Delegated Regulation 2021/2139 on the denominator of CapEx	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.27 of Annexes I and II to Delegated Regulation 2021/2139 on the denominator of CapEx	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.28 of Annexes I and II to Delegated Regulation 2021/2139 on the denominator of CapEx	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.29 of Annexes I and II to Delegated Regulation 2021/2139 on the denominator of CapEx	0	0%	0	0%	0	0%
5	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.30 of Annexes I and II to Delegated Regulation 2021/2139 on the denominator of CapEx	0	0%	0	0%	0	0%
6	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.31 of Annexes I and II to Delegated Regulation 2021/2139 on the denominator of CapEx	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
7	**Amount and proportion of other taxonomy-aligned economic activities not referred to in rows 1 to 6 above on the denominator of CapEx**	**3,043**	**15.5%**	**3,043**	**15.5%**	**0**	**0%**
8	Total CapEx	19,585	100%	19,585	100%	19,585	100%

Taxonomy-aligned economic activities (numerator)

Financial year 2024		Proportion - OpEx					
		CCM + CCA		Climate change mitigation		Climate change adaptation	
Line	Economic activities	Amount M$	%	Amount M$	%	Amount M$	%
1	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.26 of Annexes I and II to Delegated Regulation 2021/2139 on the denominator of OpEx	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.27 of Annexes I and II to Delegated Regulation 2021/2139 on the denominator of OpEx	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.28 of Annexes I and II to Delegated Regulation 2021/2139 on the denominator of OpEx	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.29 of Annexes I and II to Delegated Regulation 2021/2139 on the denominator of OpEx	0	0%	0	0%	0	0%
5	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.30 of Annexes I and II to Delegated Regulation 2021/2139 on the denominator of OpEx	0	0%	0	0%	0	0%
6	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.31 of Annexes I and II to Delegated Regulation 2021/2139 on the denominator of OpEx	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
7	**Amount and proportion of other taxonomy-aligned economic activities not referred to in rows 1 to 6 above on the denominator of OpEx**	**420**	**10.5%**	**420**	**10.5%**	**0**	**0%**
8	Total OpEx	4,019	100%	4,019	100%	4,019	100%

Taxonomy-aligned economic activities (numerator)

Financial year 2024		Proportion - Turnover					
		CCM + CCA		Climate change mitigation		Climate change adaptation	
Line	Economic activities	Amount M$	%	Amount M$	%	Amount M$	%
1	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.26 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of Turnover	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.27 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of Turnover	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.28 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of Turnover	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.29 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of Turnover	0	0%	0	0%	0	0%
5	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.30 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of Turnover	0	0%	0	0%	0	0%
6	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.31 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of Turnover	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
7	**Amount and proportion of other taxonomy-aligned economic activities not referred to in rows 1 to 6 above in the numerator of Turnover**	**3,713**	**100%**	**3,713**	**100%**	**0**	**0%**
8	Total amount and proportion of taxonomy-aligned economic activities in the numerator of Turnover	3,713	100%	3,713	100%	0	0%

Taxonomy-aligned economic activities (numerator)

Financial year 2024		Proportion - CapEx					
		CCM + CCA		Climate change mitigation		Climate change adaptation	
Line	Economic activities	Amount M$	%	Amount M$	%	Amount M$	%
1	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.26 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of CapEx	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.27 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of CapEx	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.28 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of CapEx	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.29 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of CapEx	0	0%	0	0%	0	0%
5	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.30 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of CapEx	0	0%	0	0%	0	0%
6	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.31 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of CapEx	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
7	**Amount and proportion of other taxonomy-aligned economic activities not referred to in rows 1 to 6 above in the numerator of CapEx**	**3,043**	**100%**	**3,043**	**100%**	**0**	**0%**
8	Total amount and proportion of taxonomy-aligned economic activities in the numerator of CapEx	3,043	100%	3,043	100%	0	0%

Taxonomy-aligned economic activities (numerator)

Financial year 2024		Proportion - Opex					
		CCM + CCA		Climate change mitigation		Climate change adaptation	
Line	Economic activities	Amount M$	%	Amount M$	%	Amount M$	%
1	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.26 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of OpEx	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.27 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of OpEx	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.28 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of OpEx	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.29 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of OpEx	0	0%	0	0%	0	0%
5	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.30 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of OpEx	0	0%	0	0%	0	0%
6	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.31 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of OpEx	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
7	**Amount and proportion of other taxonomy-aligned economic activities not referred to in rows 1 to 6 above in the numerator of OpEx**	**420**	**100%**	**420**	**100%**	**0**	**0%**
8	Total amount and proportion of taxonomy-aligned economic activities in the numerator of OpEx	420	100%	420	100%	0	0%

Taxonomy-eligible but not taxonomy-aligned economic activities

Financial year 2024		Proportion - Turnover					
		CCM + CCA		Climate change mitigation		Climate change adaptation	
Line	Economic activities	Amount M$	%	Amount M$	%	Amount M$	%
1	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.26 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of Turnover	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.27 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of Turnover	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.28 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of Turnover	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.29 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of Turnover	1,317	0.7%	1,317	0.7%	0	0%
5	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.30 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of Turnover	24	0.0%	24	0.0%	0	0%
6	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.31 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of Turnover	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
7	**Amount and proportion of other taxonomy-eligible but not taxonomy-aligned economic activities not referred to in rows 1 to 6 above in the denominator of Turnover**	**9,013**	**4.6%**	**9,013**	**4.6%**	**0**	**0%**
8	Total amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activities in the denominator of Turnover	10,354	5.3%	10,354	5.3%	0	0%

Taxonomy-eligible but not taxonomy-aligned economic activities

Financial year 2024		Proportion - CapEx					
		CCM + CCA		Climate change mitigation		Climate change adaptation	
Line	Economic activities	Amount M$	%	Amount M$	%	Amount M$	%
1	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.26 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of CapEx	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.27 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of CapEx	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.28 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of CapEx	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.29 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of CapEx	581	3.0%	581	3.0%	0	0%
5	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.30 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of CapEx	0	0%	0	0%	0	0%
6	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.31 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of CapEx	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
7	**Amount and proportion of other taxonomy-eligible but not taxonomy-aligned economic activities not referred to in rows 1 to 6 above in the denominator of CapEx**	**460**	**2.4%**	**460**	**2.4%**	**0**	**0%**
8	Total amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activities in the denominator of CapEx	1,041	5.4%	1,041	5.4%	0	0%

Taxonomy-eligible but not taxonomy-aligned economic activities

Financial year 2024		Proportion - Opex					
		CCM + CCA		Climate change mitigation		Climate change adaptation	
Line	Economic activities	Amount M$	%	Amount M$	%	Amount M$	%
1	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.26 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of OpEx	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.27 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of OpEx	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.28 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of OpEx	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.29 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of OpEx	27	0.7%	27	0.7%	0	0%
5	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.30 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of OpEx	2	0.0%	2	0.0%	0	0%
6	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.31 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of OpEx	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
7	**Amount and proportion of other taxonomy-eligible but not taxonomy-aligned economic activities not referred to in rows 1 to 6 above in the denominator of OpEx**	**303**	**7.5%**	**303**	**7.5%**	**0**	**0%**
8	Total amount and proportion of taxonomy eligible but not taxonomy-aligned economic activities in the denominator of OpEx	332	8.2%	332	8.2%	0	0%

Taxonomy non-eligible economic activities

Financial year 2024		Turnover	
Line	Economic activities	Amount M$	%
1	Amount and proportion of economic activity referred to in row 1 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.26 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of Turnover	n.a.	n.a.
2	Amount and proportion of economic activity referred to in row 2 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.27 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of Turnover	n.a.	n.a.
3	Amount and proportion of economic activity referred to in row 3 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.28 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of Turnover	n.a.	n.a.
4	Amount and proportion of economic activity referred to in row 4 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.29 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of Turnover	0	0%
5	Amount and proportion of economic activity referred to in row 5 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.30 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of Turnover	0	0%
6	Amount and proportion of economic activity referred to in row 6 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.31 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of Turnover	n.a.	n.a.
7	**Amount and proportion of other taxonomy-non-eligible economic activities not referred to in rows 1 to 6 above in the denominator of Turnover**	**181,543**	**92.8%**
8	Total amount and proportion of taxonomy-non-eligible economic activities in the denominator of Turnover	181,543	92.8%

Taxonomy non-eligible economic activities

Financial year 2024		CapEx	
Line	Economic activities	Amount M$	%
1	Amount and proportion of economic activity referred to in row 1 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.26 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of CapEx	n.a.	n.a.
2	Amount and proportion of economic activity referred to in row 2 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.27 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of CapEx	n.a.	n.a.
3	Amount and proportion of economic activity referred to in row 3 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.28 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of CapEx	n.a.	n.a.
4	Amount and proportion of economic activity referred to in row 4 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.29 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of CapEx	0	0%
5	Amount and proportion of economic activity referred to in row 5 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.30 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of CapEx	0	0%
6	Amount and proportion of economic activity referred to in row 6 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.31 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of CapEx	n.a.	n.a.
7	**Amount and proportion of other taxonomy-non-eligible economic activities not referred to in rows 1 to 6 above in the denominator of CapEx**	**15,501**	**79.1%**
8	Total amount and proportion of taxonomy-non-eligible economic activities in the denominator of CapEx	15,501	79.1%

Taxonomy non-eligible economic activities

Financial year 2024		OpEx	
Line	Economic activities	Amount M$	%
1	Amount and proportion of economic activity referred to in row 1 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.26 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of OpEx	n.a.	n.a.
2	Amount and proportion of economic activity referred to in row 2 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.27 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of OpEx	n.a.	n.a.
3	Amount and proportion of economic activity referred to in row 3 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.28 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of OpEx	n.a.	n.a.
4	Amount and proportion of economic activity referred to in row 4 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.29 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of OpEx	0	0%
5	Amount and proportion of economic activity referred to in row 5 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.30 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of OpEx	0	0%
6	Amount and proportion of economic activity referred to in row 6 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.31 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of OpEx	n.a.	n.a.
7	**Amount and proportion of other taxonomy-non-eligible economic activities not referred to in rows 1 to 6 above in the denominator of OpEx**	**3,267**	**81.3%**
8	Total amount and proportion of taxonomy-non-eligible economic activities in the denominator of OpEx	3,267	81.3%

Statement of CapEx reconciliation

In millions of dollars	2024
	TotalEnergies
Cash flow used in investing activities (a)	17,332
Divestments (b)	4,419
Investments in equity affiliates and other securities (c)	(2,127)
Increase in non-current loans (d)	(2,275)
New leasing contracts (e)	2,725
Adjustment of controlled entities acquisition (f)	(488)
Other adjustments* (g)	(1)
CapEx as per Taxonomy - Controlled perimeter (a+b+c+d+e+f+g)	19,585
Share of equity affiliates CapEx	7,762
CapEx as per Taxonomy - Proportional view	27,347

* Other adjustments include investment grants and capitalized financial expenses.

5.3 Social information

5.3.1 Company workforce (S1)

As part of its ambition of carbon neutrality by 2050, together with society, TotalEnergies intends to place the women and men of the company at the heart of its performance. With more than 100,000 employees worldwide and a presence in about 120 countries, the company is convinced that its development is inseparable from the trust and respect established between itself and its employees. TotalEnergies' social commitment is therefore based on the values set out in its Code of Conduct. In particular, it ensures that:

- protecting its employees' health and safety;
- offering high social standards and establishing a quality of life at work that contributes to Company's appeal and the well-being of its employees;
- developing people's skills using a robust learning model and individual support to ensure a successful and just transition;
- promoting a corporate culture that fosters equal treatment and opportunities, diversity and excludes all forms of discrimination;
- maintaining and encouraging social dialogue in compliance with local legal requirements;
- respecting internationally recognized human rights, in particular the Universal Declaration of Human Rights and the fundamental conventions of the International Labour Organization.

REPORTING SCOPES AND METHODOLOGY

Workforce and health reporting is based on three annual surveys: **the Global Workforce Analysis, the complementary Worldwide Human Resources Survey**, and the **Compensation Survey.**

The Global Workforce Analysis is conducted on December 31 in all the controlled, consolidated companies (refer to note 18 to the Consolidated Financial Statements and point 8.7 of chapter 8) having employees, *i.e.*, 350 companies in 93 countries at December 31, 2024. This survey covers workforces, hiring people on both permanent and fixed term contracts and their non-French equivalents ("contrats à durée déterminée" or "indéterminée") as well as employee turnover at the global level. It offers a breakdown of the workforce by sex, professional category (managers and other employees and non-French equivalents), age and nationality.

The Worldwide Human Resources Survey (WHRS), carried out in December of year "x" and January of year "x+1", includes 284 workforce indicators linked to the Company's Human Resources policies, such as internal mobility, talent development, training, working conditions, social dialogue, deployment of the Code of Conduct, human rights and health. The survey covers 140 companies in 51 countries, representing 90.9% of the Company's consolidated workforce (93,516 employees). The data published in this document are taken from the most recent survey, carried out in December 2024 and January 2025.

The Compensation survey is based on the consolidated scope of the WHRS scope. The compensation data are taken from the last survey, conducted in July 2024 on data extrapolated at December 31, 2024.

The data published from the workforce reporting represent 90.9% of the Company's consolidated workforce. They are considered sufficiently representative of the overall Company workforce and are not subject to estimation methodology.

Safety reporting covers the employees of subsidiaries that are more than 50% controlled within the Company's financial scope, employees of subsidiaries that are more than 50% controlled and not financially consolidated because they are not material from a financial standpoint, as well as the employees of contractors working on sites, assets or activities operated and those of transport companies under long-term contracts.

Two opinion surveys of all employees worldwide are also conducted, the **TotalEnergies Survey** and the **TotalEnergies Pulse Survey.** They are carried out, alternately every other year, within the "périmètre de gestion"[1] (435 companies in 122 countries in 2024).

TotalEnergies Survey is a large survey assessing employee engagement and measuring people's perception of the Company in various areas: the Company's ambition, collective performance, management, talent development, working conditions, etc. It is conducted every two years.

TotalEnergies Pulse Survey is an additional more concise survey that alternates with the TotalEnergies Survey, every other year, for the purposes of measuring employee engagement and well-being at work on a yearly basis.

5.3.1.1 Company employees

CHARACTERISTICS OF COMPANY EMPLOYEES

A. Breakdown of employees

At December 31, 2024, the Company had 102,887 employees belonging to 350 employing companies located in 93 countries (refer to Note 10.2 to the Consolidated Financial Statements, point 8.7 of chapter 8).

Company employees

	Number of employees (headcount) as of December 31					
	2024		2023		2022	
Equality between women and men[a]	Company	including Hutchinson	Company	including Hutchinson	Company	including Hutchinson
Women	37,862	16,257	37,839	15,943	36,773	15,561
Men	65,025	24,559	64,740	23,974	64,506	23,871
Total number of employees	**102,887**	**40,816**	**102,579**	**39,917**	**101,279**	**39,432**

(a) Certain local regulations do not allow the categories "other" and "not reported". The corresponding data are not collected in these countries.

(1) The so called "périmètre de gestion" i.e all subsidiaries controlled at more than 50.00%.

Employees in countries with at least 50 employees representing at least 10% of the Company's total workforce

France is the only country representing at least 10% of the total number of the employees of the Company.

	Number of employees (headcount) as of December 31		
France	2024	2023	2022
Company	35,880	35,506	34,959
including Hutchinson	*8,124*	*7,968*	*7,855*

Company workforce by business segment

	Headcount as of December 31		
	2024	2023	2022
Total number of employees	**102,887**	**102,579**	**101,279**
Breakdown by business segment			
Exploration & Production segment	8.6%	8.4%	8.6%
Integrated LNG segment	1.9%	1.7%	–[a]
Integrated Power segment	7.9%	7.8%	–[a]
Refining & Chemicals segment	51.2%	50.4%	50.6%
Refining & Petrochemicals	*10.6%*	*10.6%*	*10.8%*
Trading & Shipping	*1.0%*	*0.9%*	*0.8%*
Hutchinson	*39.6%*	*38.9%*	*39.0%*
Marketing & Services segment	22.8%	24.3%	24.9%
Corporate	4.0%	3.9%	3.9%
OneTech[b]	3.6%	3.5%	3.5%

(a) Since the first quarter of 2023, TotalEnergies' published results have separated the Integrated LNG segment from the Integrated Power segment.
(b) OneTech contains all technical and scientific teams from the various business segments.

Employees by type of contract

	Employees as of December 31								
	2024			2023			2022		
Company workforce	Women	Men	Total	**Women**	**Men**	**Total**	**Women**	**Men**	**Total**
Number of employees	**37,862**	**65,025**	**102,887**	37,839	64,740	**102,579**	36,773	64,506	**101,279**
Number of employees with permanent contracts (CDI)	34,372	61,021	**95,393**	34,022	60,501	**94,523**	33,077	60,189	**93,266**
Number of employees with fixed-term contracts (CDD)	3,490	4,004	**7,494**	3,817	4,239	**8,056**	3,696	4,317	**8,013**

TotalEnergies is examining how to make reporting data on non-guaranteed hours employees more reliable.

	Employees as of December 31								
	2024			2023			2022		
Including Hutchinson workforce	Women	Men	Total	**Women**	**Men**	**Total**	**Women**	**Men**	**Total**
Number of employees	**16,257**	**24,559**	**40,816**	15,943	23,974	**39,917**	15,561	23,871	**39,432**
Number of employees with permanent contracts (CDI)	14,666	22,898	**37,564**	14,378	22,341	**36,719**	14,066	22,000	**36,066**
Number of employees with fixed-term contracts (CDD)	1,591	1,661	**3,252**	1,565	1,633	**3,198**	1,495	1,871	**3,366**

TotalEnergies is examining how to make reporting data on non-guaranteed hours employees more reliable.

Employees by region

In 2024, the regions where Company's workforce is most represented were Europe (62.1%), Latin America (13.8%) and Africa (10.8%).

	Employees as of December 31								
	Europe			including France			Africa		
Company workforce	2024	2023	2022	2024	2023	2022	2024	2023	2022
Number of employees	**63,886**	**64,790**	**64,118**	**35,880**	**35,506**	**34,959**	**11,073**	**10,516**	**10,498**
including women	*23,496*	*24,047*	*23,750*	*12,945*	*12,589*	*12,302*	*3,731*	*3,395*	*3,116*
including men	*40,390*	*40,743*	*40,368*	*22,935*	*22,917*	*22,657*	*7,342*	*7,121*	*7,382*
Number of employees with permanent contracts (CDI)	58,255	58,458	58,071	33,012	32,647	32,236	9,740	9,475	9,384
Number of employees with fixed-term contracts (CDD)	5,631	6,332	6,047	2,868	2,859	2,723	1,333	1,041	1,114

	Employees as of December 31											
	North America			Latin America			Asia-Pacific			Middle East		
	2024	2023	2022	2024	2023	2022	2024	2023	2022	2024	2023	2022
Number of employees	**6,023**	**6,112**	**6,053**	**14,149**	**13,720**	**13,258**	**6,787**	**6,594**	**6,577**	**969**	**847**	**775**
including women	*1,700*	*1,770*	*1,707*	*6,127*	*5,881*	*5,503*	*2,484*	*2,463*	*2,446*	*324*	*283*	*251*
including men	*4,323*	*4,342*	*4,346*	*8,022*	*7,839*	*7,755*	*4,303*	*4,131*	*4,131*	*645*	*564*	*524*
Number of employees with permanent contracts (CDI)	6,012	6,105	6,049	14,076	13,602	13,145	6,391	6,056	5,855	919	827	762
Number of employees with fixed-term contracts (CDD)	11	7	4	73	118	113	396	538	722	50	20	13

	Employees as of December 31								
	Europe			including France			Africa		
Including Hutchinson workforce	2024	2023	2022	2024	2023	2022	2024	2023	2022
Number of employees	**22,584**	**22,519**	**22,249**	**8,124**	**7,968**	**7,855**	**2,443**	**1,883**	**1,774**
including women	*8,730*	*8,737*	*8,590*	*2,336*	*2,228*	*2,175*	*995*	*702*	*548*
including men	*13,854*	*13,782*	*13,659*	*5,788*	*5,740*	*5,680*	*1,448*	*1,181*	*1,226*
Number of employees with permanent contracts (CDI)	20,226	20,016	19,893	7,709	7,568	7,477	1,635	1,431	1,212
Number of employees with fixed-term contracts (CDD)	2,358	2,503	2,356	415	400	378	808	452	562

	Employees as of December 31											
	North America			Latin America			Asia-Pacific			Middle East		
	2024	2023	2022	2024	2023	2022	2024	2023	2022	2024	2023	2022
Number of employees	**2,666**	**2,861**	**2,825**	**10,447**	**10,130**	**9,855**	**2,676**	**2,524**	**2,729**	**0**	**0**	**0**
including women	*749*	*849*	*844*	*4,854*	*4,724*	*4,558*	*929*	*931*	*1,021*	*0*	*0*	*0*
including men	*1,917*	*2,012*	*1,981*	*5,593*	*5,406*	*5,297*	*1,747*	*1,593*	*1,708*	*0*	*0*	*0*
Number of employees with permanent contracts (CDI)	2,664	2,857	2,821	10,447	10,130	9,842	2,592	2,285	2,298	0	0	0
Number of employees with fixed-term contracts (CDD)	2	4	4	0	0	13	84	239	431	0	0	0

B. Recruitment of employees

In 2024, out of the 13,975 employees recruited on permanent contracts:

- 47.3% are under 30 years of age;
- 85.3% are non-French nationalities;
- 42.2% are women.

Furthermore, 5,632 employees were hired on fixed-term contracts in 2024, mainly in France, in line with the proactive Company policy of recruiting work-study students.

	Hires on permanent contracts (CDI) as of December 31					
	2024		2023		2022	
	Company	including Hutchinson	**Company**	including Hutchinson	**Company**	including Hutchinson
Number of hires on permanent contracts (CDI)	**13,975**	**9,187**	**15,220**	**9,831**	**14,206**	**8,878**
Breakdown by region						
Europe	27.4%	13.1%	26.3%	11.8%	30.6%	12.7%
including France	*16.5%*	*6.8%*	*15.9%*	*6.3%*	*17.9%*	*5.7%*
Africa	6.0%	2.9%	6.1%	3.8%	3.2%	0.9%
North America	7.9%	7.1%	14.9%	17.2%	16.7%	20.3%
Latin America	53.8%	75.4%	47.7%	66.0%	42.8%	62.9%
Asia-Pacific	3.6%	1.4%	4.5%	1.2%	6.0%	3.2%
Middle East	1.3%	–	0.5%	–	0.7%	–

C. Measures in favor of young work-study students in France

TotalEnergies is committed to the employment of young people, helping them establish themselves in the workplace and strengthening their employability.

Every year since 2016, the Company has reaffirmed its determined policy of recruiting, training and supporting young work-study students in France. The policy has been implemented in compliance with its commitments to diversity and equal opportunities.

In 2023, in the context of the *Collectif d'entreprises pour une économie plus inclusive (Collective businesses for a more inclusive economy)*, TotalEnergies renewed its commitment to welcoming 2,000 work-study students per year into its teams by 2025.

At the end of 2024, over 2,400 work-study students were working within the Company throughout France.

D. Departures from the workforce

	Departures as of December 31					
	2024		2023		2022	
	Company	including Hutchinson	**Company**	including Hutchinson	**Company**	including Hutchinson
Deaths	105	41	112	38	96	23
Dismissals	2,627	1,916	2,427	1,637	1,775	1,138
Resignations	8,860	6,924	10,217	7,793	9,241	6,601
Contract termination by mutual agreement[a]	917	432	880	420	1,495	796
Retirements[b]	1,276	301	–	–	–	–
Total departures (permanent contracts CDI)	13,785	9,614	13,636	9,888	12,607	8,558
Turnover rate[c] (permanent contracts CDI)	**14.6%**	**26.2%**	–	–	–	–
Total departures (fixed-term contracts CDD)[b][d]	4,693	1,734	–	–	–	–
Turnover rate[b][e] (fixed-term contracts CDD)	**58.3%**	**54.2%**	–	–	–	–

(a) Including "*ruptures conventionnelles*" in France.
(b) Data are not published before 2024.
(c) Calculation of the 2024 turnover rate for permanent contracts (CDI): Total departures from permanent contracts (deaths, dismissals, resignations, contract termination by mutual agreement, retirements) / total headcount on permanent contracts at December 31 of the previous year. In 2023, the turnover rate was calculated excluding retirements. Data 2023 and 2022 are not restated according to the new methodology.
(d) The reasons for departures for fixed-term contrats (CDD) include contract termination, resignations and deaths.
(e) Calculation of the 2024 turnover rate for fixed-term contracts (CDD): Total departures from fixed-term contracts (contract termination, deaths, resignations) / total headcount on fixed-term contracts at December 31 of the previous year.

5.3.1.2 Health and safety

TotalEnergies' activities give rise to health and safety risks and impacts for the Company's employees and our contractors. TotalEnergies operational systems are therefore centered on safety, a cardinal value at the Company, in accordance with the strictest standards, also as regards health.

As part of its double materiality analysis, the Company has identified the following material health and safety impacts, risks and opportunities. They cover the following main areas:

- major industrial accidents,
- occupational accidents,
- transportation accidents,
- health at work.

A. HSE MANAGEMENT REFERENCE FRAMEWORK

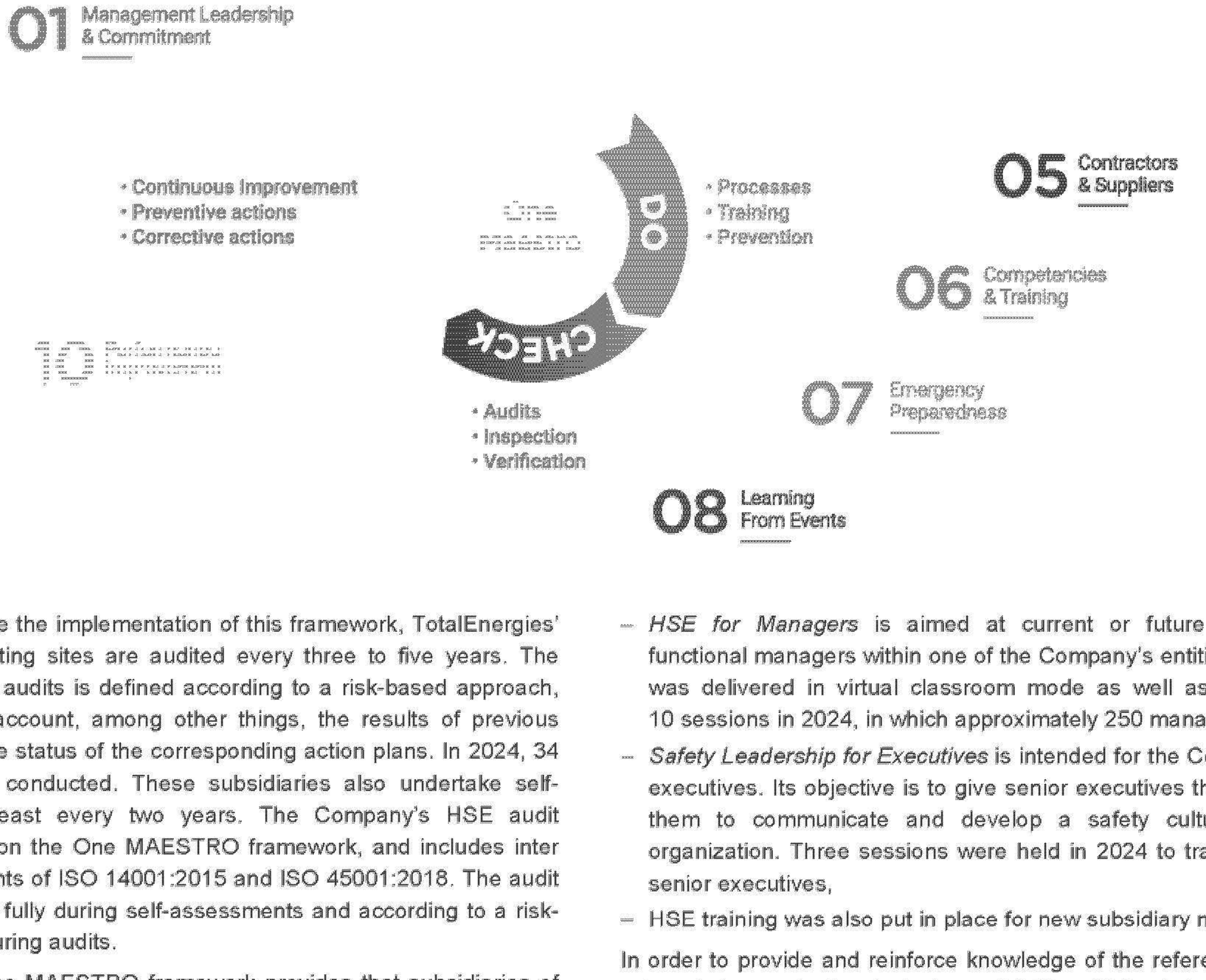
TotalEnergies relies on its Health, Safety, Environment and Quality Charter (available on its website) to conduct its operations. It forms the common foundation for the Company's management frameworks, and sets out the basic principles applicable to safety, security, health, the environment, quality and societal commitment. The Company's guidelines and rules define the minimum requirements expected of employees of both the Company and contractors under its supervision. General specifications, guides and manuals are used to implement these directives and rules. TotalEnergies' subsidiaries implement these requirements by means of their own management systems, which take account of specific local specificities and local regulatory requirements. The Company's reference framework is available to all employees.

The HSE reference framework common to all business segments, called One MAESTRO *(Management and Expectations Standards Toward Robust Operations)*, was rolled out since 2018 in order to give greater consistency to the Company's operations, while continuing to respect the specific characteristics of the various business segments.

This HSE reference framework applies to all controlled subsidiaries within the scope of the Sustainability report, and may be adapted to specific business lines, notably Hutchinson.

It is based on ten fundamental principles: (1) Management Leadership & Commitment, (2) Compliance with Laws, Regulations and Company requirements, (3) Risk Management, (4) Operational Accountability, (5) Contractors and Suppliers, (6) Competencies & Training, (7) Emergency Preparedness, (8) Learning From Events, (9) Monitoring, Audit & inspection, and (10) Performance Improvement.

Key principles of the One MAESTRO reference framework



In order to evaluate the implementation of this framework, TotalEnergies' subsidiaries operating sites are audited every three to five years. The periodicity of HSE audits is defined according to a risk-based approach, which takes into account, among other things, the results of previous HSE audits and the status of the corresponding action plans. In 2024, 34 HSE audits were conducted. These subsidiaries also undertake self-assessments at least every two years. The Company's HSE audit protocol is based on the One MAESTRO framework, and includes inter alia the requirements of ISO 14001:2015 and ISO 45001:2018. The audit protocol is applied fully during self-assessments and according to a risk-based approach during audits.

In addition, the One MAESTRO framework provides that subsidiaries of TotalEnergies holding an interest in assets operated by third parties must promote the Company's HSE requirements and best practices and use their best efforts to enable similar requirements to be adopted by the operator. It also provides that the HSE risks relating to these assets must be assessed at least every five years and that the TotalEnergies' employees in charge of managing non-operated assets must be trained in HSE management. Assessing the risks relating to these assets provides the basis for promoting the Company's HSE rules implemented by the asset manager, particularly during board meetings. This can also take place during technical assistance missions or through HSE audits or reviews, when these are provided for by a shareholders' agreement. In 2024, the Company took part in 23 HSE audits of non-operated assets.

HSE Training

Whatever the nature of the health, safety and environmental risks, preventive actions require all employees to adhere to the Company's HSE policy. To this end, TotalEnergies provides **training intended for the various groups** (new arrivals, managers, senior executives and directors) to establish a broad-based, consistent body of knowledge that is shared by everyone:

- *Safety Pass:* these safety induction courses were started on January 1, 2018 for new arrivals. Various courses exist depending on the employee's position and cover the Company's main HSE risks, the risks linked to the site activities and those linked to the workplace. The theoretical content is supplemented by practical training in life-saving actions practices,
- *HSE for Managers* is aimed at current or future operational or functional managers within one of the Company's entities. This training was delivered in virtual classroom mode as well as face-to-face in 10 sessions in 2024, in which approximately 250 managers took part,
- *Safety Leadership for Executives* is intended for the Company's senior executives. Its objective is to give senior executives the tools allowing them to communicate and develop a safety culture within their organization. Three sessions were held in 2024 to train 44 Company senior executives,
- HSE training was also put in place for new subsidiary managers.

In order to provide and reinforce knowledge of the reference framework, a knowledge evaluation tool of over 3,000 multiple-choice questions was developed in 2018 for use by HSE managers at subsidiaries, operated sites and their teams. The tool can also be used to determine a suitable training plan, if necessary. Approximately 150 evaluations were carried out in 2024.

HSE division

In coordination with the Company's various businesses, the HSE division coordinates the promotion and roll out of TotalEnergies' policies to enable the subsidiaries' HSE divisions to prevent or mitigate risks. Indicators are monitored so that the Company's health and safety activities can be continuously adapted. General Management oversees the policy's implementation with the support of the Strategy & Sustainability division, whose Managing Director sits on the Executive Committee, and the HSE division which reports to it.

Before any final decision to invest in a construction project or acquire or sell a subsidiary, the proposals presented to the Company's Risk Committee (Corisk) attended by the HSE division, are assessed for health and safety risks.

The HSE division is responsible for the ongoing management of HSE issues, working with experts and specialists. The annual World Day for Safety is another key event. TotalEnergies also encourages and promotes its subsidiaries' safety initiatives. Each year, the Company recognizes and awards a trophy to the best HSE initiative carried out in a subsidiary.

Health and safety issues are an important part of social dialogue, as described in chapter 5.3.1.4.

Health and safety objectives

Our main health and safety objectives are:

- preventing the occurrence of major industrial accidents,
- zero fatal accidents,
- continuous reduction of the TRIR,
- maintaining the health of employees at work.

These objectives are broken down into quantified targets.

B. PREVENTION OF MAJOR INDUSTRIAL ACCIDENTS

Policy and action plan

To prevent the occurrence of a major industrial accident such as an explosion, fire, leakage of hazardous products or mass leakage that might cause death, physical injury, large-scale pollution or pollution at an environmentally sensitive site, or important damage to property, TotalEnergies implements suitable risk management policies and measures which apply to its operated activities.

At year-end 2024, in addition to its drilling and pipeline transportation operations, TotalEnergies had 181 operated sites and zones exposed to these risks. These correspond to all activities relating to hydrocarbon production, whether offshore or onshore, as well as Seveso classified industrial sites (upper and lower threshold) and their equivalents outside the European Union (177 sites at the end of 2023 and 181 at the end of 2022).

The Company's policy for the management of major industrial accident risks applies from the facilities design stage, as well as throughout their lifespan, in order to minimize the potential impacts associated with its activities. The policy is described in the One MAESTRO reference framework. It provides for the analysis of the risks related to the Company's industrial operations at each operated site subject to these risks, based on incident scenarios for which the probability of occurrence and the severity of the consequences are assessed. Based on these parameters, a prioritization matrix is used to determine whether further measures are needed. These mainly concern measures to prevent accidents but also include mitigation measures (protection and mitigation). They are technical and organizational. These analyses are updated periodically, at least every five years, or when facilities are modified. Training on major accident risks is organized at head office and at subsidiary sites for operating staff.

The design and construction of facilities are subjected to technical standards that include applicable regulatory requirements and refer to industry best practices. The construction of the Company's facilities is entrusted to qualified contractors who undergo a demanding internal selection process and who are monitored. In the event of a modification to a facility, the Company's rules define the management process to be adopted.

The management of operations and integrity of facilities operated by the Company, are subjected to formal rules set out to prevent specific risks that have been identified either by means of risk analyses or from internal and industry feedback. For specific works, the preliminary risk analysis may lead to the establishment of a work permit, the process of which, from preparation through to closure, is defined. The Company's reference framework also provides a process to manage the integrity of facilities, which includes, for example, preventive maintenance, facility inspections, identification of safety critical equipment for special monitoring, management of anomalies and downgraded situations and regular audits. All these rules are part of the One MAESTRO reference framework. Operations teams receive regular training in the management of operations in the form of companionship or in-person trainings.

For example, in order to control the **integrity of pipelines** operated by the Company, these pipelines are subject to periodic surveys such as cathodic protection checks, ground or aerial surveillance or in line inspections. These actions are planned as part of the pipeline monitoring and maintenance programs. These controls and their frequency are reinforced in areas with high human or environmental risks identified by the risk analysis.

For wells in the Exploration & Production segment, the integrity management process follows the same general principles described above, with the additional use of a digital platform allowing the continuous monitoring of the status of well barriers (compliant or non-compliant), and systematic reporting to the specialists at headquarters of any non-compliance identified during barrier tests, including the associated risk analyses.

In order to deal effectively with the consequences of a major industrial accident, TotalEnergies has for several years implemented a global crisis management system based on the following elements: an on-call system available 24/7 in all the Company's entities (subsidiaries, branches and head office), a process for rating incidents and triggering alerts, an emergency management system deployed in each subsidiary which includes regular training (individual courses and annual training sessions), dedicated equipment or equipment that can be quickly mobilized. At head office, a dedicated crisis management area can handle two major crises simultaneously, if necessary. Teams are trained to act in each of the crisis cell's functions. The standards clearly stipulate that subsidiaries must have response plans and procedures in place in the event of accidents such as leaks, fires, explosions, or transport accidents. Large-scale exercises are organized by subsidiaries to train and test their crisis management systems.

The response teams at subsidiaries and at head office practice their crisis management activities regularly based on scenarios identified by the risk analyses. These personnel may follow dedicated training depending on their specific functions. In 2024, 989 individuals completed crisis management training in subsidiaries and at head office.

TotalEnergies also continued to roll out its *Incident Management System* (IMS) in subsidiaries operating liquid hydrocarbon or natural gas exploration or production sites in the Exploration & Production, Integrated LNG and Integrated Power segments. The IMS is a harmonized system for the management of emergency situations described by a good practices guide produced by the *International Petroleum Industry Environmental Conservation Association* (IPIECA) and increasingly being adopted by the major operators. In 2024, 256 employees were trained in the IMS and six Exploration & Production subsidiaries carried out a large-scale application exercise, bringing the total number of trained employees to 1,301 and the number of subsidiaries where the IMS is deployed to 26.

Lastly, in 2024, TotalEnergies continued to strengthen its business continuity system which includes a Company reference framework, onsite and remote training and a network of correspondents in all entities.

Resources

The HSE division provides assistance and expertise in analysis and control of technological risks. The Company can also draw on One Tech's technical expertise, particularly in safety engineering and technical integrity management.

The Company is actively represented in international associations in the field of major accident risk management (for example: EPSC - European Process Safety Centre, CCPS - Chemical Center for Process Safety, FABIG - Fire and Blast Information Group, IOGP - International Oil & Gas Producers...) to exchange good practices in controlling major accident risks.

In 2024, **World Safety Day** focused on technological risks with "Accidents and Feedback: Let's learn from our experiences".

Major accident prevention indicators

In the prevention of major industrial accidents, TotalEnergies monitors the number of Tier 1 and Tier 2 losses of primary containment as defined by the American Petroleum Institute (API) and the International Association of Oil & Gas Producers (IOGP).

After reaching its target in 2023, the Company strengthened its demands and set itself a new target for Tier 1 and Tier 2 events' number below 45 in 2024. This objective was achieved. The Company recorded no Tier 1 or Tier 2 event due to acts of sabotage or theft in 2024.

Losses of primary containment[a]	2024	2023	2022
Losses of primary containment (Tier 1)	14	19	11
Losses of primary containment (Tier 2)	25	29	37
Losses of primary containment (Tier 1 and Tier 2)	39	48	48

(a) Tier 1 and Tier 2: indicator of the number of losses of primary containment with more or less significant consequences (fires, explosions, injuries, etc.), as defined by API 754 (for downstream) and IOGP 456 (for upstream). Excluding acts of sabotage and theft. The scope of application is defined in the standards cited.

Tier 1 and 2 events had moderate consequences in terms of safety and environment (lost time injuries, minor fires or pollutions).

C. PREVENTION OF OCCUPATIONAL ACCIDENTS

Policy

The Company has a **policy for the prevention of occupational accidents** which applies to all subsidiaries' and contractors' employees working on a site operated by one of these subsidiaries. The safety results are monitored with the same attention to all workers. This policy is described in the One MAESTRO reference framework.

As part of the policy for preventing workplace accidents, TotalEnergies has defined rules and guidelines for HSE training, personal protective equipment and high-risk operations for Company employees and contractors working on sites operated by the Company.

In addition to its One MAESTRO reference framework, the Company has applied **12 Golden Rules for safety at work** since 2010. These simple Golden Rules, which can be memorized by everyone and are representative of a high number of workplace accidents, must be strictly applied by all personnel, both employees and contractors, in all countries and in all the Company's activities. The purpose of the Golden Rules is to protect day-to-day safety in operations and on sites with a common objective: "Zero fatal accidents". In 2022, TotalEnergies reviewed the drafting of its Golden Rules to make them more readily understandable by workers on site and to facilitate their appropriation. The Golden Rules were widely distributed to both employees and contractors supported by numerous communication media to anchor these new Golden Rules and enable their discussion and appropriation by the teams in the subsidiary.

Finally, safety, as a value of TotalEnergies, is taken into account in the **employee compensation policy** (refer to point 5.3.1.3-C).

Action plan

In order to keep moving its practices forward, TotalEnergies also implements a **process for analyzing accidents**, irrespective of their nature, adapting the method used and the level of detail to the event's actual or potential level of severity. A return on experience may include an analysis of the incident including severity and result in communication to the relevant stakeholders or a wider population within the Company. The purpose of sharing return on experience is to ensure that subsidiaries are informed and share lessons learned from the incident. By way of example, a near miss with high severity potential is treated as a severe accident, and its analysis is considered an essential factor for progress. Depending on its relevance to other Company entities, it will trigger a safety alert and, depending on the circumstances, the circulation of lessons learned and updating of the reference framework. The reporting of anomalies and near misses (nearly 1,000,000 in 2024) is strongly encouraged and is permanently monitored. The involvement of each employee in identifying anomalies and dangerous situations is an indicator of employees' vigilance in accident prevention and reflects the Company's safety culture.

The Stop Card system also enables any employee of the Company or of a contractor to intervene if, for example, any of the Golden Rules is not complied with. Starting in 2019, the Company also rolled out ***"Our Lives First"*** program, which introduced joint safety tours with contractors (10,000 carried out on the Company's sites in 2024), the establishment, in the work permit process, of a pre-work routine on all operated sites concerned (*Safety Green Light*); and a tool (*Life Saving Checks*) to intensify checks in the field and gauge compliance with safety rules for the five high-risk activities: work at height, lifting operations, work on energized systems, work in confined spaces, hot work (Life Saving Checks - more than 200,000 compliance checks were carried out on the Company's sites in 2024). The *"Our Lives First"* program was revitalized in 2024 through a communications campaign designed to strengthen its foothold in the Company.

The proper implementation of the One MAESTRO reference framework, and more generally, of all the Company's occupational safety programs, is checked with site visits and **audits.** The checking of contractors' HSE commitment involves a rigorous **qualification process**. The reference framework states that for a contractor to be authorized to carry out high risk work on a site operated by a Company subsidiary, its HSE management system needs to be certified by a recognized third-party body or be inspected for compliance. Finally, the contract award process is also based on a selection phase allowing checking that specific HSE criteria are fully respected. As indicated above, a control program is also put in place to check that contracts are properly executed from an HSE point of perspective. For contractors with a high number of hours worked, a Safety Contract Owner can be appointed from among the senior executives of the Company's segments or members of executive committees of Company subsidiaries to initiate high-level dialogue with the contractor's management and increase the level of commitment and visibility on HSE issues.

Resources

The Company's HSE division includes specialists in high-risk operations (work at height, lifting, electricity, confined spaces, etc.), whose purpose is to consolidate in-house knowledge and relations with contractors, and to issue the relevant One MAESTRO rules. The HSE division also provides support for subsidiaries in their own voluntary approach to **strengthen their safety culture.** This division also develops and disseminates tools to improve human performance by identifying the Organizational and Human Factors (OHF) of a work situation and defining appropriate measures. Since 2020, a digital platform has hosted these different tools, as well as examples of how to apply them, fact sheets and information about OHF fundamental concepts. It also includes the principles covered by two guides of the One MAESTRO reference framework, dealing respectively with OHF and Integrated Safety Culture approaches. The implementation of these principles is promoted within the Company through dedicated modules integrated into the training programs for different populations and through specific training programs at the request of the subsidiaries.

Security of operations

Concerning security, the policy aims to protect the Company's people and property from malicious intentions or acts. To achieve this, TotalEnergies relies on its Security division, which draws up the Company's reference framework and oversees the security situation in the countries in which it operates in order to determine general security measures to be adopted (such as authorization to travel). The Company's security reference framework applies to all subsidiaries controlled by TotalEnergies. It provides that the security management system for subsidiaries must include the following stages: analysis of the threat, risk assessment, choice of a security posture, implementation of preventive or protective measures, control and reporting and then regular reviews. It must also comply with the requirements of local regulations. The framework requires each subsidiary to develop a security plan, operating procedures and an action plan. Within the framework of developing new activities, the Company's Security division recommends the organization and resources to be deployed in connection with the business segments.

In each country in which TotalEnergies operates, **the Country Chair** is responsible for the security of operations in the country. The Country Chair ensures the deployment of measures and resources, with the support of a Country Security Officer. Subsidiaries' management systems and security plans are checked regularly by the Company's Security division or the Country Chair. Awareness raising and training programs and a centralized system for reporting security events are organized by the Company's Security division.

Occupational safety indicators

The indicators tracked by TotalEnergies in relation to occupational accident prevention cover accidents to its salaried and non-salaried employees (temporary workers, etc.) as well as to employees of external contractors, whether they occur on site at the workplace or in the event of an industrial accident or during transportation under long-term contracts.

In addition to its aim of zero fatalities in the exercise of its activities, TotalEnergies has set itself the target of continuously reducing the TRIR indicator and, for 2024, reducing it below 0.62 for all personnel of the Company and its contractors. This target was achieved for 2024. The 2023 target was 0.65.

Occupational Safety indicators	2024	2023	2022
Health and safety management system coverage rate[a]	**91%**	**91%**	**91%**
of which coverage of operating activities[b]	*100%*	*100%*	*100%*
Millions of hours worked – All Personnel	**400**	**400**	**392**
Company employees	216	212	217
Contractors' personnel	184	188	175
Number of occupational fatalities[c] – All employees	**1**	**2**	**3**
Company employees	0	0	0
Contractors' personnel	1	2	3
Number of occupational fatalities[c] per hundred million hours worked – All Personnel	**0.25**	**0.50**	**0.77**
Company employees	0.00	0.00	0.00
Contractors' personnel	0.54	1.06	1.71
Number of occupational injuries – All personnel	**219**	**252**	**263**
Company employees	95	108	130
Contractors' personnel	124	144	133
TRIR[d]: number of recorded injuries per million hours worked – All Personnel	**0.55**	**0.63**	**0.67**
Company employees	0.44	0.51	0.60
Contractors' personnel	0.67	0.77	0.76
LTIR[e]: number of lost time injuries per million hours worked – All Personnel	**0.35**	**0.40**	**0.45**
Company employees	0.33	0.42	0.51
Contractors' personnel	0.39	0.38	0.39
Number of lost days due to accidents at work – All personnel	**6,002**	**4,800**	**5,724**
Company employees	2,621	2,508	3,116
Contractors' personnel	3,381	2,292	2,608
LTIS[f]: number of days lost due to accidents at work[g] per million hours worked – All personnel	**15**	**12**	**15**
Company employees	12	12	14
Contractors' personnel	18	12	15

(a) Percentage of personnel covered by a health and safety management system based on legal requirements and/or recognized standards or guidelines (calculation based on hours worked). New 2024 indicator calculated retroactively.
(b) Excluding headquarters activities, services activities and trading activities.
(c) Excluding occupational illnesses, for which the link with a possible fatality is a matter of medical confidentiality.
(d) TRIR: Total Recordable Injury Rate.
(e) LTIR: Lost Time Injury Rate.
(f) LTIS: Lost Time Injury Severity.
(g) Excluding occupational illnesses, as the cause of absenteeism is a matter of medical confidentiality.

In 2024, of the 219 recordable accidents reported, 210 were related to workplace accidents. 75 % occurred while walking, handling loads or objects, using portable tools or working on an energized system.

The Company's efforts on safety allowed it to reduce the TRIR by more than 58% between 2014 and 2024.

This improvement is attributable to constant efforts in safety and, specifically:

- preventing the risks of serious and fatal accidents through campaigns addressing road transport and high-risk work;
- the implementation of the HSE rules and guides, which are regularly updated and audited;
- safety training and awareness raising for all levels of management (special training for managers, World Safety Day);
- HSE communication efforts targeting all Company personnel;
- the maintaining of HSE objectives in the employee compensation policy (refer to point 5.3.1.3-C).

Despite the measures implemented and detailed below, there was regrettably one fatal accident among contractors' personnel in 2024. In July in Nigeria, a worker lost his life during inspection work requiring rope access at height.

In response to this accident, specific preventive measures were taken at Company level, over and above the global programs already in place, in particular the reinforcement of supervision of this type of work and the development of new technologies (drones, robots) to reduce the use of rope access.

D. PREVENTION OF TRANSPORTATION ACCIDENTS

Policy

In **road transportation**, the Company has for many years applied a policy intended to reduce the number of accidents by applying standards that are, in some cases, more stringent than certain local regulations. This policy, defined in the One MAESTRO reference framework, applies to all the Company's personnel and Company entities' contractors. For example, it includes a ban on telephoning while driving, even with a hands-free set, a ban on using motorized two-wheeled vehicles for business travel, mandatory training for drivers, and the definition of strict technical specifications for Company vehicles (in particular, light vehicles must pass Euro New Car Assessment Programs - 5 stars tests).

Additional requirements are defined according to the level of road traffic risks in the country in question and the nature of the activity.

In **maritime** and **inland waterways transportation**, the process and criteria for selecting ships and barges are defined by the teams in charge of vetting. These criteria account of the ship or barge and its crew, ensuring that the crew has the qualifications and training required under the STCW (Standards of Training, Certification and Watchkeeping for Seafarers) convention as well as a minimum of experience. The same teams also check the application of the safety management system defined for ships by the ISM (International Safety Management) Code of the IMO (International Maritime Organization) and industry recommendations such as OCIMF (Oil Companies International Marine Forum) and SIGTTO (Society of International Gas Tanker and Terminal Operators), including those that take account of the human and organizational factors. TotalEnergies' chartering contracts also require that the crew belong to a recognized trade union affiliated to the ITF (International Transport Workers' Federation). The ITF represents the interests of transportation workers' unions in bodies that make decisions about jobs, conditions of employment or safety in the transportation segment such as the International Labour Organization (ILO) or the IMO. The average age of the TotalEnergies' mid-term and long-term chartered fleet of oil & gas tankers is 7 years in 2024.

In **air transportation,** a carrier selection process limits the risks relating to travel by Company and contractors' employees, if their journey is organized by TotalEnergies. This process is based on data from recognized international organizations: ICAO (International Civil Aviation Organization), IOSA (IATA Operational Safety Audit), IOGP (International Association of Oil and Gas Producers), and civil aviation authorities' recommendations. Airlines that do not have a rating from an international body are assessed by an independent body commissioned by the Company. For chartered flights, TotalEnergies' Aeronautical Technical center participates in the selection process of air operators. It audits and inspects these operators on a regular basis.

Action plan

Since 2012, a large-scale **inspection program of transportation contractors** has also been rolled out by Marketing & Services, the segment with the greatest use of road transportation within the Company, with the delivery of products to service stations and consumers. This program has been extended to the product transportation activities of the Polymers division of the Refining & Chemicals segment, to the liquid sulfur transportation activities of the Integrated LNG segment and is being progressively extended to the Exploration & Production segment.

The program calls on independent transportation experts who inspect the transportation contractors' practices and processes in the recruitment and training of drivers, vehicle inspections and maintenance, route management, and the HSE management system. After inspection, an action plan is adopted. If there is a serious shortcoming or repeated poor results, the transportation contractor may be excluded from the list of approved transportation contractors. There has also been a training center in Radès in Tunisia since 2015 welcoming subsidiaries' employees as well as road transportation contractors working for the Company that are interested in the transportation trainings offered by Marketing & Services.

Based on the use of **new technologies to prevent road accidents**, TotalEnergies internal rules require all new heavy vehicles in the Marketing & Services segment to be equipped with certain driver[1] assistance systems wherever these technologies are offered by manufacturers. The decision was also made to generalize the use of fatigue and distraction detection systems throughout Company, after conclusive tests carried out over several months on heavy vehicles in the Africa Marketing & Services zone. Deployment is underway globally with the aim of having these devices, as well as lane departure warning and frontal collision warning systems, on all heavy vehicles by the end of 2024. The Company's Rules also require all the Company's light vehicles, as well as the contractors' dedicated light vehicles, to be equipped with the same devices during fleet renewals.

(1) Such as AEB (advanced emergency braking), LDW (lane departure warning) and EBS (electronic braking system) for motor vehicles and RSS (roll stability support) for semi-trailers.

The third part of the 2023-2024 *SafeDriver* video campaign, entitled "All SafeDrivers", took place in November 2024, with the theme "I'm attentive to others when driving". Other topics covered during the campaign included: "I'm always in control of my vehicle", and "I don't drive if I'm tired and I avoid distractions while driving".

Transportation accident prevention indicators

To measure the results of its policy for the prevention of road transportation accidents, TotalEnergies has for many years monitored the number of severe road accidents involving its own employees and those of its contractors. Over the past five years (2019-2024), the 61% reduction in the number of severe road accidents testifies to the efforts made, thanks, in particular, to prevention campaigns for heavy goods truck drivers.

Number of severe road accidents[a]	2024	2023	2022
Light vehicles and people transportation[b]	4	4	3
Heavy goods vehicles (trucks)[b]	9	7	12

(a) Overturned vehicle or other accident resulting in the injury of a crew member or a passenger (recordable accident).
(b) TotalEnergies' vehicles or vehicles under long-term contract (over 6 months) with TotalEnergies.

E. PREVENTION OF RISKS TO HEALTH IN THE WORKPLACE

General policy relating to occupational health

The health directive contains requirements regarding occupational health which apply to TotalEnergies' employees in the context of their professional activity, as well as to the employees of contractors working on the Company's sites.

The aim of occupational health protection is to preserve the mental and physical health of the Company's employees by implementing an appropriate risk analysis and prevention policy. It also aims to guarantee their fitness for work and to prevent accidents at work and occupational diseases.

The Company has also included the preservation of the mental and physical health of all employees worldwide in its *Care Together by TotalEnergies* program (refer to point 5.3.1.3-A)

1. Physical health

Action plan

To prevent occupational health risks, the One MAESTRO framework provides that subsidiaries of the Company identify and assess risks in the workplace in the short, medium and long term. The framework provides guides for implementation. The analysis of these health risks relates to chemical, physical, biological, ergonomic and psychosocial risks. This results in the roll-out of an action plan. An Industrial Health correspondent in subsidiaries is identified and tasked with implementing the policy for identifying and assessing work-related health risks. The actions are integrated into the entities' HSE action plans and can be audited as part of the One MAESTRO audits.

In general, **potential exposure to chemical or hazardous products** at a site operated by a Company entity or nearby is one of the most closely monitored risks in view of the potential consequences. New facility construction projects comply with international technical standards from the design stage in order to limit exposure. For production sites operated by a Company entity and subject to this risk, the One MAESTRO reference framework sets out the prevention process in several stages:

- first, hazardous products such as carcinogenic, mutagenic and reprotoxic products (CMR) are listed and their risks identified,
- second, potential exposure to levels that may present a risk to the health of personnel, contractors or local residents at the site or nearby are identified and assessed, and prevention or mitigation measures are implemented to control the risk,
- last, the approach is checked (atmospheric checks, specific medical monitoring, audits etc.) to ensure its effectiveness and implement improvement measures if necessary. This is also set out formally in a risk assessment file, which is revised regularly by the subsidiary.

An annual Industrial Hygiene survey is sent to the Company's subsidiaries to evaluate the rate of implementation of risk analyses in the workplace, to make sure any potential exposure has been identified, and that action plans are in place.

The Company provides its subsidiaries with a guide to best practice in assessing the risk of **musculoskeletal disorders** (MSDs). It helps subsidiaries' HSE departments implement ergonomic risk management measures and offers employees training in the prevention of musculoskeletal disorders.

In addition to the One MAESTRO reference framework, the Company has a health reference framework, which was comprehensively reviewed and approved by the People & Social Engagement division in 2022.

In **medical monitoring**, the "Internal Control Essentials" directive provides that each subsidiary offer its employees a regular medical checkup that includes the prevention or early detection of disease. The formal medical monitoring procedure takes account of the requirements of local law (frequency, type of examination, etc.) and the level of exposure of its personnel to the various risks. Medical monitoring of employees is conducted at a health department, either internal or external.

On a broader level, TotalEnergies also supports **the promotion of individual and collective health programs** in the countries where it operates, including vaccination campaigns and screening programs for certain diseases (COVID-19, AIDS, cancer, malaria, etc.) for employees, their families and local communities. It is also developing social protection schemes and takes regular action to raise awareness of health-related risks (the Pink October campaign to raise awareness of breast cancer, prevention of cardiovascular risk as part of World Heart Day, etc.).

The Company has set up scientific and legal watch teams to monitor global health situations (COVID-19, MPOX, etc.).

Resources

In 2018, the Company updated its organization by appointing a medical coordinator in charge of the health directive. He organizes active monitoring and promotes health issues by regularly participating in medical discussions between peers, particularly as part of the *Association of medical coordinators* in major international groups. The medical coordinator can also call on a Medical Advisory Committee that meets regularly to discuss key health issues relating to the Company's activities. The committee decides whether there is a need for additional health protection strategies. It consists of external scientific experts and the Company's senior executives and stakeholders concerned by these issues. The medical coordinator also leads the Health Steering Committee, a health governance body consisting of the health officers of the Company's various business segments; it meets on a quarterly basis.

Furthermore, in view of its activities and exposure, TotalEnergies has an international medical department that designs, coordinates and supervises operational medical logistics overseas. It is the decision-making body for the medical safety of expatriate and national employees. For foreign subsidiaries, it coordinates health services, employee aptitude assessments, medical monitoring and support for employees and expatriates' families, and medical evacuations. It also audits medical facilities in TotalEnergies' host countries and issues recommendations.

2. Mental health

Policy

TotalEnergies aims to develop a culture promoting well-being at work and encourages openness and dialogue on mental health.

As part of its **health directive**, the Company has implemented a **Mental Health Risks (MHR) prevention program** aimed at protecting employees' mental health, and has introduced a global program to enable all exposed employees to receive support, wherever they are in the world.

The program is managed by the People & Social Engagement division, the Company's coordinating doctor and the MHR representatives appointed in each TotalEnergies business segment, and relies on local MHR prevention committees consisting of employer and employee representatives. Any employee can volunteer to take part in these committees and contribute to the definition and development of local mental health initiatives. This allows mental health programs to be adapted to the local contexts.

Action plan

The program is based on three levels:

- **primary prevention** consists of systematically assessing the mental health risks in the workplace and the impacts of reorganizations on mental health, using a methodology based on the One MAESTRO reference framework, to take action at the source, or reduce or eliminate any potential risk;
- **secondary prevention** consists of raising awareness among all employees with a mental health risk prevention kit.

  This kit, the primary supporting material for all training, has been translated into eleven languages and approved by international experts. It consists of a methodological guide for site managers and two practical guides for managers and employees. After a definition of the MHRs and risk factors for mental health, it presents the impacts and human and societal issues connected to MHRs and a methodology to prevent them in the workplace. Finally, it contains practical fact sheets for use in the event of difficulties, high-risk situations or crises.

  Aware of the key role played by managers in the psychological equilibrium and mental health of their employees, the Company is making them aware of their role in preventing these risks on a daily basis and of the impact of the working environment on their teams' well-being.

  Training in the prevention of mental health risks (e-learning and educational videos) is available to everyone on the Company's training platform. It particularly addresses the themes of stress, harassment both moral and sexual and burn-out. The deployment of this training is monitored.

  In 2023, the Company launched "First Aid in Mental Health" training to improve understanding of psychological difficulties, help people provide the right initial response and redirect cases to the appropriate contacts. Following a pilot scheme for health and mental health representatives, doctors, nurses, social workers and staff representatives, this training (currently in French only) is now open to all employees.

  In pursuit of openness and dialogue about mental health, the Company makes questionnaires established and scientifically validated by recognized organizations available to employees on the intranet for individual measurements of stress, anxiety and depression, and for collective assessment of MHR factors in the working environment. Consequently, health officers can manage the prevention of MHRs themselves in order to reduce their impacts on mental health, working as closely as possible to the employees.
- **tertiary prevention**, provided by international experts, offers help and support to all employees, in more than 60 languages and cultures, on a free 24/7 hotline (also accessible to employees of contractors) and up to three video-consultations paid for by the Company.

  This system guarantees anonymity, confidentiality and the security of personal data during the entire period of support. It is easily accessible on the Company's intranet. The Health Steering Committee checks the progress of the system's roll-out on a quarterly basis within each business segment.

These physical and mental health commitments are included in the Health pillar of the *Care Together by TotalEnergies* program (refer to point 5.3.1.3-A).

Indicators for prevention of risks to health in the workplace	2024	2023	2022
Health risk assessment[a]			
Entities having carried out workplace Health risk analysis	97%[b]	92%	91%
Well-being at work[b]			
% of subsidiaries that have deployed a help system	91%	87%	85%
% of subsidiaries that have measured stress over the last two years	56%	55%	58%
Mental health risks			
% of subsidiaries that have appointed a mental and physical health officer[c]	94%	100%	97%
% of subsidiaries with a Mental Health Risk Prevention Committee[b]	81%	65%	64%
% of managers trained in Mental Health Risk prevention[b]	53%	49%	47%
Medical monitoring[b]			
% of employees with specific occupational risks benefiting from regular medical monitoring	99%	100%	99%
% of subsidiaries offering a regular medical check-up	81%	74%	59%
Occupational illnesses[b]			
Number of occupational illnesses recorded in the year (in accordance with local regulations)	170	107	129
including musculoskeletal disorders	*65%*	*69%*	*70%*
Absenteeism[b]			
Absenteeism for medical reasons	4.0%	4.0%	4.6%

(a) Data provided by the Industrial Hygiene survey before 2024. Data for 2024 provided by the WHRS.
(b) WHRS.
(c) Health Steering Committee.

5.3.1.3 Working conditions and environment

To implement its balanced multi-energy strategy for the benefit of the energy transition, TotalEnergies has defined a people ambition for its employees. Deployed from 2019 under the name "Better Together", it aims to attract and develop talent all over the world, promote a management style that encourages team development and make the Company a good place to work together.

This translates into a competitive compensation and benefits policy, skills development programs and the promotion of high social standards worldwide, based on four pillars: social protection, physical and mental health, family sphere, and working environment and ways of working.

The Company is convinced that talent diversity is crucial to the success of the transition on which it has embarked and therefore promotes diversity as well as equal treatment and opportunities.

To fulfill its social responsibility commitments, TotalEnergies relies on its People & Social Engagement division, whose mission is to define and present the Company's human resources strategy and policies for approval by the Executive Committee, in line with its business challenges and transition strategy.

The social dialogue and the human rights aspects of working conditions and the working environment are dealt with in points 5.3.1.4 and 5.3.1.5.

A. QUALITY OF LIFE AT WORK AND THE WELL-BEING OF EMPLOYEES

1. Care Together by TotalEnergies program

As part of its ambition to build a good place to work together, the Company has the **Care Together by TotalEnergies** program.

It translates TotalEnergies' CSR commitments and promotes high social standards for all employees worldwide, regardless of local legislation.

The program is based on four pillars:



Resources

The People & Social Engagement division coordinates the promotion and deployment of the **Care Together by TotalEnergies** program, supporting the human resources functions of the Company's business segments and subsidiaries.

Action plan

Social protection Ensure a living wage and quality social protection for all employees, regardless of their location (refer to point 5.3.1.3-C)	**Our worldwide commitments** • Ensure all employees have direct remuneration at least equal to the living wage of the country or region in which they work • Where appropriate, set up a health insurance plan, in addition to the legal plans in force • Set up a death benefit plan, whatever the cause, at least equivalent to two years' gross reference salary
Health Preserve the physical and mental health of all employees worldwide (refer to point 5.3.1.2)	**Our worldwide commitments** • Provide medical monitoring for all employees exposed to an occupational risk that may have harmful effects on their physical and mental health • Propose to employees a regular health check-up • Deploy a global policy for the prevention of psychosocial risks to protect the mental health of employees
Family sphere Give employees the opportunity to take care of their families	**Our worldwide commitments** For situations of pregnancy or adoption: • Guarantee a minimum of 14 weeks of childcare leave for the first parent and 2 weeks for the second parent with 100% retention of their basic salary (subject to more protective local measures) • Neutralize absences for childcare leave by granting the first parent to return from leave an increase equal to the average of individual increases received over the last three years
Working environment and ways of working Promote a flexible, modern and attractive work organization for employees while preserving collective efficiency in a safe working environment	**Our worldwide commitments** • Generalize the use of flexible working hours by establishing clear rules and trust employees to take responsibility for the way they manage remote working as part of their day-to-day activities • Conduct information campaigns and awareness-raising initiatives on employee well-being and work-life balance

Measures for the family sphere

The Company's parental policy has adopted a neutral concept of families that takes account of the diversity of family structures. The concepts of a "first parent" and a "second parent" now allow all parents, regardless of the composition of their families, to benefit from leave for the birth or the arrival of a child. TotalEnergies guarantees paid childcare leave of at least 14 weeks for the first parent and at least 2 weeks for the second parent, with 100% retention of their basic salary. If local measures are more favorable, they prevail.

TotalEnergies also guarantees the first parent returning from this leave an increase equal to the average of the individual increases he or she has received over the past three years.

In addition to parental leave, and to help employees manage their work-life balance, the Company offers **personal leave at each important stage of life**, especially for family events (marriage, death, sick child, etc.) or for helping family members. Other types of unpaid leave are also offered to support employees in their personal projects (international voluntary missions, following spouses, setting up a company, etc.).

In 2023, an agreement in favor of employee **caregivers**(1) was unanimously signed with the representative trade union organizations within the scope of the *Socle social commun*(2) in France, in order to provide them with guidance and support. The agreement provides for the establishment of a "care manager" offering practical advice and support for employee caregivers, helping them implement the right solutions for their relatives, offering flexibility in the organization of their work and improving on certain legal leave entitlements for caring for relatives requiring assistance or at the end of life.

(1) Employees who have to balance a caregiving role with their professional life, either occasionally or more regularly.
(2) The *Socle social commun* (SSC) or "Common Social Basis" (whereby all employees have the same rights) is composed of 18 subsidiaries in France.

Family sphere Indicators - WHRS	2024	2023	2022[a]
% of subsidiaries deploying the parental policy	71.3%	67.3%	–
% of subsidiaries applying paid childcare leave of 14 weeks or more (for the first parent)	92.1%	91.2%	–
% of subsidiaries guaranteeing the 100% payment of the basic salary (for the first parent)	89.3%	83.2%	–
% of employees receiving an increase equal to the average individual increases awarded over the last three years (for the first parent)	77.9%	77.1%	–
% of subsidiaries with specific breastfeeding period arrangements	66.4%	58.4%	–
% of subsidiaries offering personal leave for family events	75.0%	70.1%	–

(a) The program was deployed worldwide in 2023, data for 2022 are not available.

Fostering a flexible work organization

The **organization of work** involves many challenges, varying according to the different regions of the world where the Company operates, and according to the local legislation. The TotalEnergies' entities set up programs designed to meet the specific needs of the organization of work and ensure, as far as possible, that a work-life balance is promoted.

Depending on the segment, specific working arrangements are implemented, such as shift[1] schedules and rotating[2] schedules. Most shift workers are employed in Refining & Chemicals, Marketing & Services, Integrated LNG and Integrated Power, while rotating workers are mainly in Exploration & Production. The average work week is determined in accordance with applicable local laws and limits set by International Labour Organization (ILO) conventions.

In line with its ambition to build a good place to work, TotalEnergies promotes a modern and attractive **work organization**, while preserving collective efficiency. The Company is committed to generalizing the use of **flexible working hours** by establishing clear rules, trusting employees to take responsibility for the way they manage **remote working** and by conducting information campaigns and awareness-raising initiatives on the well-being of employees and their work-life balance.

Among other programs designed to foster a better work-life balance, employees can also choose part-time work.

Ways of working Indicators - WHRS	2024	2023	2022
% of subsidiaries offering the option of regular remote working	65.0%	63.5%	61.4%
% of subsidiaries offering the option of occasional remote working	85.0%	82.5%	83.3%
% of employees choosing remote working when given the option	19.6%	18.8%	19.7%
% of subsidiaries that have implemented flextime	85.0%	82.5%	81.8%
% of subsidiaries that have voluntary part-time work	52.1%	51.1%	53.8%
% of employees choosing part-time work	4.8%	2.6%	4.0%

2. Quality of life at work and employee well-being

"Care" lever - Paying attention to colleagues

TotalEnergies promotes this behavior in its "*Our 5 levers for a Sustainable Change*" program, so that employees can play an active role in their own well-being.

Launched in 2024, this program aims to create a **dynamic for change** by promoting certain priority group attitudes in favor of sustainable development. The "Care" lever encourages employees to pay attention to their colleagues and take action if any of them show signs of not being well, "mal-être". A training module dedicated to this lever was made available to all employees in early 2025.

"Care Week" - Raising awareness of well-being

Every year, a week dedicated to the quality of life at work is organized within the Company. In 2024, more than 24,400 employees[3] were invited to take part in workshops, conferences and sports sessions accessible both in person and remotely.

Indicators - WHRS	2024	2023	2022
% of subsidiaries conducting information campaigns or organizing events related to the well-being of employees	95.7%	92.7%	90.2%
% of subsidiaries that have carried out actions to raise awareness of work-life balance	85.0%	82.5%	78.0%

"Bonjour" stores

As part of TotalEnergies' ambition to build a company that is a good place to work, "Bonjour" stores have been gradually opened on Company sites with more than 100 employees. For smaller sites, the concept can be implemented on the site's own initiative. These living spaces and personal services within the Company aim to make life easier for our employees.

This program has reached over 50,000 employees in 52 countries.

Well-being indicators

In collaboration with IPSOS, the Company has defined an annual measure of its employees' level of well-being, using a **Care index** based on seven criteria: safety, respect, autonomy at work, listening capacity of manager, conviviality, work-life balance and controlling pressure at work.

In 2024, the TotalEnergies' score[4] is 83.1%, while the benchmark[5] is 71%.

(1) In which employees maintain continuous operations, with relays between teams to keep production going (in two or three 8-hour shifts), e.g., in plants or refineries.
(2) In which employees conduct their work at a location (town or worksite) far from their place of residence and alternate between extended periods of work (at their assigned worksite) and rest periods at home.
(3) 29 sites in France, Belgium and Switzerland.
(4) Results from the internal TotalEnergies Survey 2024. The data do not cover Hutchinson which was the subject of a specific survey. The Care Hutchinson score care is 80.9% in 2024 while the benchmark is 70%. The IPSOS benchmark is composed of automotive and aeronautics companies from around the world.
(5) The benchmark established by IPSOS is composed of companies with over 10,000 employees worldwide.

Care Index TotalEnergies	2024	2023	2022
Score Care TotalEnergies	**83.1%**	**81.5%**	**78.6%**
Work in safe conditions	*95%*	*97%*	*95%*
Feel respected at work	*88%*	*86%*	*85%*
Freedom and autonomy	*87%*	*85%*	*85%*
Share moments of conviviality and celebrate success	*81%*	*78%*	*74%*
Managers listen to their teams	*85%*	*85%*	*83%*
Good balance between work and personal life	*81%*	*77%*	*75%*
No excessive pressure at work	*66%*	*63%*	*53%*

B. DEVELOPING SKILLS AND MAINTAINING EMPLOYEES' LONG-TERM EMPLOYABILITY

Developing employees' skills and maintaining their long-term employability is one of the Company's key social challenges, and one of the key factors in ensuring the success of the corporate project. The Company has therefore decided to rely on a robust learning model and individual support adapted to the transition and the changes in business lines and technologies.

Better Together Indicators	2024	2023	2022
Number of individual career review carried out since the launch of *Better Together*	Over 11,000		
Number of positions on the internal mobility platform[1] each year	Nearly 10,000		
% of positions are staffed by internal mobility	72%	72%	73%
Average time spent in the same job *(in years)*	6.2	6.6	6.5
Average time spent in the same job for managers *(in years)*	4.7	5.0	4.8

1. Employee support

Policy

TotalEnergies is aware of the challenges of the energy transition and has adopted a people ambition called *Better Together* which places each employee's professional development at the heart of the Company's performance. All employees are empowered to take charge of their own career paths and given support in their choices and development.

Action plan

Talent developers

To meet the ambition of "Attracting and developing talent", the position of **Talent Developer** was created in 2019 to strengthen employee support by providing individualized local guidance. Today, more than 400 talent developers are located close to the teams in all our branches (head offices and subsidiaries).

They are responsible for implementing internal mobility to ensure that all available positions are filled, and for ensuring compliance with human resources policies in the recruitment and selection of candidates. Talent developers support employees' development throughout their careers, in coordination with manager-coaches.

They carry out individual career reviews for employees, drawing on the tools and methods they have been trained to use (in-depth interviews, personality profiles, "vis ma vie" experiences, etc.). The time spent with their talent developers allows employees to:

- review their experiences, skills and aspirations,
- identify opportunities in the Company,
- build a realistic professional project for the next stages of their careers.

Talent developers support the operational implementation of employees' career plans (training plans, coaching, etc.) and help them to find new positions in the Company. They also support managers in their role as manager-coach.

Manager-coaches

The managers of TotalEnergies, at all levels of the organization, are **manager-coaches**, committed to continuous development of their managerial practice. They are responsible for their teams' professional development.

A training program allows them to develop their skills from the moment they take up a management position and throughout their subsequent career. This offer, revised and reinforced in 2024, is made up of three components:

- *The fundamentals*: a set of training courses intended to develop the know-how and best practices essential for manager-coaches. They are aimed at everyone in the logic of continuous development and are mandatory for first-time manager-coaches and first-time managers of manager-coaches,
- *Deep diving*: "à la carte" training to deepen skills on what manager-coaches need when they need them, on one or more themes, in addition to the fundamentals,
- *Outside the box*: collective development (social learning) offer to share and develop between peers, structured around various modalities allowing each manager-coach, at least once a year, to devote time to their managerial practice (co-development, events, role-playing, etc.).

Employees

As the main active players in the *Better Together* people ambition, employees build their own career paths. As they do so, they are supported by their talent developer and manager-coach and are encouraged to:

- reflect on their profile, skills and aspirations;
- sign up for training courses that enable them to develop their skills;
- freely apply, where appropriate, to the positions they aspire to.

Each year, an annual performance review campaign is organized for the entire Company. This is a time for employees to meet their manager-coach for an objective and constructive conversation. The **Annual Individual Reviews** (AIRs) provide an opportunity to take stock of the past year, evaluate the employee's performance and define objectives for the coming period.

(1) Publication of positions, except for senior management positions, which are subject to succession plans.

They are also an opportunity to discuss the employee's career plan and skills, to define a development plan, and to consider the relevance and timing of mobility.

Indicators

Employees who had a performance and development appraisal

% of employees who had an AIR during the year	2024 WHRS	2023 WHRS	2022[a] WHRS
All employees	**91.2%**	**91.6%**	**92.4%**
Women	90.7%	93.1%	–
Men	91.4%	90.7%	–
Managers (JL ≥ 10)[b]	96.2%	95.2%	97.5%
Non-managers (JL <10)	88.5%	89.8%	90.0%

(a) Data not collected in 2022.
(b) Job level of the position according to the Hay method. JL 10 corresponds to the first level of junior manager (*cadre débutant*) (≥ 300 Hay points).

These interviews are also an ideal opportunity to discuss the quality of life at work and, in particular, workload and work-life balance, as well as to address questions about the principles of action and individual behavior set out in the Code of Conduct.

Employee support indicators[a]

	2024	2022
% of employees who consider that feedback from their manager-coach helps them progress	76%	76%
% of employees who feel involved in their own professional development	77%	73%
% of employees who state that they have access to information about the vacancies to be filled	81%	79%

(a) Data from TotalEnergies Survey. Hutchinson was the subject of a separate survey not consolidated in the data presented. The survey conducted in 2023 was the Pulse Survey. Employees were not questioned on this topic.

2. Training and skills development

Policy

Employee development is at the heart of the company's performance and is one of the foundations of the *Better Together* people ambition.

Development is based on a learning model with three levers:

- **on-the-job training**, to develop know-how through experience,
- **peer learning,** which allows **know-how** to be **pooled** in the various communities of professions or expertises to develop skills in a collaborative spirit,
- **training**, offering adapted programs aimed at developing the skills and employability of employees.

These three levers are reinforced by a **policy of internal mobility** that enables employees to change jobs regularly and acquire new skills, thus developing their employability.

The Company's **training** approach is based on five major areas:

- sharing TotalEnergies' basic corporate values, particularly in HSE, the climate, ethics, compliance, leadership, innovation and digital technology,
- supporting the development of existing activities and creating new ones in order to achieve the Company's ambition,
- strengthening key skills in all the Company's business areas to maintain a high level of operating performance in the workforce,
- promoting employees' integration and career development through training designed to teach employees about the Company, management skills and personal development,
- supporting the policy of mobility and diversity within TotalEnergies through language and intercultural training.

This robust learning model, associated with the major areas of training, allows TotalEnergies to adapt to technical changes and unforeseeable environmental factors, while preserving employees' employability.

Resources

The People & Social Engagement division coordinates the promotion and deployment of skills development policies.

A Company's subsidiary manages the training offering and helps the branches develop specific training programs. Training programs and initiatives are implemented and monitored by local branch networks.

TotalEnergies also has a technological training center, Oléum, that combines technological expertise (over 30 specialized, certified instructors) and technical teaching facilities. The center, located on two sites in France (Dunkirk and La Mède), offers trainees a full-scale Seveso environment and provides technical career training in operations, maintenance, inspection, safety and other fields.

Certified as a corporate Apprentice Training Center (CFA), Oléum trains apprentices for roles both inside and outside the Company. Internationally recognized qualifications are also offered, such as the BOSIET program (Basic Offshore Safety Induction and Emergency Training), approved by the Offshore Petroleum Industry Training Organization, and training programs on wind power certified by the Global Wind Organization.

Oléum welcomes trainees from all the Company's segments worldwide and from its partners and external customers.

Action plan

Training

The Company has decided to make all employees active players in their professional training, consistent with the *Better Together* people ambition. The goal deployed and monitored worldwide is for every employee to devote at least **five days a year to professional training**.

Among those 5 days, in addition to the mandatory training programs required for the job, since January 1, 2023, every employee has the option to enroll for up to 3 days of training of their choice each year, in fields that they consider to be important for their development, among the training programs offered by the Company.

The Company's **training catalog** offers nearly 5,800 training content (on-site and remote) covering all technical, business and cross-functional fields, including behavioral soft skills.

After each training session, participants, and their managers where applicable, receive a satisfaction survey designed to assess the impact of the training and its results in the light of the stated objectives.

Skills development programs

a) Global "upskilling" program

As part of its balanced multi-energy strategy for the benefit of the energy transition, TotalEnergies has designed **Visa for TotalEnergies,** a comprehensive **upskilling** program designed to prepare all employees for the new challenges facing the company and society in general, and to support the development of their skills.

This multi-year **training program** is deployed in several seasons, each devoted to a key aspect of TotalEnergies' transition.

The first season focused on climate challenges and the answers provided by the Company's ambition. Season 2 covered fundamentals of electricity, the main lever for reducing the carbon footprint of the energy mix (production, uses, value chains, markets and business models). These first two seasons have trained more than 30,000 employees worldwide.

In 2024, this approach of supporting and maintaining the employability of all its employees, continued with the ambition to accelerate the appropriation of generative Artificial Intelligence tools to serve collective performance. This resulted in the gradual provision of *Copilot* licenses for *Microsoft 365* and *Microsoft Power Platform*, supported by training on how to use these new tools currently being rolled out. As a result, the democratization of new digital uses to help everyone improve their personal efficiency.

b) Upskilling programs

Several training programs have been designed and adapted to the specific needs of the business segments:

- programs requiring a few weeks of training to acquire the skills needed to do a job in one's own technical discipline, but in a different field of application,
- courses over a longer period including training, coaching, role playing and mentoring to prepare for moves to other technical disciplines.

Since 2022, 32 career paths have been created for positions in a wide range of technical fields (projects, processes, research & development, etc.).

These long-term skills development initiatives are designed to **anticipate changes** in the Company's activities, and are based on a **mapping** of technical roles and competencies carried out by OneTech.

Class of young multi-energy talents

In 2022, OneTech launched the first cohort of the *OneTech Graduate Program* and welcomed 60 young engineers of 23 nationalities for a two-year program.

These integration-accelerating programs offer young engineers the opportunity to gain initial experience in all areas of energy, oil and gas, but also electricity (solar, wind, batteries, gas power plants) and decarbonated molecules (hydrogen and biogas). They take the form of successive missions over several months to create a group of young multi-energy talents.

Building on the program's success and attractiveness, a new course, entitled *Technical Graduate Program* was launched in 2024 with 30 new graduates. This program is now being implemented within the other business segments.

In October 2024, GRP welcomed 20 young graduates to the first year of the *Renewables & Power Graduate Program* and 7 other to its *Graduate Program* in the US. Over two and a half years, these young graduates will have the opportunity to discover GRP through three key positions across the entire electricity value chain. They are assigned to the Business Units Renewables (REN), Flexible Power & Integration (FPI), and Trading Power (TRDP): a rich and diverse experience, during which they will also have the opportunity to visit various electricity production and storage sites. A promising initiative aimed at training diverse profiles to sustainably support our integrated electricity strategy.

Support for the evolution and transformation of activities

In the Marketing & Services segment, training for service station staff has been developed on the specific features of charging infrastructure for electric vehicles. Since 2023, more than 250 operators, station managers and sales teams have been trained. These training courses will continue through 2025 to support the deployment of new charging stations operated by the Company.

More generally, Marketing & Services is training its sales teams in the fundamentals of electric mobility in order to give them the necessary operational skills to support the Company's customers with sustainable mobility solutions. Since 2023, over 1,300 employees have been trained in electric mobility, including more than 700 sales staff.

As part of its ambition of carbon neutrality by 2050, together with society, TotalEnergies is also implementing projects to convert industrial sites while paying close attention to potential social impacts.

The transformation of the Grandpuits refinery into a zero-oil platform, which started in 2020, remains ongoing, and the Pyrolysis unit, France's first chemical plastic recycling plant is scheduled for commissioning in 2025.

The training provided to the unit's operators to help them make the best start in their new positions, should come to over 7,000 hours. As well as enhancing their skills, for most of them, this development is also supported by an increase in their level of responsibility.

Training indicators

Average number of training hours/ year per employee[a] - WHRS	2024	2023	2022
All employees	**30.8**	**27.8**	**24.8**
Women	29.3	26.8	22.8
Men	31.8	28.3	25.8
Managers (JL ≥ 10)(b)	39.8	34.3	32.5
Non-managers (JL <10)	26.5	24.7	21.4

(a) On-site and remote learning, excluding on-the-job training (7.6h = 1day).
(b) Job level of the position according to the Hay method. JL 10 corresponds to the first level of junior manager (*cadre débutant*) (≥ 300 Hay points).

Indicators - WHRS	2024	2023	2022
% of employees that followed at least one training course during the year	97.9%	97.7%	97.3%
Average number of training days/year per employee (including on-the-job training)	5.5	5.0	4.7
Average number of training days/year per employee (excluding on-the-job training)	4.1	3.7	3.3
Satisfaction rate as training	85.9%	83.2%	84.5%

C. COMPENSATION AND BENEFITS

The Company's **compensation and benefits** policy is an integral part of our *Better Together* people ambition. It aims to offer our employees a competitive, transparent and fair compensation package, linked to individual performance and in line with the Company's corporate social responsibility commitments.

1. Attractive and competitive compensation

Policy

The Company's compensation policy applies to all companies in which TotalEnergies SE holds the majority of voting rights. That policy has several aims: to ensure external competitiveness and internal fairness, reinforce the link to individual performance, increase employee share ownership and implement the Company's corporate social responsibility commitments.

It consists of providing levels of compensation that are higher than the minimum level observed locally, through regular benchmarks in countries where legislation guaranteeing a minimum wage is lacking.

The Company's compensation policy is designed to offer competitive, fair, transparent and responsible compensation. In particular, it stipulates that compensation levels must be equivalent internally for positions with the same level of responsibility in a given environment (activity, country). Fair treatment is ensured within the Company through the widespread use of weighting for management positions (JL ≥ 10) via the Hay method. Performance reviews for Company employees, covering actual versus targeted results, skills assessment and overall job performance, are conducted during an annual individual review and formally issued in accordance with the same principles and guidelines across the entire Company.

Resources

The compensation policy is implemented and managed by the People & Social Engagement division.

Implementation

The **compensation structure** for the Company's employees is based on the following components, depending on the country:

- a base salary, which is subject to individual and/or general salary-raise campaigns each year. The salary-raise campaigns are intended to reflect market adjustment, employee's proficiency in the position and individual potential;
- an individual variable compensation starting at a certain level of responsibility. This is intended to compensate individual performance (quantitative and qualitative attainment of previously set targets), managerial practices, if applicable, and the employee's contribution to collective performance evaluated on the basis of HSE targets set for each business segment, which represents up to 10% of the variable portion. In 2024, 87% of the Company's entities included HSE criteria in the variable compensation. In particular, HSE criteria include greenhouse gas reduction targets.

Supplemental collective variable compensation programs are implemented in some countries, such as France, via incentives and profit sharing. In France, under the agreement signed for 2024-2028, applicable to the companies that signed the agreement[1] (encompassing approximately 17,800 employees in 2024), the amount available for employee profit-sharing is based on environmental and social criteria, and is determined on the basis of:

- financial parameters (the Company's return on equity (ROE) as an absolute value and the Company's return on average employed (ROACE) and compared to four peers[2]),
- the attainment of safety targets (injury rate and accidental deaths in the establishments in France of the companies party to the agreement),
- the attainment of energy transition targets (intensity of greenhouse gas emissions from the refining and petrochemicals activities),
- criteria relating to employee commitment to priority areas identified by the *Action!* program, which is mainly led by the TotalEnergies Corporate Foundation (*Fondation d'entreprise*) in France; assessed for the establishments to which the employees belong and the companies party to the agreement.

Furthermore, this agreement now includes a mechanism that increases profit-sharing bonuses in the event of TotalEnergies' financial outperformance, based on the Company's gross cash flow margin (MBA).

2. Social protection

Policy

In its general compensation and benefits policy, the Company provides **pension and employee benefit** programs (health and death) that meet the needs of the subsidiaries, as well as the Company's standards, designed to ensure that each employee can:

- in case of illness, receive coverage that is at least equal to the median amount for the national industrial market,
- participate in a savings or supplementary retirement plan,
- organize the protection of the family in the event of the death of the employee.

Action plan

To this end, TotalEnergies is deploying a number of commitments and mechanisms worldwide (part of the *Care Together by TotalEnergies* program):

Social protection	Our worldwide commitments
Ensure a living wage and quality social protection for all employees, regardless of their location	● Ensure all employees have direct compensation at least equal to the living wage of the country or region in which they work ● Where appropriate, set up a health insurance plan, in addition to the legal plans in force ● Set up a death benefit plan, whatever the cause, at least equivalent to two years' gross reference salary

(1) The *Socle social commun* (SSC) or "Common Social Basis" (whereby all employees have the same rights) is composed of 18 subsidiaries in France.
(2) ExxonMobil, Shell, BP and Chevron.

Since 2021, TotalEnergies assesses any discrepancies between direct remuneration[1] and the living wage[2] in all its subsidiaries[3]. The result of the studies carried out show that, since the end of 2022, the Company had reached its target, as 100% of employees received direct remuneration at least equal to the living wage in the country or region in which they work.

A living wage is defined as an income that allows employees:

- to provide a decent life for their family,
- for standard working hours,
- to cover their essential expenses (food, water, electricity, housing, education, health, clothing, etc.),
- the ability to cope with some of life's uncertainties.

3. Employee shareholding and employee savings

Policy

Employee shareholding is developed through three main programs: **the grant of performance shares**, **share capital increases reserved for employees**, and **employee savings**.

In this way, TotalEnergies hopes to encourage employee shareholding, strengthen employees' sense of belonging to the Company and give them a stake in the Company's performance by allowing them to reap benefits from their commitment.

Action plan

Performance shares

Each year since 2005, TotalEnergies has granted **performance shares** to many of its employees (more than 10,000 each year between 2009 and 2023). Those shares are granted definitively only upon the fulfillment of performance conditions assessed at the end of a vesting period of three years. Two of the performance conditions include GHG emission reduction targets.

On May 23, 2024, to mark the Company's centenary, the Board of Directors approved a plan to grant 100 free TotalEnergies shares to all employees of the Company[4] worldwide, amounting to nearly 105,000 employees in over 100 countries. These shares will be definitively granted after five years of working for the Company without performance conditions. This global allocation, owing to its exceptional scale, is a first in the history of TotalEnergies.

Alongside this global plan, the Board of Directors has maintained a performance share allocation under the 2024 plan for more than 8,400 employees, over 97% of whom are non-executives.

Share Capital increases reserved for employees

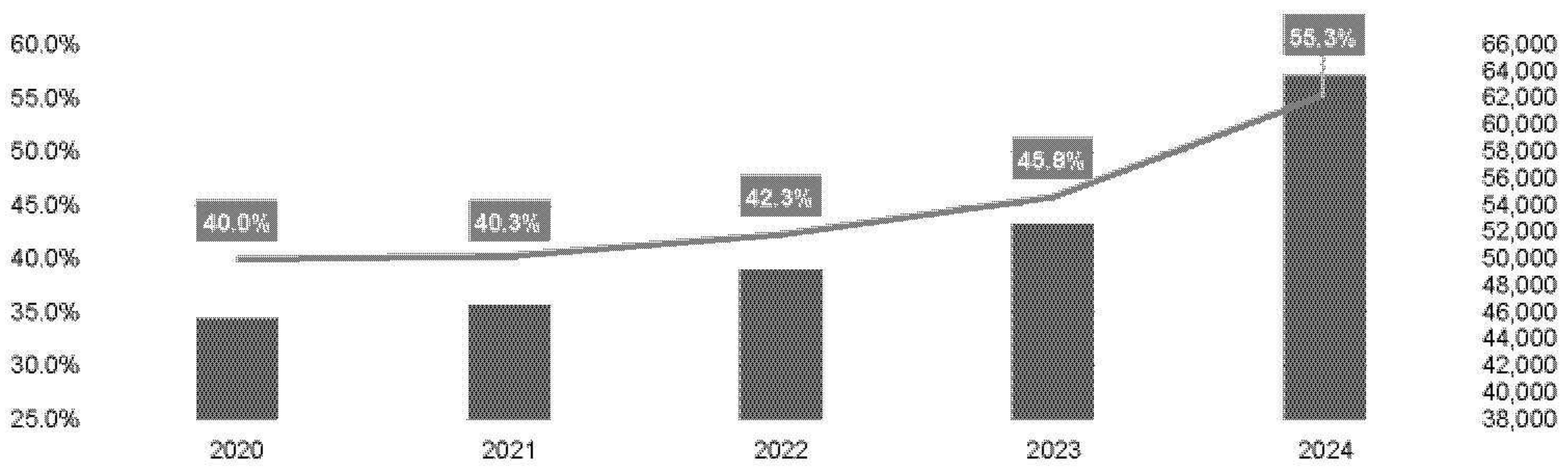
TotalEnergies also invites employees of companies in which it holds more than 50% of voting rights, and that subscribe to the Shareholder Group Savings Plan (PEG-A) created in 1999 for this purpose, to subscribe to share capital increases reserved for employees. **Share capital increases reserved for employees** take place annually. Depending on the employees' location, these campaigns are completed either through employee mutual funds[5] (FCPE) or by subscribing to TotalEnergies shares or American Depositary Receipts (ADRs) in the United States.

Pursuant to the authorization given by the Annual Shareholders' Meeting on May 24, 2024, the Board of Directors decided, at its meeting on October 30, 2024, to proceed with a capital increase reserved for employees to be carried out in 2025 with a 20% discount. This operation is expected to involve about 100 countries. Employees will benefit from a matching contribution of one free share for each share subscribed, up to a limit of ten. The shares subscribed will give holders current dividend rights. The previous share capital increase reserved for employees was carried out in June 2024. Over 63,600 current and former employees in 96 countries took part in this share capital increase, which resulted in the subscription of 10,251,337 shares at a price of €46.90 per share.

Since 2023, employees in French companies can finance their subscription to the capital increase by investing their profit-sharing bonuses. Excluding subscriptions by former employees, the total amount subscribed internationally represents 53% of the total amount, exceeding those of France in the last three operations.

Share capital increases indicators

Number of subscriptions and subscription rate during the last five capital increases reserved for employees



(1) The direct compensation is composed of fixed and variable compensation.
(2) TotalEnergies relies on the global database provided by the Fairwage Network, which assesses the living wage for a given country or region, based on the typical family size (number of children) and the average number of workers (between one and two per household).
(3) It applies to the so called "périmètre de gestion" i.e. all subsidiaries controlled at more than 50%.
(4) The term 'Company employee' is used to refer to employees of TotalEnergies SE and companies whose share capital is more than 50% owned by TotalEnergies SE and which are directly or indirectly controlled by TotalEnergies SE or under joint control, with the exception of a limited number of companies co-managed with other oil actors, as well as those registered or incorporated in a country under economic sanctions.
(5) TotalEnergies Actionnariat France, TotalEnergies Actionnariat International Capitalisation.

Employee savings

The **development of employee savings schemes** enables each employee, with the help of TotalEnergies, to build up and then develop medium or long-term savings, in order to retire or to support major life events.

Employee savings are made through the TotalEnergies Group Savings Plan (PEGT), open to employees of the Company's French subsidiaries covered by the 2002 agreement and its amendments. This plan allows investments in a wide range of mutual funds, including the TotalEnergies Actionnariat France fund that is invested in TotalEnergies shares.

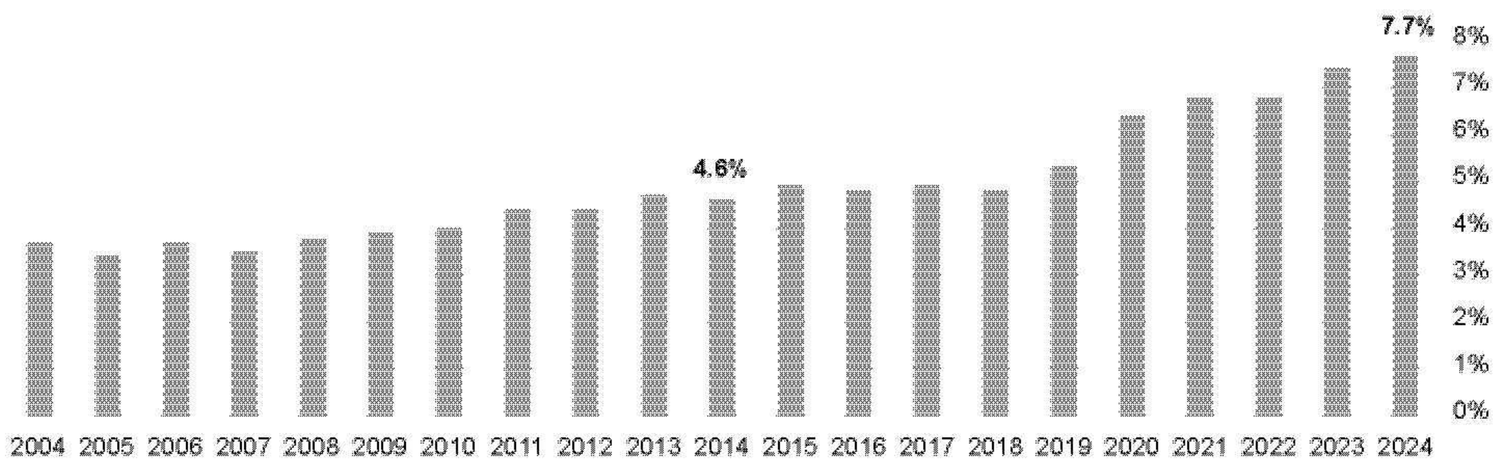
In France, an agreement on retirement savings, within the limits of the "Socle Social Commun"[1], came into force on January 1, 2022. This agreement had introduced an optional Collective Retirement Savings Plan (PERCOL), which is the successor of the PERCO, previously introduced by the 2004 Group agreement on retirement savings schemes. Other saving plans are open in some Company subsidiaries in France covered by specific agreements. Company employees can make discretionary contributions as part of those various plans, which their employer may supplement under certain conditions through a matching contribution. The Company's subsidiaries in France made gross matching contributions totaling nearly €75 million in 2024.

Worldwide, this arrangement is strengthened by the *Care Together by TotalEnergies* program launched in 2024 (refer to point 5.3.1.3).

Employee shareholding indicators

More than 70% of the Company's employees are TotalEnergies shareholders and employee shareholding[2] represents 7.7% of the Company's share capital at December 31, 2024, increasing by more than 50% over the last ten years.

Evolution of the Company employee shareholding (held % of share capital)



D. EQUAL TREATMENT AND OPPORTUNITIES

Policy

TotalEnergies considers that the men and women of the Company are at the heart of its performance and is convinced that diversity of talent and management is a key driver of progress, both for its competitiveness and its capacity for innovation, as well as for its attractiveness. The Company has therefore included this principle in its Diversity policy, which applies to all its employees, subject to local laws and regulations.

The Company has long been committed to promoting equal treatment and opportunity that allows every employee to express and develop his or her potential.

In accordance with its Code of Conduct, TotalEnergies aims to develop its employees' skills and careers by implementing a **Human Resources policy excluding any discrimination**.

In terms of diversity, the Company has signed international agreements and charters to demonstrate its commitment at the highest levels of decision-making. In 2010, TotalEnergies signed the Women's Empowerment Principles - Equality Means Business as set out in the United Nations Global Compact. The WEP are inspired by international labor and human rights standards.

TotalEnergies pledged within the World Economic Forum by signing Closing the gender gap – a call to action in 2016. This joint declaration is based on seven guiding principles (leadership; aspiration and goal setting; the Science, Technology, Engineering and Mathematics (STEM) pipeline; clear responsibilities; recruitment, retention and promotion policies; inclusive corporate culture; and work environment and work-life balance) and two decisive objectives: more diverse recruitment and greater access for women to technical and management roles.

The Company's Diversity policy includes specific measures to promote the integration and retention of people with disabilities.

Resources

The Diversity policy is supported at the highest levels and promoted by the Diversity and Inclusion Council, which is chaired by a member of the Company's Executive Committee and composed of fifteen members representing all the Company's activities. The Diversity and Inclusion Council is also charged with making specific recommendations on issues identified each year by the Executive Committee.

Council members also have an individual responsibility play an active role in deploying the policy, and to act as ambassadors for it both internally and externally.

The Council relies on the People & Social Engagement division to coordinate the implementation of the policy and the network of branch Diversity & Inclusion correspondents.

Actions

To promote diversity, the Company takes care to raise awareness among its employees and provides training. To do this, it relies on a number of documents, accessible to all:

- the Code of Conduct,
- the Human Rights Guide,
- the Practical Guide to dealing with religious issues,
- the "Recruiting without discrimination" Guide,
- or more recently, the Guide to Neurodiversity.

Employees can also access a wide range of e-learning material and training courses on the themes of diversity, unconscious bias and non-discrimination via the TotalEnergies training platform.

(1) The *Socle social commun* (SSC) or "Common Social Basis" (whereby all employees have the same rights) is composed of 18 subsidiaries in France.
(2) As defined in Article L. 225-102 of the French Commercial Code and Article 11 paragraph 6 of the Articles of Incorporation of the Company.

In 2024, a comprehensive **awareness kit** was made available to managers so that they could organize a moment of exchange with their teams around the world. The goal: to understand and respect differences in order to create the collective conditions that allow everyone to express their talent, ideas, and energy.

In addition to the guides and training courses available on the TotalEnergies training platform, the Company deploys frequent awareness-raising initiatives.

Moreover, in France, TotalEnergies is a signatory of the Charter developed by an organization called l'*Autre Cercle*, which provides a framework for combating workplace discrimination in France based on an individual's sexual orientation or identity.

Remediation procedure

The Ethics Committee plays a key role in listening and providing assistance. It can be contacted by employees on the e-mail address: ethics@totalenergies.com (refer to point 5.3.1.5).

Targets

The Diversity roadmap, which sets out the targets for feminization and internationalization of the management bodies and senior management, was rolled out by business segment to maintain momentum, in compliance with local laws and regulations.

In addition to the diversity and internationalization components, each entity is encouraged to implement measures to promote the employment and integration of people with disabilities, in line with applicable legislation, and to create an inclusive working environment to offer all employees the same career opportunities.

Our objectives

- **30% women in management bodies and senior management positions by 2025:**
  - Executive Committee
  - G70[(a)]
  - Senior executives
  - Senior management
- **Internationalization (non-French nationalities):**
  - 45% of senior executives
  - 40% of senior managers

(a) Senior executives with the most important responsibilities. Together with the Executive Committee, they form part of the Company's management bodies within the meaning of point 8.1 of the FEP-MEDEF Code.

1. Equality between men and women in the workplace

Actions

TotalEnergies is committed to upholding and promoting the principle of equality between men and women in the workplace and ensuring and monitoring its proper application.

Equality between men and women is fostered Company-wide through a global policy of diversity, quantitative targets set by the Company's General Management, human resources procedures that take men and women concern into account, agreements aimed at promoting a better work-life balance and actions to raise awareness and train the workforce.

TotalEnergies' commitment to equality in the workplace and treatment between men and women begins at the recruitment stage and continues throughout a person's career, particularly in the process of identifying high-potential employees and appointing managers.

Mixed teams, equal treatment and opportunities

TotalEnergies aims to recruit women in proportions that reflect, at a minimum, the percentage of women graduates at schools and universities in its business sectors.

To encourage young women to opt for careers in technical fields, TotalEnergies has partnered with France's *Elles Bougent* organization since 2011. More than 200 female engineers regularly talk to high-school girls about careers in science. Throughout the Company, female engineers and technicians from all backgrounds are encouraged to serve as role models for female high school and university students to illustrate women's contributions to the fields of science and technology.

The internal mobility process implemented as part of *Better Together*, ensures greater transparency and offers new prospects for career growth for both men and women in the Company's various professions.

With nearly 170 nationalities in its workforce, TotalEnergies benefits from a great cultural diversity and considers it important to promote that diversity at all levels of the Company.

Several measures have been adopted to create a more international management pool, including career paths designed to create more international careers, expatriate assignments for employees of all nationalities (nearly 3,300 employees representing more than 100 nationalities are posted in about 100 countries), and orientation and personal development training organized by large regional hubs (such as Houston, Johannesburg and Singapore).

Promoting a culture that respects differences also involves changing mentalities: awareness-raising, training and communication actions are regularly carried out for managers and employees. Internal training courses for women such as *Young Female Talents* and *How to Market Yourself* or *How extraordinary women* communicate are offered.

Through its mentoring activities and development workshops, the TWICE (*TotalEnergies Women's Initiative for Communication and Exchange*) network also helps to expand the diversity policy. Established in 2006, it is now present in France and abroad (with 71 local networks) and has more than 5,000 members. TWICE offers a mentoring program, deployed in France and worldwide, to help women gain insight into key phases of their career. More than 3,200 women have taken part in the program since 2010. At 422, the number of pairs formed for 2025 has significantly increased (from to 307 in 2023).

In 2018, TWICE launched the TWICE@Digital initiative to encourage networking among women working in digital technology in the Company and, more broadly, help women become more digital-savvy, so they can learn about the changes underway and the impact of those changes on their work.

Initiatives are also being launched at branch level to promote women's career development. Within Exploration & Production, a 100-day training program called "*The A effect*", was launched in 2023 for talented women who wish to fully realize their potential. Since its launch, 130 women employees have joined the program from headquarters and 25 subsidiaries.

Diversity indicators

Representation of diversity in management and governing bodies

	Number in 2024		% in 2024		Number in 2023		% in 2023		Number in 2022		% in 2022	
	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men
Executive Committee	2	7	22.2%	77.8%	2	6	25.0%	75.0%	2	6	25.0%	75.0%
G70[a]	25	50	33.3%	66.7%	26	51	33.8%	66.2%	25	51	32.9%	67.1%
Senior Executive	78	186	29.5%	70.5%	75	190	28.3%	71.7%	72	190	27.5%	72.5%
Senior management[b]	2,019	5,793	25.8%	74.2%	1,921	5,726	25.1%	74.9%	1,719	5,509	23.8%	76.2%
Middle management[c]	1,916	4,602	29.4%	70.6%	1,830	4,335	29.7%	70.3%	1,641	4,225	28.0%	72.0%
First-level management[d]	7,773	14,340	35.2%	64.8%	7,338	13,707	34.9%	65.1%	6,782	13,415	33.6%	66.4%

(a) Senior executives with the most important responsibilities. Together with the Executive Committee, they form part of the Company's management bodies within the meaning of point 8.1 of the AFEP-MEDEF Code.
(b) JL≥14 .
(c) JL13.
(d) JL 10 to 12.

Representation of workforce diversity by age groups

	% in 2024			% in 2023			% in 2022		
	Women	Men	Total workforce	Women	Men	Total workforce	Women	Men	Total workforce
< 30 years	19.4%	15.9%	**17.2%**	19.6%	15.9%	**17.3%**	19.4%	16.0%	**17.2%**
30-49 years	56.5%	53.8%	**54.8%**	56.7%	54.4%	**55.2%**	57.1%	55.1%	**55.9%**
49 years and over	24.1%	30.4%	**28.0%**	23.7%	29.7%	**27.5%**	23.5%	28.9%	**26.9%**

Representation of women in the workforce

% of women	2024	2023	2022
Among all employees	36.8%	36.9%	36.3%
Among managers (JL ≥ 10)[a]	33.1%	32.5%	31.5%
Among permanent contract hires	42.2%	41.2%	42.1%
Among managers hires (JL ≥ 10)[a]	39.0%	39.8%	40.8%
Among the pool of high potentials	40.8%	39.6%	38.3%
Among technical or commercial professions[b] (JL ≥ 10)[a]	25.5%	24.9%	23.9%
Occupying the 10% most responsible positions[c]	26.6%	26.1%	24.9%

(a) Job level of the position according to the Hay method. JL 10 corresponds to the first level of junior manager (*cadre débutant*) (≥ 300 Hay points).
(b) Technical and sales functions, excluding support functions (e.g. human resources, legal affairs, purchasing, etc.).
(c) Proportion calculated on the basis of 98,625 employees.

Representation of international employees in the workforce

% of employees of non-French nationality	2024	2023	2022
Among all employees	66.8%	67.0%	66.8%
Among managers (JL ≥ 10)[a]	59.1%	58.5%	57.6%
Among permanent contract hires	85.3%	85.6%	83.4%
Among managers hires (JL ≥ 10)[a]	66.0%	67.1%	62.7%
Among the pool of high potentials	54.0%	52.7%	51.4%
Among senior executives	38.6%	37.7%	37.4%
Among senior managers (JL ≥ 15)[a]	36.4%	36.3%	34.2%

(a) Job level of the position according to the Hay method. JL 10 corresponds to the first level of junior manager (cadre débutant) (≥ 300 Hay points).

Equal pay for equal work

In terms of compensation, the Company has introduced an annual check in all countries for any unjustified wage differentials.

To this end, TotalEnergies calculates the adjusted or "identical profile" pay gap in each subsidiary, using *Mercer Consulting's methodology*. This adjusted pay gap takes into account the characteristics of the job held (function, segment, region, etc.) and of the individual (age, diploma, seniority, etc.), and makes it possible to isolate gaps not justified by objective criteria. A corrective action plan is then implemented based on the results.

Since 2019, consistent with *French Act 2018-771* of September 5, 2018, on the freedom to choose one's professional future, the Company has published an index in France for its three units of economic and employee interest (UESs) on wage differentials and the steps taken to eliminate them. That index, based on a score of 100, reflects five indicators: wage differentials, pay raise differentials excluding promotions, promotion rate differentials, percentage of female employees who received a pay raise in the year they returned from maternity leave, number of employees of the under-represented sex among the ten employees who received the highest compensation.

In November 2023, the Company and all the representative trade union organizations within the scope of the *Socle Social Commun*[1] in France unanimously signed a new agreement relating to professional equality. Through this agreement, the parties reaffirm their commitment to respecting the principle of equal treatment between women and men.

(1) The *Socle social commun* (SSC) or "Common Social Basis" (whereby all employees have the same rights) is composed of 18 subsidiaries in France.

Pay gap indicators

The ratio of total annual compensation is presented in point 4.3.2.1.

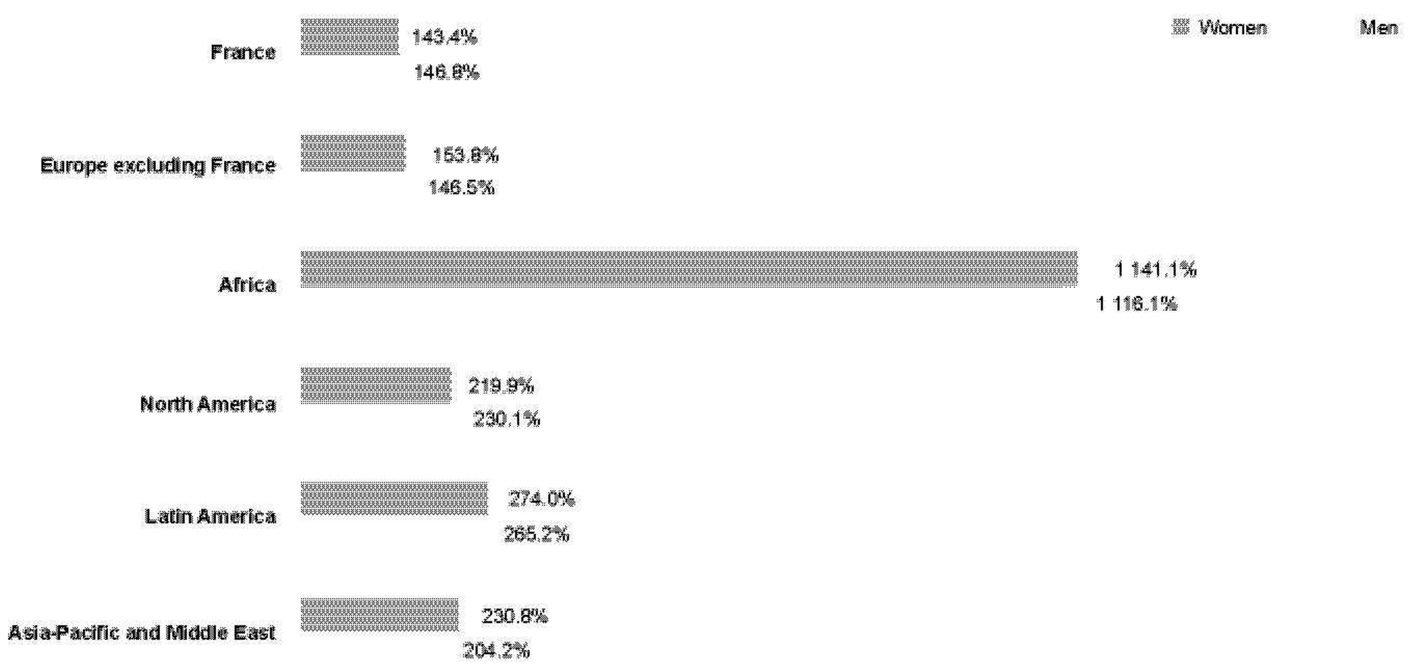
Professional equality index

Index[a]	2023-2024	2022-2023	2021-2022
Upstream/Global services/Holding UES (AGSH)	93/100	93/100	92/100
Refining & Petrochemicals (RP) UES	100/100	99/100	100/100
Marketing & Services (MS) UES	92/100	92/100	92/100

(a) Reference period N-1/N: from September 30 N-1 to September 30 N.

Details of the 2023-2024 index	UES AGSH	UES RP	UES MS
Wage differential	38/40	40/40	37/40
Difference in the distribution of individual increases	20/20	20/20	20/20
Difference in the distribution of promotions	15/15	15/15	15/15
% of employees with a raise after returning from maternity leave	15/15	15/15	15/15
Number of women in the 10 highest earners	5/10	10/10	5/10

Ratio of the lowest base salary (M/W) to the minimum salary guaranteed by local legislation, aggregated by geographical area[a]



(a) Unweighted average, within the scope of the Compensation survey.

2. Employment and inclusion of people with disabilities

The Company's diversity policy includes specific measures to promote the integration and retention of people with disabilities.

Resources

The People & Social Engagement division, is responsible for leading the disability approach on the basis of a Disability Agreement of the *Socle Social Commun*[1] perimeter. TotalEnergies' *Mission Handicap* structure, housed within the People & Social Engagement division, works in close collaboration with disability coordinators at business segment level and a network of liaisons in the establishments. The four jobs for disability coordinators in the various sectors of activity, as well as the dedicated recruitment officer, provided for in the agreement signed in 2019, are now the driving force behind the Company's disability approach in the field, and coordinate the network of disability officers on the sites.

Actions

In France, TotalEnergies has given concrete proof of its commitment to hiring people with disabilities for more than 20 years by signing agreements with employee representatives.

In 2022, a new disability agreement was signed within the scope of the *Socle social commun*, excluding expatriates (more than 13,000 people) and approved by DRIEETS[2] for 2023-2025. This agreement strengthens and improves the system in force and for the first time introduces end-of-career support measures for people with disabilities (possibility of buying back quarter-years for their pensions, additional payment for part-time work, etc.). It is based on three major priorities:

- recruitment, integration and professional support throughout the employee's career,
- job retention, the adaptation of workstations and measures to compensate for the employee's disability,
- the development of agreements and partnerships with the sheltered and supported employment sector (ESAT and EA).

Since 2019, 300 recruitments have been finalized, including 49 permanent contract hires. Since 2022, TotalEnergies has reached the rate of 6% of disabled workers within the scope of the *Socle social commun*. In the new agreement, the Company restated its ambition to continue to progress beyond the legal threshold in this same scope and to pursue its action in favor of the indirect employment of disabled people.

(1) The *Socle social commun* (SSC) or "Common Social Basis" (whereby all employees have the same rights) is composed of 18 subsidiaries in France.
(2) Interdepartmental Regional Directorate for the Economy, Employment, Labor and Inclusion.

Since 2022, the Company has made new commitments to digital accessibility by signing the "*J'agis*" ("I act") charter for the inclusion of people with disabilities through employment in the digital profession.

Additionally, workstation adaptations continued at the homes of disabled employees working from home to facilitate their continued employment, particularly within the framework of the ergonomic services contract signed with the specialist company *Ergosanté*. In 2024, as part of the agreement and the Development Fund for Initiatives[1], a study of around 50 associative projects related to disability was conducted.

TotalEnergies also supports the *Association TotalEnergies Solidarité Handicap (ATSH)*, an organization formed in 1975 by employees who have children with disabilities. ATSH provides psychological and financial support to current and retired employees of the Company and their dependents in France who are affected by disability. It currently has about 300 members.

Furthermore, as part of the *Manifesto for the Inclusion of Persons with Disabilities in economic life*, which was signed in 2018, TotalEnergies participates in several working groups, such as those on the internationalization of corporate disability policies or digital accessibility.

As a partner of the *Conférence des Grandes Ecoles*, TotalEnergies finances an international scholarship program to offset the extra costs associated with disability, allowing talented young people to complete top-level courses by spending time abroad. In 2024, some twenty young people benefited from this program.

Internationally, the Company aims to support employees with disabilities whatever the legal obligations in each country. This ambition is reflected in the signing of the International Labour Organization's (ILO) Global Business and Disability Network Charter in October 2018. At the end of 2024, 41 subsidiaries had voluntarily signed up to the policy and set themselves goals based on the five principles identified as priorities by the Company: respect and promotion of rights, non-discriminatory policies and practices, accessibility, job retention and confidentiality. This new dynamic is reflected in the regular exchange of best practices and the supply of awareness-raising tools.

Disability indicators

	2023[a]			2022			2021		
	Women	Men	Total	Women	Men	Total	Women	Men	Total
% of disabled workers in France (*Socle Social Commun*)[2]	46%	54%	6.23%	46%	54%	6.24%[b]	47%	53%	6.03%

(a) The rate for the reference year (2024) will be known after the report publication. The publication is based on the previous three fiscal years.
(b) The rate was confirmed after the publication of the 2023 Universal Registration Document.

5.3.1.4 Social dialogue

Social dialogue is a key component of the Company. It includes all types of negotiations, consultations or exchanges of information among the management of the TotalEnergies entities, employees and their representatives about economic and workplace issues and concerns relating to company life. The topics addressed in this social dialogue may vary according to each subsidiary, but some are shared concerns across the Company such as health and safety, work hours, compensation, training and equal opportunity.

ACTIONS

Promoting and encouraging social dialogue

The Company is careful to conduct this dialogue at both the local level and at headquarters or centrally, through its participation in company bodies and its negotiation of agreements.

Among the many stakeholders with which TotalEnergies maintains a regular dialogue, the Company's employees and their representatives have a special position and role, particularly in discussions with management teams. In countries where employee representation is not required by law, the TotalEnergies companies strive to establish such representation. As a result, majority elected employee representatives are present in most TotalEnergies companies.

Moreover, where local laws provide few protections for freedom of organization and the right to collective bargaining, the subsidiary's management is reminded that it must provide alternatives. These may include allowing employees to designate representatives, organizing regular meetings between those representatives and management, providing meeting rooms where employees can gather adjusting work schedules accordingly. Those best practices are reviewed in an e-learning course on human rights in the workplace, available within the Company since 2019.

Freedom of association and collective bargaining are two of the subjects studied in its analysis of the risks of human rights abuses, and especially human rights in the workplace.

In December 2017, TotalEnergies joined the worldwide Global Deal initiative, a multiparty partnership that aims to encourage governments, businesses, unions and other organizations to make concrete commitments to promoting employee relations at every level and to proposing concrete solutions that reconcile economic performance and social progress. The Global Deal promotes the idea that effective social dialogue can contribute to decent work and quality jobs and, as a consequence, lead to greater equality and inclusive growth, from which workers, companies and civil society benefit. In 2024 TotalEnergies continued to share its best practices with Global Deal member companies, notably in relation to apprenticeships and the living wage, and by participating in a working group on the European directive on European works councils.

Anticipating and supporting organizational changes

The TotalEnergies European Works Council serves, on a European scale, as a forum for providing information and regular exchanging views about the Company's strategy, its workplace, and economic and financial situation, as well as on sustainable development, environmental and social responsibility and safety. It is consulted on proposals for significant organizational changes concerning at least two companies in two European countries, to express its opinion, in addition to the procedures initiated before the national representative bodies.

The richness of social dialogue at European level was once again illustrated by the number (16) of European Works Council meetings and site visits in 2024, including several outside France (in Germany, in Romania).

(1) The Development Fund for Initiatives for the inclusion of people with disabilities aims to facilitate the implementation and development of projects for the inclusion and retention in employment of people with disabilities.
(2) The *Socle social commun* (SSC) or "Common Social Basis" (whereby all employees have the same rights) is composed of 18 subsidiaries in France.

Also in 2024, the particularly fruitful social dialogue at European level led to the negotiation of an amendment to the agreement concerning the renewal of the TotalEnergies European Works Council, signed by all members of the Committee, with the exception of those members representing a French trade union organization. This amendment improves the functioning of the European Works Council, notably by granting more resources to countries with fewer than 150 employees and grouped into clusters, optimizes meeting times (preparatory meetings, plenary meetings and visits) and takes into account the representativeness of each country making up the European Works Council, by updating the allocation of seats among these countries.

The composition of the works council was accordingly renewed in September 2024 with 52 members representing 25 countries. Members benefited from several discussions relating in particular to TotalEnergies' balanced multi-energy strategy for the benefit of the energy transition. Meetings of the Strategy Committees (E&P, GRP, M&S, R&C)[1] allowed staff representatives to understand this ambition in a concrete way, through the presentation of the strategy of each business segment. The members were also able to take part in a Climate Fresk workshop.

As a responsible employer, TotalEnergies manages organizational changes responsibly. Among the commitments in the global agreement, the Company has committed to social support for organizational changes that consists of informing employee representatives in advance of planned changes, as well as making sure that subsidiaries take social measures when organizational changes occur, which must be among the best practices of companies in the business segment of the country concerned.

In 2024, 35 subsidiaries worldwide underwent organizational changes that could have impact on employees, and 33 (94.3%) of them implemented measures to support their employees. They included:

- 14 subsidiaries that took supporting measures for retirement or early retirement. This represents 40.0% of the subsidiaries concerned,
- 30 subsidiaries that resorted to redeployment or mobility as supporting measures. This represents 85.7% of the subsidiaries concerned,
- 17 subsidiaries that introduced an outplacement program. This represents 48.6% of the subsidiaries concerned,
- 23 subsidiaries that offered assistance for training. This represents 65.7% of the subsidiaries concerned,
- 7 subsidiaries that used a reduction in working hours as support measures. This represents 20.0% of the subsidiaries concerned,
- 15 subsidiaries that offered financial compensation. This represents 42.9% of the subsidiaries concerned.

Listening to our employees

As a company that listens to its employees, TotalEnergies regularly involves them in participatory processes.

For example, the Company is developing exchange formats between members of the Executive Committee and the employees, in order to listen to their proposals on key issues for the Company, such as climate change, the impact of the Company's activities on biodiversity, performance-related compensation, employee well-being and the pace of the transition and its impact on employees.

In 2024, nearly 300 employees working in a technical role took part in the third edition of *Speak Up Campus*. They joined workshops in fields including technical excellence, driving the energy transition with technical ambition and controlling investments.

Every two years, TotalEnergies also conducts an internal opinion survey (TotalEnergies Survey) to gather employees' opinions and expectations regarding their professional situation and their perception of the Company, on a local or Company-wide level, on various topics (values, commitment, the Company's ambition, diversity and inclusion, management, talent development, working conditions, etc.).

Since 2023, by decision of the Executive Committee, an additional short survey, the TotalEnergies Pulse Survey[2], has taken place every other year, to make it possible to measure employee engagement and well-being annually.

More than 90,000 employees in 122 countries were invited to respond to the latest edition of this survey in 2024. The results of this survey[3] indicate that employees have an engagement rate of 83.7%, compared with the benchmark[4] of 69%. 90% of employees state they are proud to work for TotalEnergies.

The results were communicated within all the entities concerned.

Social dialogue indicators

Employee commitment

Indicators -TotalSurvey	2024	2023 (Pulse)	2022
TotalEnergies' engagement score	83.7%	82.5%	80.3%

Coverage of negotiation/collective bargaining agreements

France is the only country representing at least 10% of the total number of the employees of the Company.

	2024	2023	2022
% of employees covered by a collective bargaining agreement worldwide	73.6%	73.0%	73.6%
in the EEA[a][b]	*93.3%*	–	–
Number of active agreements signed with employee representatives worldwide	346	404	330
in the EEA[a][b]	*266*	–	–
including France	*165*	*222*	*189*
Number of wage agreements signed worldwide	150	282	284

(a) European Economic Area.
(b) Data are not collected before 2024.

(1) Exploration & Production - Gas, Renewables & Power - Marketing & Services - Refining & Chemicals.
(2) Survey conducted in 2023 on a Company scope excluding Hutchinson.
(3) Results from the internal TotalEnergies Survey 2024. The data do not cover Hutchinson which was the subject of a specific survey. The engagement score for TotalEnergies was 79% in 2024 compared to the benchmark of 70%. The IPSOS benchmark is composed of automotive and aeronautics companies from around the world. 85% of Hutchinson's employees are proud to work for TotalEnergies.
(4) The benchmark established by IPSOS of companies with over 10,000 employees worldwide.

Social dialogue

	2024	2023	2022
% of employees with labor union representation and/or employee representation worldwide	92.3%	91.5%	91.8%
in the EEA[a][b]	*100%*	–	–
including France[b]	*100%*	–	–

(a) European Economic Area.
(b) Data are not collected before 2024.

5.3.1.5 Respect for human rights at work

The main challenges associated with the effects of the Company's activities in terms of respect for human rights have been identified using the methodology set out in the United Nations Guiding Principles on business and human rights (UNGP) reporting framework relating to the "salient issues", i.e., the human rights at risk of the most severe negative impact through the Company's activities or business relationships.

A. REFERENCE FRAMEWORK

TotalEnergies' human rights approach is based on its Code of Conduct, strong and formalized commitments, a dedicated organization, an awareness-raising and training program as well as evaluation and follow-up mechanisms aiming at measuring the effectiveness of the Company's actions.

TotalEnergies is committed in particular to respecting internationally recognized human rights and standards, wherever the Company operates, in particular the Universal Declaration of Human Rights, the Fundamental Conventions of the International Labour Organization (ILO), the U.N. Guiding Principles on Business and Human Rights, the OECD guidelines for multinational enterprises and the Voluntary Principles on Security and Human Rights (VPSHR).

In 2016, the Company published a Human Rights Briefing Paper, updated in 2018, in accordance with the recommendations of the United Nations Guiding Principles Reporting Framework, which is available on its website. TotalEnergies was then the first company in the oil and gas industry to do this. The third edition of this Briefing Paper was released in January 2024.

B. COMMITMENTS

To address salient human rights issues, TotalEnergies takes action in its employees' workplaces by creating a working environment in which people are treated with respect and dignity, without fear of intimidation or harassment.

The Company pays particular attention to the following points:

- prohibition of forced labor and child labor,
- prohibition of all forms of discrimination, whether based on origin, sex, age, disability, sexual orientation or identity, or affiliation with a political, religious, trade union or minority group,
- taking the necessary steps to ensure decent working conditions:
  - ensuring people's health and safety,
  - guaranteeing a decent wage for all employees,
  - monitoring equal pay between women and men,
  - promoting diversity and respect for others in the workplace,
  - respecting freedom of association and collective bargaining.

The Company's specific policies aimed at eliminating **discrimination and harassment**, and promoting **equal opportunity and treatment** are described in point 5.3.1.3-D and 5.3.1.2-E. Specific commitments relating to policies of positive actions in favor of members of its **personnel** are described in point 5.3.1.3.

C. RESOURCES/ORGANIZATION

The organization in charge of human rights is structured in three different levels.

First, the Human Rights department in the Sustainability & Climate division, which in turn reports to the President, Strategy & Sustainability, who sits on the Executive Committee, coordinates the analysis of the Company's human rights risks, supports operational teams and supervises the actions to promote respect for human rights, in close collaboration with the Ethics Committee and in accordance with the Company's Code of Conduct and the People & Social Engagement division, in charge of human resources.

The Company's human rights roadmap, developed with the various business segments and divisions concerned, is regularly presented to the Company's senior management in order to support the ongoing efforts to implement the Code of Conduct and to respect human rights.

The Human Rights Steering Committee, chaired by the Human Rights department, monitors the implementation of this roadmap on the strategic level for the Company and meets several times a year. It is led by the Senior Vice President of Sustainability & Climate. The committee includes representatives of each business segment and of the main functional divisions that have a role related to human rights.

The Ethics Committee, on which representatives of all TotalEnergies' business segments sit plays a key role is one of listening and support. Employees, but also people from outside the Company, can contact the committee at the email address ethics@totalenergies.com. The Committee protects the confidentiality of the complaints, which can only be lifted with the agreement of the complainant. The Chairman of the Ethics Committee presents an annual Ethics report to the Governance and Ethics Committee of the Board of Directors.

In 2024, the Ethics Committee received about 210 alerts (internal, external and anonymous) registered on ethics@totalenergies.com regarding compliance with the Code of Conduct, more than 60% of them concerning matters related to human resources.

All alerts received are addressed and, when necessary, recommendations are made in order to lead to the implementation of corrective actions.

Secondly, each business segment, as well as the TotalEnergies Global Procurement, which is in charge of the Responsible Procurement program, has appointed a human rights representative who coordinates this subject in its scope and cooperates with the Human Rights department, with which he or she meets each month in order to address ongoing human rights issues. Monthly reviews also take place between the Human Rights department and the main head office functional divisions regarding human rights. The Marketing & Services segment has also its own Human Rights committee, which is chaired by the Senior Vice President Africa and composed of representatives from each geographical zone (Africa, America, AsiaPacific/Middle East and Europe) in which the Marketing & Services segment operates. The main task of this Committee is to monitor the implementation of this segment's human rights roadmap.

Lastly, this dedicated organization is supported by a network of human rights correspondents based in the countries where the Company operates, and in particular the network of ethics officers, as well as the persons in the local subsidiaries in charge of the health, safety and environment and human resources functions, plus certain subsidiaries' managing directors. These human rights correspondents, who are located as close to the operations as possible, are in charge of promoting the values set out in the Code of Conduct among employees working at subsidiaries and ensuring that the Company's commitments are correctly implemented by local stakeholders.

More information on the organization in charge of human rights are available in point 5.3.2.1.

D. ACTION PLAN

Awareness-raising and training

In order to disseminate the Company's commitments, TotalEnergies raises its employees' awareness via internal communication channels such as intranet sites and events such as the Business Ethics Day, which is held each year at the headquarters and in subsidiaries. In 2024, the Business Ethics Day was held on December 10 and dealt with returning to the basics of the Code of Conduct. The Chairman & Chief Executive Officer of TotalEnergies speaking in a live event reminded to all the personnel of the Company the cardinal values of the Code of Conduct, notably to respect each other and the zero tolerance on fraud and corruption.

In addition to the Code of Conduct, the Company also publishes a Human Rights Guide that is made available to its employees and the stakeholders and published in early 2024 its third edition of the Human rights briefing paper covering the time period from 2018 to 2023 which illustrates its human rights approach in its activities. TotalEnergies also has a practical guide to dealing with religious questions within the Company. These guides and the third edition of the Human rights briefing paper 2018-2023 are available on the intranet site.

In addition to the Ethics training which has been updated in 2024 and is mandatory for all Company employees, a Human Rights training plan, developed in 2020, aims to promote the development of a culture of respect for human rights within the Company, to better manage the associated risks, and to upskill all employees, so that they themselves become agents of change in the long term. This plan is targeted at the following priority populations:

- the most influential categories (such as Country Chairs, Project Managers and Asset Managers in high-risk countries and projects),
- the categories most exposed to human rights risks or whose actions may have potentially negative impacts on human rights (such as service station managers in the Marketing & Services segment or Community Liaison Officers (CLOs) in the Exploration & Production segment).

As part of this plan, several training sessions were organized in 2024.

For target groups

About 5,000 employees belonging to the priority categories were trained in face-to-face training sessions in 2024:

- in the Marketing & Services segment, 620 employees were trained. These employees include members of management committees,
- the management committee as well as other priority categories of employees (network directors, segment managers and service station managers) within the subsidiaries, particularly in Angola, Mauritius, Puerto Rico, Equatorial Guinea, Senegal,
- the Exploration & Production segment, nearly 3,560 employees being trained on respect for human rights, including members of the management committees of subsidiaries located in Angola, Nigeria and Brazil,
- the Integrated Power and Integrated LNG segments, more than 350 employees being trained on respect for human rights in Brazil (Casa dos Ventos),
- the Refining & Chemicals segment, more than 420 employees being trained on respect for human rights, including members of the segment's management committee and certain priority groups at Hutchinson sites in Morocco, Brazil and Serbia.

Training on ethics and human rights was followed by around 25 newly appointed executives in 2024.

For all employees

The online module on human rights in the workplace with a focus on respecting the ILO's core conventions, which has been accessible to all employees since 2019 in all countries and mandatory for all management employees, continued to be deployed in the countries where TotalEnergies is present. The training module is available in five languages. In 2024, about 9,900 employees have been trained online on Lizzy platform leading to a total number of around 70,000 employees having completed it between its launching in 2019 and the end of 2024.

In addition, representatives of the Human Rights department regularly participate in external events with other companies and institutional players to share experiences and best practices in this area.

Assessments

In addition to the audits and assistance missions carried out by the Audit and Internal Control division, which cover certain human rights-related issues, the ethics and human rights-related practices of TotalEnergies' entities are regularly assessed by independent third parties and qualified experts.

The entities are identified in particular according to the level of the risk of human rights violations in each country, the number of alerts received the previous year and the date of the subsidiary's last assessment. These assessments help identify best practices, share them in the Company and recommend areas for improvement. Knowledge and appropriation of the Code of Conduct are tested and reinforced by ethics and human rights awareness-raising sessions. Employees are encouraged to voice their ethical concerns in a confidential manner and report behaviors potentially contrary to the Code of Conduct. These assessments confirmed that the Code of Conduct is well understood by employees.

The ethics and human rights assessments are followed up by action plans within 12 months.

The British company *GoodCorporation* has assessed more than 160 entities since 2002 in 60 countries with regard to the principles and values enshrined in the Code of Conduct.

In 2024, seven ethics and human rights assessments were conducted. They concerned seven subsidiaries (in USA, Angola, Equatorial Guinea, Nigeria, Philippines, Brazil and Serbia). These assessments confirmed that the Code of Conduct has been duly incorporated by the subsidiaries.

The follow-up of the action plans put in place further to the 2023 assessments in Vietnam, Morrocco, South Africa and Republic of the Congo subsidiaries was also carried out in 2024.

E. COMBATTING FORCED LABOR AND CHILD LABOR

In accordance with ILO standards, it is forbidden to hire people under the age of 15. The minimum age for access to any type of employment or work considered dangerous must not be less than 18. TotalEnergies is concerned about the risk of forced labor and child labor. Such situations are a challenge, but also an opportunity to use our skills to promote respect for human rights in the workplace.

The prohibition of forced and child labor, non-discrimination, just and favorable conditions of work, as well as safety, all form part of the principles set out in the Code of Conduct and are developed in TotalEnergies' Human Rights Guide and in the Human Rights Briefing Paper 2018-2023 published in 2024.

The "*Human rights in the workplace*" e-learning course also raises employee awareness about upholding these rights and the Company's zero-tolerance policy concerning forced labor and child labor.

F. REMEDIATION PROCEDURES AND ACCESS TO CORRECTIVE MEASURES

Employees can contact the Ethics Committee to ask questions or report any incident involving a risk of non-compliance with the Code of Conduct via the generic email address (ethics@totalenergies.com).

This channel was put in place in 2008. The collection and processing of ethical complaints procedure published internally and on the TotalEnergies website since December 2020, formally sets out the existing approach for collecting and processing complaints sent to the Ethics Committee by internal or external stakeholders concerning behaviors or situations contrary to the Code of Conduct.

It ensures that the identity of the person making the report is protected, rules out any reprisals against them or against those taking part in the processing of the complaint, and respects applicable laws and regulations in terms of protecting personal data.

The procedure was presented to employee representatives in France for consultation. The Chairman of the Ethics Committee, who reports directly to the Chairman and Chief Executive Officer of the Company, presents an annual ethics balance sheet to the Governance and Ethics Committee of the Board of Directors.

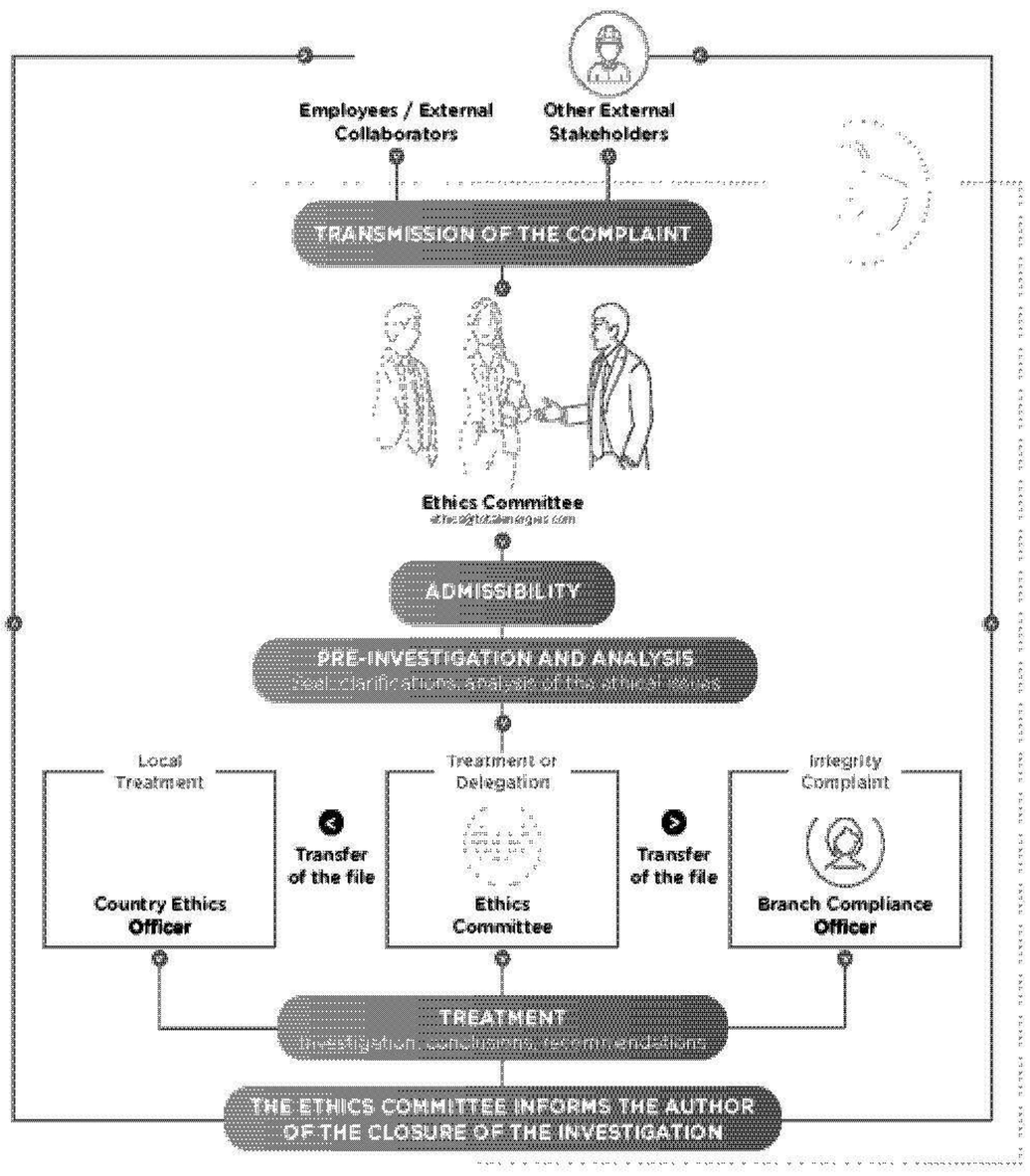
When the Ethics Committee observes a breach of the Code of Conduct, management draws the necessary conclusions and sanctions may be imposed in keeping with the applicable law and the procedures negotiated locally with staff representatives (examples include verbal reminders, written warnings, suspension or dismissal).

All cases registered via the online network are processed and when necessary, recommendations are made in order to lead to the implementation of corrective actions.

For example, in cases of human rights violations in the workplace, such as inappropriate behavior including sexual harassment, sanctions up to and including dismissal in the most serious cases may be imposed on the perpetrator.

Processing of complaints made to ethics@totalenergies.com

Whistleblowers are kept informed of the progress of their case (receipt, analysis, actions, closure). Whistleblowers can choose to remain anonymous.



G. INDICATORS

Report follow-up	2024	2023	2022
Number of reports relating to the Code of Conduct received at ethics@totalenergies.com	209	170	150
% of reports relating to human resources (including harassment, discrimination and unsatisfactory working conditions)	63%	70%	60%

Human rights training follow-up	2024	2023	2022
Number of employees trained in human rights during the year (in person training for target groups)	4,948	3,532	2,050
Number of employees trained in human rights during the year (e-learning)	9,886	11,712	8,444

TotalEnergies implements several channels for reporting information, principally the email address ethics@totalenergies.com which is open to all employees and to people outside the Company.

Beyond the incidents reported to the Ethics Committee above, the Company is not in a position to gather and collect data on the number of work-related incidents and/or complaints (including the amounts of related fines and penalties, if any), and is considering how to consolidate this information in order to be in a position to report them in the future, where appropriate.

In 2024, TotalEnergies was not aware of any serious incidents related to human rights (such as forced labor, human trafficking, or child labor, for example).

5.3.2 Value chain workers (S2)

TotalEnergies' activities generate hundreds of thousands of direct and indirect jobs worldwide. Workers in the value chain likely to be affected by material impacts related to the Company's activities or its value chain include:

- upstream, the workers of suppliers of goods and services,
- downstream, workers at the Company's distributors and service stations operated by a third party.

5.3.2.1 Value chain worker policies (S2-1)

The main challenges associated with the effects of the Company's activities in terms of respect for human rights have been identified using the methodology set out in the United Nations Guiding Principles on business and human rights (UNGP) Reporting Framework relating to the "salient issues", i.e., the human rights at risk of the most severe negative impact through the Company's activities or business relationships. On this basis, the Company has identified six salient risks, subdivided across three key areas, one of which is human rights in the workplace of TotalEnergies employees as well as the employees of its suppliers and other business partners (such as service stations). Preventing risks related to working conditions, in particular forced labor and child labor in the value chain, is a priority for the Company, which has made this one of the principles in its Code of Conduct, along with non-discrimination, fair, satisfactory and safe working conditions, as well as safety.

These principles relating to human rights in the workplace are also those set out in the fundamental conventions of the International Labor Organization, which are recalled in TotalEnergies' Code of Conduct as its reference standards in its activities. The Company has formalized its approach to human rights, set out in the Human Rights Information Document published in January 2024. The Company specifies its commitments to prohibit forced labor and child labor, to proscribe all forms of discrimination and to take the necessary steps to ensure decent working conditions.

An organization structured into three levels is in charge of human rights, within the Company:

First, the Human rights department attached to the Sustainability & Climate Division, which in turn reports to the President, Strategy & Sustainability, who sits on the Executive Committee, is in charge of deploying the Company's roadmap, coordinates the analysis of the Company's human rights risks, supports operational teams and supervises the actions to promote respect for human rights, in close collaboration with the Ethics Committee in accordance with the Company's Code of Conduct and the TotalEnergies Global Procurement teams for workers in the upstream value chain and the M&S segment for the downstream value chain.

The Human Rights Steering Committee monitors the implementation of the Human Rights roadmap and meets several times a year. It is chaired by the Senior Vice President of Sustainability & Climate and includes representative of each business segment, as well as the main functional divisions that have a role related to human rights. The Ethics Committee, on which representatives of all TotalEnergies' business segments sit, plays a key role of listening and support. It carries out Ethics and human rights assessments of the subsidiaries with the assistance of a consultant GoodCorporation. These assessments cover the upstream and downstream value chain and the working conditions of the workers of this value chain, and enable to identify good practices, to share them across the Company and to recommend areas of improvement. The choice of the entities assessed is based in particular on the level of human rights violations risks in the country, the number of alerts received during the previous year and the date of the latest assessment of the subsidiary.

In 2024, these Ethics and human rights assessments were carried out in the United States, in Angola, Equatorial Guinea, Nigeria Philippines, Brazil and Serbia.

Secondly, each business segment, has appointed a human rights representative who coordinates this subject in its scope and cooperates with the Human Rights department, with whom he or she meets regularly to address ongoing concerns. Monthly reviews also take place between the Human rights department and the main functional entities of the headquarters in charge of human rights.

Lastly, this dedicated organization is supported by a network of human rights correspondents located in the countries where the Company operates, notably the ethics officers' network (*ethics officers*) as well as the persons within the subsidiaries in charge of the health, safety and environment, human resources and certain subsidiaries managing directors. These human rights correspondents, who are located as close to the operations as possible, are in charge of promoting the values set out in the Code of Conduct among subsidiaries employees and ensuring that the Company's commitments are correctly implemented by local stakeholders.

POLICIES FOR WORKERS IN THE UPSTREAM VALUE CHAIN

The Company's Code of Conduct also applies to the Company's suppliers of goods and services, who must apply standards at least equivalent to those of the Company, particularly with regard to their employees. The relationship between TotalEnergies and its suppliers is based on adherence to the Fundamental Principles of Purchasing, which specify the commitments expected by TotalEnergies, particularly in the areas of respect for human rights in the workplace, and the protection of health, safety and security.

For more information on upstream value chain worker policies, refer to point 5.4.3. that describes the Company's Fundamentals Principles of Purchasing as well as the Sustainable Procurement program.

In addition, preventing risks related to working conditions is a major challenge and a commitment for the Company. In this context, TotalEnergies is rolling out a program to engage and assess its priority suppliers. In 2024, supplier assessments carried out via on-site audits (refer to point 5.4.3) identified situations of non-compliance with the principles of the Company's Code of Conduct and the Fundamental Principles of Purchasing. These are mainly related to safety in the workplace, the absence of supplier reporting mechanisms, and working conditions (e.g. vacation entitlement under local laws). Action plans to address identified deficiencies are implemented by suppliers and monitored by TotalEnergies, as well as verified by the external service provider in charge of carrying out these audits.

Minerals policies

The origin, extraction and refining conditions as well as the use of certain minerals, ores and raw materials are the subject of particular attention, given the potential risks to human rights like forced labour, child labour and inadequate working conditions, and the environment. In 2022, TotalEnergies conducted an internal study to identify the Company's priorities in this area. This study, based on a materiality analysis and a risk analysis, identified three priorities: cobalt, polysilicon and conflict minerals (gold, tungsten, tin and tantalum).

- Cobalt: since cobalt can be used in the manufacture of certain batteries, Saft Groupe (Saft) has been conducting an annual campaign since 2021 to collect information from its suppliers. Saft relies on the Extended Minerals Reporting Template (EMRT) provided by the Responsible Minerals Initiative® (RMI®) to identify the processing units in its supply chain and the country of origin of the cobalt ores. Based on the results and using the RMI® database, Saft verifies whether its cobalt supply chains include suppliers at risk in terms of human rights and environment. Where necessary, specific actions are taken to mitigate or cancel these risks. As part of a progress-led approach, since 2023, Saft is a member of the Cobalt Institute, the global association representing cobalt producers and users. The main objective of the Cobalt Institute is to ensure that cobalt is produced and used ethically and in a sustainable manner, while meeting the needs of industry and society.
- Polysilicon: polysilicon is used in the manufacture of solar panels. TotalEnergies Global Procurement carries out traceability audits upstream of the supplier's selection or commissions an independent third party to conduct them. TotalEnergies has joined a pool of US developers who jointly commission and share traceability audits.
- Conflict minerals: Pursuant to Rule 13p-1 of the Securities Exchange Act of 1934, as amended, which implemented certain provisions of the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010, since 2014, TotalEnergies has filed with the United States Securities and Exchange Commission (SEC) an annual document relating to "minerals from conflict zones" sourced from the Democratic Republic of the Congo or neighboring countries. This document indicates whether, during the preceding calendar year, any such minerals were necessary for the operation or for the production of a product manufactured by TotalEnergies SE or one of its consolidated companies or contracted by TotalEnergies SE or one of its consolidated companies to be manufactured. The purpose of this regulation is to prevent the direct or indirect funding of armed groups in central Africa. For more information, please refer to TotalEnergies' most recent publication, available on the TotalEnergies website or sec.gov.

  As conflict minerals may potentially be present in the electrical and electronic components used in battery manufacturing, Saft conducts an annual campaign to collect information from its suppliers. Saft relies on the Conflict Minerals Reporting Template (CMRT) provided by the Responsible Minerals Initiative® (RMI®) to determine the presence of conflict minerals in its supply chain and to identify the processing units for these minerals that are likely to participate in it as well as the country of origin of the ores. Saft became a member of the RMI in 2022.

  In 2024, Saft also launched a campaign to collect information from suppliers in its supply chain for cadmium, aluminum, copper, silver, nickel, lithium, graphite and manganese, using the Additional Mineral Template (AMRT) of the RMI®.

POLICIES FOR WORKERS IN THE DOWNSTREAM VALUE CHAIN

The Company encourages its business partners to apply principles at least equivalent to those set out in the Code of Conduct. Among the ethics and human rights assessments carried out by the Ethics Committee in 2024 with downstream value chain partners, enabled to identify some areas for improvement with regards to the principles of the Code of Conduct, essentially linked to unsatisfactory working conditions. They have led to action plans.

In the Marketing & Services (M&S) segment, assessments on human rights in the workplace conducted in service stations, with the assistance of an external service provider, aim to identify best practices, areas for improvement, and lead to action plans. These assessments include interviews with service station dealers and employees, site visits and a document review. In addition, contracts concluded with service stations operators must include provisions relating to respect for human rights and the Voluntary Principles on Security and Human Rights (VPSHR).

Furthermore, human rights training and awareness-raising sessions, aimed more specifically at employees of TotalEnergies subsidiaries and service station dealers, are held in parallel to these assessments.

5.3.2.2 Process for dialogue with value chain workers on impacts (S2-2)

TotalEnergies ensures that, whenever possible and relevant, it has discussions with workers' representatives in the value chain or directly with workers in the case of more innovative approaches to certain major projects. This dialogue can take different forms, depending on the specific context and the particular groups of workers involved in the value chain. Conducting audits or assessments of the Company's partners is one of the first levers of dialogue to build a dynamic of continuous improvement with partners.

At the global level, TotalEnergies signed in 2015 a four-year agreement with IndustriALL Global Union[1] on the promotion of human rights at work, diversity, health and safety at work and the dialogue with employees and their representatives. TotalEnergies continues to apply the commitments of this global agreement. Through this global agreement and the Fundamental Principles of Purchasing, TotalEnergies also asks its suppliers to respect freedom of expression, association and collective bargaining and, in countries where this right is restricted, to ensure that employees have the right to participate in a dialogue concerning their collective work situation.

(1) International union federation representing more than 50 million employees in the energy, mining, manufacturing and industrial segments in 140 countries.

In December 2017, TotalEnergies also joined the worldwide Global Deal initiative, a multi-stakeholder partnership whose goal is to encourage governments, companies, unions and other organizations to make concrete commitments to improve dialogue with employee on all levels and to propose concrete solutions to reconcile economic performance and social progress. The Global Deal promotes the idea that effective dialogue with employees can contribute to decent work and quality jobs and, as a result, to more equality and inclusive growth, from which workers, companies and civil society benefit. In 2024, TotalEnergies continued to share its good practices with Global Deal member companies.

UPSTREAM VALUE CHAIN

The Company assesses its priority suppliers in terms of human rights and environment through on-site audits carried out by an independent third party. These audits include systematic interviews with suppliers' employees. In the event of a deficiency observed, the supplier must put in place an action plan, monitored by the TotalEnergies teams and whose effectiveness is verified by an independent external service provider. Among the 600 suppliers audited on site since 2023, more than 260 of them have implemented verified improvements concerning the right to a weekly day off, access to grievance mechanism and overtime pay.

In addition, aware of the importance of guaranteeing respect for working conditions on the sites of major construction projects, TotalEnergies has tested an innovative complementary approach to the already existing audit and complaint reporting systems. In 2023, the Company implemented a pilot "workers' voice survey" within two of its large industrial projects: Tilenga in Uganda and EACOP in Tanzania. This pilot aims to directly interview workers of tier-one suppliers and above via their mobile phones in order to collect information on respect for human rights and working conditions on site. The percentage of workers participating to the recruitment survey since 2023 varied between 79% and 100% depending on the sites. Worker participation is voluntary and anonymous. Among workers volunteering to participate in the system, the response rate to regular surveys varies from 44% to 72%. TotalEnergies shares the results of these surveys with suppliers who are required to propose action plans.

DOWNSTREAM VALUE CHAIN

Since 2022, the M&S segment's assessments in service stations on human rights in the workplace are opportunities for dialogue with service station dealers. These assessments aim to identify good practices and areas for improvement. Awareness-raising sessions on human rights are held for service station dealers. In addition, M&S subsidiaries regularly host conventions in the countries where they operate, bringing together service stations dealers, in order to discuss with them and raise awareness on issues such as respect for human rights in the workplace.

5.3.2.3 Description of processes to remedy negative impacts and channels for value chain workers to voice their concerns (S2-3)

Value chain workers have access to grievance mechanisms and may report their concerns and complaints through the global Ethics line via a generic email address (ethics@totalenergies.com) as well as through other mechanisms for reporting concerns or complaints. These may be mechanisms set up by a subsidiary of the Company (such as the form on the subsidiary's website, the telephone number or the email referring to the subsidiary's sales department trained to receive and manage non-commercial complaints) or managed by third parties (such as the anonymous platform managed by a third party).

TotalEnergies ensures that these mechanisms are effective, understandable and accessible (displays, awareness-raising, language used) by all workers in the value chain, and that they are not used to impede access to judicial or extrajudicial grievance mechanisms. Retaliation will not be tolerated against anyone who submits a concern or complaint in good faith, and, similarly, TotalEnergies' suppliers are expected to allow their employees to express grievances and concerns without fear of retaliation as stated in the Fundamental Principles of Purchasing which they have signed.

As part of audits or evaluation missions of the Company's partners, TotalEnergies ensures that mechanisms for reporting concerns or complaints are made available to workers in the value chain.

5.3.2.4 Description of actions concerning material impacts on value chain workers, approaches to managing material risks and seizing material opportunities concerning value chain workers, and effectiveness of these actions (S2-4)

UPSTREAM VALUE CHAIN

On-site audits of the Company's priority suppliers sometimes identify deficiencies that could have an impact on workers in the upstream value chain. In the event of any deficiency observed, the supplier must implement an action plan to improve working conditions, as mentioned in point 5.3.2.2.

In addition, in 2024 EACOP continued implementation of the Industrial Relations Management System (IRMS) to ensure the project's workforce management and the working conditions for the contractor workforce are well respected, in particular by putting in place systems and processes to monitor dedicated indicators and complaints management. In this context, all construction contractors were trained on the IRMS requirements in Tanzania. In Uganda, the IR performance started in early 2024. The site-based Industrial Relations Supervisors (IRS, Tanzania) and Industrial Relations Officers (IRO, Uganda) are responsible for developing and implementing key systems and processes, such as site workers forums and committees, monthly reporting to the project, workers grievance mechanisms, as well as IR training, inductions, and awareness raising at the worksite to communicate on workers' rights.

IRMS enables contractors to closely monitor working conditions throughout a project, and to respond to any incident. For EACOP, it has been supplemented by the "Worker's Voice" tool, deployed on a pilot basis to monitor compliance with workers' rights for the Tilenga and EACOP projects. This system has improved working conditions, in line with the information feedback facilitated by IRMS.

IRMS is a mechanism that could be deployed on other projects.

For more information, refer to point 5.4.3. "Supplier Relationship Management" describes the Company's Sustainable program for workers in the upstream value chain.

DOWNSTREAM VALUE CHAIN

Please refer to the "Downstream value chain" section in point 5.3.2.2 "Dialogue process with value chain workers" regarding impacts. Salient human rights issues in the workplace, including forced labor, child labor, and safe and satisfactory working conditions, have been identified for several years by the Company in all its activities, including those of service stations in the M&S segment. The Company has integrated these risks into its approach to human rights, enabling it to better assess them and, where necessary, implement actions to avoid or reduce the impact on workers in the value chain. In addition, the M&S segment set up a Human Rights Committee since 2022, which ensures the proper deployment of the segment's human rights roadmap. Audits carried out by the Ethics Committee with the assistance of GoodCorporation within the M&S segment, include service stations; in this context, station dealers are systematically interviewed.

5.3.2.5 Description of targets for managing material negative impacts, promoting positive impacts and managing material risks and opportunities (S2-5)

As part of a continuous improvement process designed to address the material risks associated with workers in the value chain, the Sustainable Procurement program is a target-based scheme targeting 1,300 priority suppliers (refer to point 5.4.3.2).

5.3.3 Affected communities (S3)

5.3.3.1 Policies for affected communities (S3-1)

TotalEnergies strives to be an agent of positive change for society, and to contribute to its development through its societal actions. At a national level, the Company's activities generate value for the countries where it operates. At a local level, the Company's activities can be a source of opportunities for people but may also have an impact on the living conditions of local communities and residents.

In order to manage these actual or potential impacts, TotalEnergies has defined in its referential framework's principles which reflect the Company's values and aim at preventing impacts on human rights.

- The Company's Code of Conduct, which can be consulted on the TotalEnergies website, is intended for all employees worldwide, as well as external stakeholders (host countries, local communities, customers, suppliers, industrial and commercial partners, and shareholders) and sets out the values that guide TotalEnergies' actions, including safety and respect for others. It states TotalEnergies' compliance with the following international norms and standards:
  - the principles of the Universal Declaration of Human Rights,
  - the United Nations Guiding Principles on Business & Human Rights,
  - the principles set out in the International Labour Organization's fundamental conventions,
  - the principles of the United Nations Global Compact,
  - the OECD Guidelines for Multinational Enterprises, and
  - Voluntary Principles on Security and Human Rights or VPSHR.

  The Code of Conduct sets out the Company's commitments to its internal and external stakeholders, in particular:
  - to respect the rights of local communities by identifying, preventing and mitigating any negative impact on their environment and way of life, and remedying it where necessary,
  - systematically to seek to establish dialogue as early as possible in order to foster lasting relationships with communities, and to be attentive to their development opportunities,
  - to design and implement grievance mechanisms and corrective measures, particularly for vulnerable groups such as indigenous peoples.
- TotalEnergies published the third edition of the Human Right Briefing Paper in January 2024, describing the Company's approach to integrating Human Rights, particularly in relation to local communities. It provides concrete illustrations of the Company's actions in the field. The identification of the potential human rights impacts of the Company's activities on local communities is carried out through the Human Right Impact Assessment (HRIA) when applicable.
- The Company's Health, Safety, Environment and Quality Charter, specifies that TotalEnergies implements periodic risk assessments and appropriate risk management policies and measures for all its activities.
- The "Our 5 Levers for a Sustainable Change" program, launched in 2024 aims to strengthen the commitment of all employees to sustainable development. Lever 4, "Our Communities", promotes knowledge of local residents and stakeholders, constructive dialogue with local communities and careful handling of complaints.
- The One MAESTRO (Management and Expectations Standards Toward Robust Operations) reference framework, comprising rules, guides and manuals, specifications, video tutorials and a community of practice, accessible online to all TotalEnergies subsidiaries, and which facilitates the structuring and implementation of an operational societal approach adapted to the local specificities of territories and communities. It includes a rule dedicated to the management of stakeholders and local impacts, which describes the approach to be followed in managing the societal risks and impacts of the Company's operations.

SPECIAL PROVISIONS FOR INDIGENOUS AND TRIBAL PEOPLES

TotalEnergies, aware of the particularities of Indigenous Peoples, recognizes Convention 169 of the International Labour Organization (ILO) adopted in 1989, the 2007 United Nations Declaration on the Rights of Indigenous Peoples and various World Bank standards, including the International Finance Corporation (IFC) performance standards. A Charter of Principles and Guidelines regarding Indigenous and Tribal Peoples has been issued to conduct projects with careful consideration for their rights, while respecting applicable laws.

In addition to the application of the One MAESTRO reference framework application, and its rules regarding stakeholder dialogue and local impact management, TotalEnergies subsidiaries strive to know and understand the legitimate needs of the indigenous peoples with whom they come into contact, within the framework of the applicable legal rules and the Principles and Guidelines of the Charter, and in compliance with the principle of sovereignty of nations. In particular, when the situation so requires, TotalEnergies subsidiaries are expected to:

- consult indigenous peoples and their representatives, as recommended by ILO standards such as Convention 169, in particular,
- dialogue with communities to understand their objectives, needs, values and constraints,
- communicate planned operations to indigenous groups through presentations and local meetings,
- keep the local population informed of the project's progress,
- work with all stakeholders so that the overall impact of the project is considered positive.

In 2024, in Tanzania, EACOP has continued to engage and dialogue frequently with the four vulnerable ethnic groups self-identifying as "Indigenous Peoples" impacted by the project - the Akie, Taturu, Barabaig and Maasai. EACOP's approach with these groups included in particular:

- the implementation of the EACOP Plan for Vulnerable Ethnic Groups self-identifying as "Indigenous Peoples" signed in September 2022. This Plan sets out EACOP's commitments to reinforced engagement, impact mitigation measures adapted to the specific lifestyle of these communities, access to project benefits and capacity building of these communities;
- the signing of the Free Prior and Informed Consent (FPIC) Agreements between EACOP and the Akie Community in July 2022, with the Taturu community in March 2023 and with the Barabaig community in January 2024;
- the collaboration with 3 indigenous NGOs to reinforce engagement using more traditional methods and build the capacity of the four communities on different topics;
- the design of a specific community social investment program working with one of the indigenous NGOs and an international specialist company.

The solutions proposed in response to the expectations of local communities, particularly indigenous and tribal people, are coordinated by the societal teams that work in close collaboration with the Human Rights department and the legal, safety and environmental teams.

5.3.3.2 Process of dialogue with affected communities

TotalEnergies has structured its dialogue processes with its stakeholders at different levels of the Company, through relays within the organization, requirements included in internal reference frameworks, the deployment of a methodology for conducting local dialogue and a dedicated attention to the professionalization of the teams responsible for fostering that dialogue. This structures is designed to develop a long-term, trust-based relationship founded on principles of respect, attentiveness, constructive dialogue, proactive engagement and transparency, consistent with the legitimate need for confidentiality as appropriate.

The One MAESTRO framework provides subsidiaries a referential to conduct a stakeholder mapping and engage in a structured, ongoing process of dialogue with stakeholders to keep them informed, hear and address their concerns and expectations, report on mitigation actions or compensation, measure their satisfaction and identify ways the subsidiaries can improve their community outreach.

For Exploration & Production projects, dialogue is initiated from the exploration phase, even when TotalEnergies does not have permanent teams on site. Each subsidiary or project develops an engagement plan with stakeholders describing a process for transparent dialogue, as well as the timetable and means of ensuring its implementation. In most projects a network of community liaison officers is rolled out on the ground to provide information to and consult with neighboring communities, authorities and other local stakeholders, with a particular focus being paid to vulnerable groups. Community liaison officers speak the local languages and understand local customs. Their role is crucial for establishing good relations between TotalEnergies and its stakeholders.

For example, community liaison officers in Tanzania and Uganda, for the EACOP and Tilenga projects, observe and guide exchanges between contractors and communities affected by the project. Community liaison officers ensure that exchanges with project stakeholders is consistent with the principles of participation, respect for human rights, non-discrimination, empowerment, transparency and accountability.

In Papua New Guinea, the Exploration & Production subsidiary maintains an intense dialogue, with more than 1,213 meetings held in 2024, mainly with communities and traditional authorities neighboring its operations.

In the Integrated Power segment, a voluntary consultation and agreement process is implemented for new projects. For sites already in operation, educational visits are organized with key stakeholders, such as elected officials, farm owners and students from schools in the regions where the operations are located.

In the Refining & Chemicals segment, refineries and petrochemical sites put consultation with stakeholders at the heart of their ongoing improvement strategy, with some of them ISO 14001 certified. Local structures for dialogue have been set up, such as Community Advisory Panels in the United States and specific local committees for certain European platforms (e.g. Feyzin neighbors' conference, La Mède neighbors' meetings and Donges residential committee).Communities living around the Grandpuits refinery have been involved in the site conversion project from the outset, and are kept regularly informed of its progress.

The SRM+ ("Stakeholder Relationship Management") methodology developed by TotalEnergies is periodically deployed to assess the effectiveness of the subsidiary's actions in the fields of safety, environment, local content (employment and supply of local goods and services), and to understand the perception and expectations of local stakeholders. On this occasion, representatives of the communities affected are consulted on the quality of dialogue with the subsidiary (transparency and regularity) and on its management of negative and positive impacts. The results of these consultations are integrated into the subsidiary's decision-making processes through an action plan.

5.3.3.3 Processes to remedy negative impacts and channels for affected communities to voice their concerns

The main challenges associated with the effects of the Company's activities in terms of respect for human rights have been identified using the methodology set out in the United Nations Guiding Principles on business and human rights (UNGP) Reporting Framework relating to the "salient issues", i.e., the human rights at risk of the most severe negative impact through the Company's activities or business relationships. On this basis, the Company has identified as salient risks:

- access to land,
- right to health and to an adequate standard of living,
- and the risk to human rights in security activities in the event of disproportionate use of force.

To address these key human rights issues, the Company's stakeholder and local impact management policy is based on:

- **the analysis of the challenges and local societal context and potential impacts relating to operations:** This analysis is one of the criteria for making investment, acquisition and divestment decisions on projects presented to the Company's Risk Committee and, depending on the amounts, to the governing bodies of TotalEnergies;
- **A societal impact assessment:** when the decision is taken to develop a project, a detailed baseline study is launched to identify in advance potential affected communities, describe the local context and assesses the main socio-economic and cultural impacts, risks and opportunities in the affected area. In 2024, 82 of these studies were initiated or carried out for different projects;
- **Specific studies on human rights (as the HRIA) or cultural heritage,** in addition to the societal impact assessment, may be carried out depending on the context, with the help of independent experts;
- **The implemention and monitoring of societal actions:** Subsidiaries implement and monitor their societal strategy, with the support of the societal teams reporting to TotalEnergies' HSE division, which provide expertise for the implementation of the One MAESTRO reference framework. Societal aspects are included within the scope of the One MAESTRO audits that produce recommendations to reinforce control of operations. In addition, subsidiaries are required to conduct a self-assessment of their societal initiatives and produce an annual internal report listing the societal actions taken locally. Finally, in some cases, when projects follow IFC standards or are exposed to controversies, independent experts may be called upon to conduct external reviews of the societal actions implemented.

The mitigation hierarchy ("Avoid, Reduce, Compensate") is applied during societal impact assessments and throughout projects to manage negative impacts on communities. When applicable, if a specific human rights study is conducted, the implementation of the associated action plan falls under the responsibility of the subsidiary, with the support of the Company's human rights and societal teams. To reinforce this proactive impact management, TotalEnergies has also set up alert mechanisms enabling communities to voice their concerns about the Company's activities or its value chain actors.

Any stakeholder can contact the Ethics Committee to ask questions or report any incident involving a risk of non-compliance with the Code of Conduct through the generic email address (ethics@totalenergies.com). This system for collecting and processing of ethical complaints was set up in 2008 and then detailed in a dedicated internal rule. Reports transmitted to the Ethics Committee may in particular concern: "a serious abuse or a risk of serious abuse of human rights and fundamental freedoms" and "a serious damage or a risk of serious damage to the health or safety of persons, or to the environment". The procedure for collecting and processing of ethical complaints, available on TotalEnergies' website since December 2020, describes this mechanism which provides measures to protect whistleblowers including the non-disclosure of their identity, the confidentiality of the procedure for collecting, processing, and closing of the complaints, the prohibition of any retaliation measures against whistleblowers, subject to sanctions, and the respect for the laws and regulations applicable to the protection of personal data. The Ethics Committee oversees this system and reports annually to the Board of Directors' Governance and Ethics Committee.

In 2024, the Ethics Committee received close to 210 alerts (internal, external, anonymous) regarding compliance with the Code of Conduct, more than 60% of them concerning matters relating to human resources. All alerts received are addressed and, when necessary, recommendations are made in order to lead to the implementation of corrective actions.

The One MAESTRO reference framework requires the Company's operational subsidiaries to deploy procedures to manage implement complaint management procedures aligned with the eight effectiveness criteria of the United Nations Guiding Principles on Business and Human Rights. These provide residents and local communities with a preferential and easily accessible channel to voice their concerns and grievances and involve them in finding a solution.

At every stage of the asset life cycle, from developing a project to cessation of activity and divestment, the Company intends to provide swift responses that are acceptable to the people or organizations that have been adversely affected. As part of a continuous improvement process, analysis of all complaints received helps improve operations.

Several channels for submitting a grievance are available to affected communities: via community liaison officers for certain projects, in reception offices, during local consultations, through community mailboxes, telephone hotlines, e-mails or online forms on the website. These mechanisms guarantee the confidentiality and anonymity of complainants, when they so request, and protect them against any form of retaliation, in line with international best practice.

At the end of 2024, 100% of the Subsidiaries within the One MAESTRO scope with an operational activity, had a grievance management mechanism in place. In 2024, 1,414 grievances have been recorded, and 87% of them were resolved, representing an increase of 8.5% compared to the previous year.

Each subsidiary within the One MAESTRO scope reports the number of grievances as well as their resolution rate, using a self-assessment questionnaire. TotalEnergies' headquarter HSE Environmental & Societal teams are responsible for analyzing these questionnaires, with the aim of promoting continuous improvement of procedures. These processes are evaluated as part of the One MAESTRO management system. In addition, as part of the deployment of the SRM+ methodology, local community representatives are consulted on their perception of grievance management, its effectiveness and the transparency of the responses provided.

Finally, these grievance and alert mechanisms can also be used in the context of the implementation of the Voluntary Principles on Security and Human Rights. In the event of an incident, a reporting process requires the Security division to be informed and an internal analysis to be performed to establish the facts, resulting in a final report. This allows the Subsidiary to re-assess its VPSHR process and to take measures to reduce the risk of incidents.

5.3.3.4 Actions to manage material impacts and opportunities for affected communities

Human rights of local communities whose territories are affected by the Company's activities

The initial studies carried out for a project may lead TotalEnergies to review the location of its assets in order to avoid or minimize impacts on land use and cultural heritage.

Particular attention is paid to the following points:

- access to land for people affected by the project is maintained or compensated (including through replacement land), and that their livelihoods are restored;
- the use of locally provided resources by operations does not have a negative impact on local populations in terms of health and on their right to an adequate standard of living, including a healthy environment, access to water and sanitation.

The subsidiaries manage impacts on affected communities that cannot be avoided in relation to physical displacement or livelihood. The compensations that may be granted are accompanied by programs to restore livelihoods, developed in consultation with the communities concerned.

In Uganda, the Tilenga project implements livelihood restoration programs for several years after land acquisition, or until livelihoods have been fully restored. In terms of compensation for land acquisition, people affected may choose between monetary compensation based on a rate schedule approved by the Uganda Land Administration office, or in kind compensation in the form of a new house (for the main residence) or new land.

With regard to the management of impacts linked to cultural or religious heritage, TotalEnergies may use specialists to carry out specific studies prior to new operations. For example, in 2024:

- in Bolivia, the Exploration & Production subsidiary continued with the implementation of the archaeological mitigation plan through the construction of a Guarani Cultural Interpretation Center which is expected to be used to showcase the archaeological heritage discovered during the construction of the Incahuasi Power Plant. The content of the mitigation plan, as well as details of the design of the installations, are the result of a co-construction process with the Guarani indigenous people of the Alto Parapeti territory;
- in South Africa and Namibia, following specific impact studies on cultural heritage carried out in 2022 (in addition to regulatory environmental and social impact assessments), a program to understand and value this social and cultural heritage (The Blue Values Journey) continued in 2024 in collaboration with Nelson Mandela University, with the aim of promoting its conservation and transmission.

Human rights in security-related activities

In certain situations, intervention by government security forces or private security companies may be necessary to protect TotalEnergies' staff and assets. To prevent the risk of disproportionate use of force, TotalEnergies is committed to implementing the Voluntary Principles on Security and Human Rights.

When government security forces are deployed to protect the Company's personnel and facilities, a dialogue is maintained with national or regional authorities to raise awareness of these principles and encourage them to adhere to them through specific protocols. The Company promotes these principles and requirements among the private security companies contracted as part of its activities, for whom training is provided. In addition, TotalEnergies regularly organizes training sessions and awareness campaigns for its employees, in particular to encourage them to report any safety and human rights incidents.

The contribution of the subsidiaries to the annual "ADRA Campaign" (Auto-Diagnostic and Risk-Assessment) enables the VPSHR teams of the Security division to assist them with improvement actions throughout the year. The self-assessment and risk analysis tools in this field were revised in 2022 to make them more adaptable to the local situation. In 2024, these tools were rolled out in the subsidiaries in 31 countries. Specific awareness-raising work on compliance and deployment in the entities considered to be most at risk is carried out annually.

In certain specific contexts, where security risks are high, notably countries affected by conflict or internal unrest, specific analyses are carried out to understand the underlying dynamics of a conflict context and to deduce the impact on our activities and communities. By integrating these analyses, it is possible to anticipate the impact, and adapt and reinforce measures to prevent and mitigate the risk of human rights violations, in line with the Voluntary Principles on Security and Human Rights.

Health and safety of local communities

TotalEnergies has a policy to prevent the occurrence of a major industrial accidents, integrated into its One MAESTRO reference framework. This policy includes a risk analysis for each site operated, based on potential accident scenarios. For each situation, preventive or mitigating measures are put in place. These risk analysis are regularly updated. In particular, TotalEnergies is stepping up the training of local teams to ensure that operations comply with the strictest safety standards, while minimizing the impact on neighboring communities.

The Company's reference framework also provides a process to manage the integrity of facilities, which includes, for example, preventive maintenance, facility inspections, identification of safety critical equipment for special monitoring, management of anomalies and downgraded situations, as well as regular audits. Operations teams receive regular training in the management of operations in the form of companionship or in-person trainings. These controls and their frequency are reinforced in areas with high human or environmental risks identified by the risk analysis.

Noise and dust emissions and other potential impacts may also have consequences for the livelihood of neighboring communities. Specific infrastructures can be built to limit noise emissions, while reinforced control mechanisms are implemented in areas identified as particularly sensitive.

Positive impact on local development

TotalEnergies is committed to promoting local employment and subcontracting wherever possible, while respecting its operational constraints. In addition to jobs and the local content of projects, TotalEnergies supports the education and professional integration of young people, the preservation of cultural heritage, access to water, to health and road safety, all of which help to reduce inequalities. In 2024, more than 1,500 initiatives were supported in this field.

Commitment to the professional integration of young people in countries where the company operates

TotalEnergies is committed to the employment of young people, thus contributing concretely to their professional integration and strengthening their employability. Considering it essential to address this issue as early as possible in the educational process to maximize its impact, targeted actions are put in place and adapted to the specificity of the country contexts where they are deployed.

In the Africa Marketing & Services Department, the Young graduate program has been in existence since 2014 and offers approximately 80 young African graduates aged up to 26 an 18-month professional placement each year. The program is divided into two phases: a 6-month work experience at the subsidiary in the participant's home country, followed by a 12-month assignment abroad. Since 2014, more than 600 young people have taken this opportunity to improve their employability.

The Exploration & Production segment's international scholarship programs contribute both to the promotion of French higher education around the world and to the development of the skills of students from host countries. The beneficiaries of international scholarships, selected in their country of origin by the TotalEnergies subsidiary concerned, join multi-year academic programs in France, from bachelor level to PhD in highly diverse fields of study. In 2024, TotalEnergies financed and supported 136 scholarship students from 10 different countries (Angola, Azerbaijan, Congo,EAU, Iraq, Mozambique, Nigeria, Uganda, Rwanda, Sao Tome, etc.).

Fair, multi-energy energy transition

TotalEnergies also supports producer countries in making a just energy transition, by implementing programs to diversify energy sources and reduce dependence on fossil fuels, in particular with the ambition of giving 100 M people in Africa and India access to clean cooking by 2030 (refer to point 5.3.4 (S4)).

Total Energies' ambition is to provide accessible energy to as many people as possible. The "Access to Energy" program, launched in 2011 by TotalEnergies, aims to bring a solar lighting solution to 25 M people without access to energy by 2025. This objective has been achieved a year ahead of schedule, since the end of 2024, 26 M people, particularly in Africa, had seen their quality of life improve thanks to the 5.7 M solar lamps distributed via our service station network, our distributors and partners, as well as the voluntary actions of the Company's branches.

In **France**, since 2022, Think Tanks have provided an opportunity for dialogue with stakeholders on regional issues related to energy and the energy transition (acceptability of renewable energies, skills, sobriety, technological challenges, energy choices, just transition...). They brought together 800 participants and produced recommendations and actions that were published by region and shared with stakeholders.To support local communities in their energy transition and economic development, several partnerships have been set up with local authorities. In 2024, four new partnership agreements were signed with the Départements de France Association, the Association Nationale des Elus des Littoraux, the Association des Maires Ruraux de France and the Institut des Hautes Etudes des Mondes Ruraux.

Accompanying the reconversion of the Company's industrial sites, in a spirit of fair transition and support for the energy transition, is another aspect of its responsible involvement in local communities. This conversion takes into account market trends, in order to offer low-carbon products to our customers and partners and maintain jobs in the economic areas concerned. Subcontractors at the sites concerned are being supported by TotalEnergies to help them adapt to the transition in their businesses and the skills of their employees. A Voluntary Agreement for Economic and Social Development (CVDES) is systematically implemented to support the site and its ecosystem in this phase of change (subcontractors, stakeholders, network of small local businesses, etc.). In this way, TotalEnergies is reaffirming its responsibility to the employment areas in which it operates, with a commitment to a just transition and to maintaining a long-term industrial base.

- At the **Grandpuits** platform, TotalEnergies is supporting the project to convert the site to a "zero-oil" platform announced in September 2020, representing a planned investment of over €500 M. This will include units for the production of more sustainable aviation fuels and plastics recycling, as well as photovoltaic electricity generation and battery storage. The CVDES signed between the public authorities and TotalEnergies, with a budget of almost €5 M dedicated to supporting the Grandpuits and Gargenville employment areas, came to an end in 2024, with 5 third-party projects supported and 72 jobs programmed.
- On the **Lacq** platform, a specific TotalEnergies unit researches and examine third-party industrial projects that could be set up there, in partnership with the Nouvelle-Aquitaine region, the Pau-Béarn Chamber of Commerce and Industry (CCI), the Chemparc public interest group, the Lacq-Orthez local authority and Sobegi. The green chemistry unit supported by Alpha Chitin (investment of €14 M and 20 jobs created in the first phase) has been operational since 2023. With its project to recycle rare earths from permanent magnets used in electric motors and to separate heavy rare earths, Carester plans to invest €180 M and create over 90 jobs in the Lacq basin. The coordinated efforts of local players, including TotalEnergies, have enabled the creation of new, forward-looking sectors linked to the energy transition, turning this site into the industry of the future.

In addition, TotalEnergies supports the creation and maintenance of sustainable jobs in France by granting loans to SMEs, particularly those with projects contributing to the ecological and energy transition. Between 2022 and 2024, loans have been granted to 394 SME projects for a total amount of €14.8 M and over 10,000 jobs supported.

5.3.3.5 Targets for managing material negative impacts, promoting positive impacts and managing material risks and opportunities

In order to meet the expectations and needs of affected communities as closely as possible, targets adapted to the local legal, economic and social context can be defined by the Company's subsidiaries to maximize the socio-economic benefits of their projects in host countries. These targets may include:

- the number of local jobs created,
- the share of contracts allocated to local suppliers,
- the number of hours of training provided,
- the amount and type of investments made in socio-economic development projects.

These targets are monitored by the subsidiaries and are the subject of communication and discussion with all relevant stakeholders (authorities, business and local communities).

The Tilenga and EACOP projects have developed of a detailed national and local content plan covering local employment, local procurement of goods and services, and local skills development. These plans have been approved by the national authorities. In terms of investment, the plan is to spend $1.2 billion with local contractors during the construction phase. In terms of jobs, another strong expectation, these projects aim to create nearly 18,000 direct jobs and 60,000 indirect jobs during the construction phase. Priority is given to local communities and Ugandan and Tanzanian nationals for these jobs.

In terms of training, these projects aim to provide three million hours of training to local employees in Uganda and Tanzania. Approximately 40% of the technical skills acquired through these training courses can be used in other industrial projects (e.g. truck driving, welding, etc.). 17,674 direct jobs has already been created at the end of 2024 on both projects. $1.1 billion were spent on Ugandan and Tanzanian companies. In terms of training 1,55 million hours had been provided by the end of 2024.

5.3.4 Consumers and end-users (S4)

RESPONSIBLE BUSINESS PRACTICES

TotalEnergies' Code of Conduct sets out the guiding principles and commitments relating to the relationship with its customers: to provide quality products and services, always seeking to deliver the best performance at a competitive price, in a just transition approach. As such, the Company aims to constantly monitor, evaluate and improve its products, services, technology and processes, in order to ensure quality, safety, energy efficiency and innovation at every stage of the development, production and distribution processes while placing customers' needs at the heart of its concerns.

These principles form the basis of the Company's business policies, defined in compliance with applicable regulations, and are underpinned by a set of procedures. This approach is designed to help build trusting relationships with customers and minimize reputational and image risks.

To be able to identify, assess, manage and, if necessary, repair any material impact on consumers and end-users, the company has set up various channels for dialogue with its customers, both private and professional:

- individuals can contact TotalEnergies' customer service teams to request any useful information, receive administrative support or raise a complaint, as well as to exercise their rights with regard to the processing of their personal data. Teams can be reached by telephone, e-mail, post or via social networks. In France, channels dedicated to private customers are also accessible to the deaf and hearing-impaired;
- key account professionals are supported by a dedicated account manager, enabling constant dialogue with the company. For over 300 key account customers from 11 different sectors, the dedicated OneB2B Solutions organization is set to help them achieve their ambitions by offering solutions tailored to their needs.

The sales and operations functions from the Company's subsidiaries are responsible for customer relationship management, and as such, manage interactions with customers from prospecting through the entire contractual relationship.

Actions and action plans are deployed on a daily basis within the Company and its subsidiaries to respond to any complaints from our customers or external stakeholders:

- claims are analyzed to identify their causes,
- concrete actions are then taken to treat the cause and verify the corrective action taken,
- the customer is then contacted, and
- a specific treatment such as a commercial gesture can be applied in addition to tracking traceability in the customer relationship management platform.

Customer interactions are tracked through customer relationship management tools, allowing to trace any claims raised. Requests or complaints are addressed orally and/or in writing, as appropriate. Their processing and the customers' satisfaction are regularly reviewed by the subsidiaries' management committees through a number of indicators. More generally, customer satisfaction is measured by means of awareness and/or satisfaction barometers: a worldwide B2B satisfaction survey conducted every two years and regular consumer surveys.

In France, to meet these reputational and image challenges, these procedures are applied at different levels of the customer relationship:

- with business introducer/comparator partners to gain access to new customers,
- within contracts, with the addition of a paragraph relating to the principles set out in international conventions such as the Internation Labour Organization,
- via the implementation of a quality control system based on regular listening and,
- monitoring customer complaints through bilateral meetings twice a year with the French national energy ombudsman.

In its relations with its customers, as with all other stakeholders, TotalEnergies is committed to respecting internationally recognized human rights, in particular the United Nations Guiding Principles on Business and Human Rights (UNGPs), the principles set out in the fundamental conventions of the International Labour Organization and the OECD Guidelines for Multinational Enterprises. These commitments apply, in particular, to the safety of our products sold and to our customers' personal data.

PRODUCTS SAFETY

Without taking into consideration specific precautions, some of the petroleum or chemical products marketed by TotalEnergies pose potential consumer health and safety risks. Respecting regulatory requirements is the main measure to limit risk throughout the life cycle of these products.

TotalEnergies has also defined the minimum requirements to be observed in order to market its petroleum or chemical products worldwide with the goal of reducing potential risks to consumer health and the environment. These include the identification and assessment of the risks inherent to these products and their use, as well as providing information to consumers. The material safety data sheets that accompany the petroleum or chemical products marketed by the Company, including those not classified as dangerous, available in at least one of the languages used in the relevant country, as well as product labels, are two key sources of information.

The implementation of these requirements is monitored by teams of regulatory experts, toxicologists and ecotoxicologists within the Refining & Chemicals and Marketing & Services segments of the Company. These teams' assignment is the preparation of safety documentation for the marketed petroleum and chemical products so that they correspond to the applications for which they are intended and to the applicable regulations. These teams therefore draw up the material safety data sheets and compliance certificates (contact with food, toys, pharmaceutical packaging, etc.) and carry out REACH registration[1] (or equivalent in other geographical regions) if necessary. Thanks to their scientific and regulatory monitoring, they support the development of future commercial products and monitor updates of safety data sheets, certificates and registrations so that they remain compliant with regulations in force.

Governance of the process is rounded off within the Company's business units or subsidiaries of the Refining & Chemicals and Marketing & Services segments with the designation of a Product Safety Manager, who ensures compliance during the market release of his or her entity's petroleum or chemical products. The networks of product managers are coordinated by the Company's specialist teams either directly or via an intermediate regional level in the case of the Marketing & Services segment.

The safety data sheets for oil and gas produced by subsidiaries of the Exploration & Production segment are produced by the Marketing & Services expertise center. The compliance of the go-to-market process of these products is under the subsidiary's responsibility.

Through its health, safety and environment quality charter, the Company is committed to maintaining a quality management system to ensure that the products and services it provides to customers comply with current regulations and specifications, and meet its stated performance commitments. In its directive on minimum requirements for placing products on the market, the company describes the approach to be implemented for marketing products:

- identify and assess hazards inherent in products and their uses,
- inform customers and users of these hazards and of the prevention and protection measures to be applied, by means of safety data sheets and product labeling, the two key information elements.

The Company assesses the impact of its products, throughout their life cycle, on the health of customers, users and any other people involved.

The quality of the products and services marketed is the responsibility of the subsidiary vis-à-vis its customers. In the event of a malfunction, the subsidiary which receives a customer complaint or a remark from a competent authority, or which detects an anomaly, is responsible for its follow-up: it records it, ensures that it is processed and checks that corrective actions are effectively implemented.

Consumer information is provided by the labels affixed to our products, the content of which is defined by the chemical regulations of the country of sale concerned. In the European Union, this is the Classification, Labeling and Packaging (CLP) regulation[2]. This regulation is the European version of the United Nations Globally Harmonized System (GHS) for chemicals. This system is used in other regulations around the world. For countries with no specific regulations, TotalEnergies applies the GHS. Consumers can contact customer service if they have any questions about using our products. The contact number can be found, for example, on the packaging of our lubricants.

PERSONAL DATA

TotalEnergies ensures the confidentiality of the data entrusted to it by its customers, in compliance with personal data regulations. As part of its commercial activities, TotalEnergies processes personal data of customers, both private individuals and professionals. Such processing of personal data is carried out respecting the rights of the individuals concerned, to ensure, in particular, their security and confidentiality.

The affiliate processing the data can be found liable[3] in case of non-compliance with regulations, in addition to damage to its image and of the Company's, loss of confidence on the part of customers or other stakeholders.

To face these challenges, the Company has set up a Personal Data Protection program based on Binding Corporate Rules (BCR) approved by supervisory authorities. These BCRs establish governance for the personal data protection by setting up a dedicated network and creating a set of internal rules that each signing entity is required to comply with. These internal rules ensure a consistent level of protection within the Company and legally regulate intra-group transfers of personal data outside the EEA[4] in compliance with applicable regulations.

Compliance with the Company's data protection internal rules is verified during a Privacy By Design analysis for each new IT project. This analysis incorporates, from the design stage of a project, measures aimed at protecting personal data throughout their processing. In the event of high risks for the rights and freedoms of individuals, a Data Protection Impact Assessment (DPIA) is carried out, and additional measures are implemented to mitigate the risks.

In the event of a personal data breach[5], the resulting risks to the rights and freedoms of individuals are assessed. The supervisory authority is notified, and individuals are informed, in accordance with applicable regulations, when this breach results in a high risk to their rights and freedoms.

Furthermore, awareness-raising actions are regularly carried out and an e-learning module dedicated to personal data protection is made available to employees.

In addition, the Company implements a cybersecurity risk management program designed to protect the confidentiality, integrity and availability of its information systems as well as its critical data, including customers' data. TotalEnergies designs and evaluates its program based on the National Institute of Standards and Technology's Cybersecurity Framework (NIST CSF), the ISO 27001 standard for information security management systems (ISMS), and communicates with the French information security agency (ANSSI) for certain scopes of action. The Company's cybersecurity risk management program is integrated into TotalEnergies' overall risk management program, and relies on common methods, reporting channels and governance processes that apply to other risk areas such as legal, compliance, strategic, operational and financial risk.

(1) European Parliament regulation Registration, Evaluation, Authorization and restriction of CHemicals (REACH).
(2) CLP: Classification Labeling and Packaging. Transposition by the European Union of the UNGHS (United Nations Globally Harmonized System) via regulation 1272/2008/EC.
(3) According to Article 83 of Regulation (EU) 2016/679 of April 27, 2016, penalties can amount to up to 20 million euros or up to 4% of the global annual turnover.
(4) The EEA includes the EU member states and Iceland, Norway, and Liechtenstein.
(5) Violation of security resulting in accidental or unlawfuul destruction, loss, alteration, unauthorized disclosure or unauthorized access to personal data transmitted, stored or otherwise processed.

The key elements of the cybersecurity risk management program include, but are not limited to:

- risk assessments,
- a cybersecurity team primarily responsible for managing risk assessment processes, cybersecurity controls, and response to cybersecurity incidents,
- cybersecurity training and awareness for the Company's employees,
- a cybersecurity incident response plan including procedures, and
- a risk management process for key service providers.

In addition to these key elements, the Company develops and relays rules to be followed everywhere regarding cybersecurity. It raises awareness and trains its employees on cybersecurity through various initiatives, such as mandatory training, courses tailored to different profiles, and guidelines for managers. Regular events like phishing awareness campaigns or Cybersecurity Month organized by the Company in October allow all employees to review best practices and identify cyber correspondents.

The Audit Committee oversees the implementation of the cybersecurity risk management program. The Committee reviews the cybersecurity risk control system and the deployment of the multi-year program that covers the Company's information systems. The Committee is informed of the results of audit missions conducted, self-assessments, and, if necessary, any significant cybersecurity incidents. The Committee periodically reports on its activities, including those related to cybersecurity, to the Board of Directors.

ACCESS TO MORE SUSTAINABLE ENERGY (OR JUST TRANSITION)

TotalEnergies aims to address the challenges of the energy transition by providing energy to the less developed countries, meeting the needs of their growing populations aspiring to improve their standard of living. To achieve this, the Company supports its customers' transition towards the consumption of low-carbon and affordable energy.

To this end, TotalEnergies announced at the Clean Cooking Summit organized by the International Energy Agency (IEA) in Paris in 2024, its ambition to give 100 million people in Africa and India access to clean cooking by 2030. To achieve this, TotalEnergies plans on investing over $400 million in the development of LPG (Liquefied Petroleum Gas) for cooking. In addition, to make clean cooking affordable to as many people as possible, the company will be developing the use of digital pay-as-you-cook technologies, which enable customers to pay only as they use the LPG cylinder, rather than having to advance the full value of the cylinder volume. Replacing wood and charcoal with LPG (even though it is a fossil fuel) in the form of bottled gas for clean cooking has a positive effect on human health, the environment and the economy. LPG is more efficient for cooking and emits less CO_2 than charcoal. It improves air quality, reducing the risk of respiratory complications and cardiovascular disease. It also helps reduce some of the negative impacts of traditional biomass use, notably for women (time saved, facilitating access to education, employment or entrepreneurship, and to financial autonomy) or on the environment (deforestation).

TotalEnergies has also launched initiatives to support those who could find themselves in a difficult position as a result of this transition, for example because the cost of this transition would place them in a precarious situation energy-wise.

In France, TotalEnergies Electricité et Gaz has set up a number of initiatives to combat fuel poverty and help customers reduce their energy consumption, and therefore their energy bills. Similarly, the Company has introduced a cap on fuel prices at the pump at €1.99/l in 2024. Since September 2024, TotalEnergies' retail Electricité et Gaz customers in France have been able to benefit from a capped price of €1.94/l instead of €1.99/l for all fuels at filling stations.

5.4 Governance information

5.4.1 Business conduct policy and corporate culture (G1-1)

5.4.1.1 Five values rooted in our daily lives

TotalEnergies operates in many different countries with disparate and complex economic, social and cultural environments, where governments and civil society have especially high expectations of the Company as an exemplar. Within this context, TotalEnergies strives to act as a vehicle for positive change in society by helping to promote ethical principles in every region where it operates.

The Company's corporate culture is rooted in five values: Safety, Respect for Each Other, Pioneering Spirit, Stand Together, and Performance-Minded.

These five values guide daily actions and relations of the Company with its stakeholders. They require all TotalEnergies employees to behave in an exemplary manner, priority in terms of safety, security, health, environment, integrity in all its forms (including the fight against corruption, fraud, and anti-competitive practices), and human rights.

It is through the employees' adherence to these values and the Code of Conduct that the Company intends to build profitable and sustainable growth for itself and its stakeholders.

TotalEnergies conducts an internal opinion survey (TotalEnergies Survey) every two years among employees to gather their opinions and expectations regarding, in particular, their perception of the Company, both locally and at the Company level. Since 2023, an additional survey (TotalEnergies Pulse Survey)[1] has been conducted every other year to measure employee engagement and well-being annually.

The latest edition of the 2024 survey (TotalEnergies Survey) was conducted among more than 90,000 employees[2] across 122 countries. The results[3] indicate that employees have an engagement rate of 83.7%, with 90% expressing pride in working for TotalEnergies. These high results are an improvement compared to the survey conducted in 2022.

(1) Excluding Hutchinson.
(2) Scope TotalEnergies and Hutchinson.
(3) Hutchinson was the subject of a separate survey not consolidated in the presented data.

5.4.1.2 A collective ethics

The Company considers adopting ethical conduct essential to its operational activities with its internal and external stakeholders, its reputation, and its performance.

The Company's Code of Conduct affirms the collective ethics of TotalEnergies. Distributed to all employees, it can be downloaded in more than fifteen languages. The Code of Conduct, which can be accessed on TotalEnergies' website, is aimed at all employees and external stakeholders (host countries, local communities, customers, suppliers, industrial and commercial partners and shareholders). It specifies the five values that guide TotalEnergies' actions and the Company's commitments to its internal and external stakeholders.

Each employee is responsible for knowing it, practicing it daily, and being its ambassador to all those who work with and for the Company. Every new employee is required to read it when joining the Company (and must certify having done so).

The Code of Conduct was the theme of the 2024 Business Ethics Day titled "Code of Conduct: the essentials".

The principles of the Code of Conduct cover safety, integrity, issues related to fraud and corruption, respect for human rights, health, and the environment. It maintains a policy of zero tolerance for fraud of any kind, particularly bribery and corruption, influence peddling and violations of antitrust law. It also reaffirms that respect for human rights is a collective and individual requirement and sets out TotalEnergies' commitment to comply with the following international norms and standards:

- the principles of the Universal Declaration of Human Rights,
- the United Nations Guiding Principles on Business and Human Rights,
- the principles set out in the Fundamental Conventions of the International Labour Organization (ILO),
- the principles of the United Nations Global Compact,
- the OECD Guidelines for Multinational Enterprises, and
- the Voluntary Principles on Security and Human Rights (VPSHR).

The principles of the Code of Conduct are set forth in a number of guides, such as the Business Integrity Guide and the Human Rights Guide. These documents distributed to employees and available on the intranet, mention the principles of individual behavior that all employees must respect in the countries where TotalEnergies is present. Similarly, a Financial Code of Ethics sets forth the obligations applicable to the Chairman and Chief Executive Officer, the Chief Financial Officer, the Vice President of the Corporate Accounting Division, and the financial and accounting officers of the principal activities of TotalEnergies.

As priority of General Management, compliance programs are deployed, particularly for the prevention of corruption, fraud, and infringement of competition law, as well as for compliance with applicable economic sanctions. The programs covering anti-corruption, anti-fraud, and compliance with economic sanctions include reporting and control actions (compliance reviews and audits). TotalEnergies' anti-corruption program is more precisely described in point 5.4.2.1.

The Ethics Committee assures compliance with the Code of Conduct and ensures its proper implementation. It is assisted in its work by the relevant departments, as well as by a network of local Ethics Officers.

Ethics assessments are carried out by third parties to verify the application of the Code of Conduct, and the Chairman of the Company's Ethics Committee monitors the results.

The Chairperson of the Ethics Committee, who reports to the Chairman and Chief Executive Officer of TotalEnergies SE, submits an annual Ethics report to the Governance and Ethics Committee of the Board of Directors.

The members of the Ethics Committee are subject to a confidentiality obligation. The Committee ensures the confidentiality of the complaints, which can only be lifted with the agreement of the complainant.

5.4.1.3 Procedure for collecting and processing whistleblowing reports

The system for collecting and processing reports implemented by TotalEnergies as part of the Code of Conduct allows for the detection of behaviors contrary to business ethics, their processing, and remediation.

To submit a report, each employee can use the various existing channels according to what they deem most appropriate: any manager, managers in charge of human resources, Compliance Officers, Ethics Officers, or the Ethics Committee by writing to ethics@totalenergies.com.

Because ethics is everybody's responsibility, any third party can also contact the TotalEnergies Ethics Committee if they need advice, have a question, or want to report any matter that poses an ethical risk via the dedicated email address mentioned above, which is accessible from the Company's website.

TotalEnergies has voluntarily opened different channels to encourage and facilitate the reporting of concerns.

Every report is processed within a predefined framework, from its receipt to the measures considered or taken to address, if necessary, the subject of the report.

TotalEnergies guarantees that no disciplinary sanction, nor any direct or indirect discriminatory retaliatory, measure, may be taken against the whistleblower, as long as it is in good faith, and this even if the facts subsequently turn out to be inaccurate or unfounded and/or do not give rise to any proceeding or sanction.

The system for collecting and processing reports guarantees, in particular, confidentiality, the absence of conflict of interest, as well as the preservation and protection of personal data.

TotalEnergies uses several communication channels to inform its employees about the procedures for collecting and processing reports:

- awareness-raising actions, for example, during the Business Ethics Day, whose 2023 edition was dedicated to this topic, or through training sessions;
- poster campaigns;
- The Company's intranet, which provides access to internal documents dedicated to ethics and compliance, including the Code of Conduct, which repeatedly mentions the Company' system for collecting and processing reports and includes a message from the Chairman and Chief Executive Officer reminding that in case of suspicion of a violation of the Code of Conduct, the Ethics Committee is available via the address ethics@totalenergies.com.

The Company ensures the dissemination and promotion of its ethical approach to its stakeholders by making available on its website the information and documents specifying its commitment and the actions implemented.

5.4.1.4 Awareness-raising and training on ethics and business conduct

TotalEnergies conducts awareness and training initiatives for employees on issues related to ethics.

A dedicated section on ethics on the Company's intranet provides employees with various materials and information documents on understanding ethical issues, the role and functioning of the Ethics Committee.

A mandatory e-learning module ("Ethics, what to know and what to do") for all employees provides keys to understanding ethics and its issues and describes the Company's commitments through practical cases.

In addition to this module, webinars are organized annually for Ethics Officers to maintain a network for exchanging information and best practices. A seminar is also organized every two years with the same objective.

Ethics sessions are integrated into training programs for target populations such as new recruits, executives, and new subsidiary directors.

In terms of prevention and fight against fraud, TotalEnergies offers an online training open to all employees and mandatory for defined target populations. It covers the challenges of fraud detection worldwide, the concept of fraud, the internal framework, and the Company's organization to fight against fraud. Training on anti-corruption is presented in point 5.4.2.

5.4.2 The fight against corruption (G1-3 and G1-4)

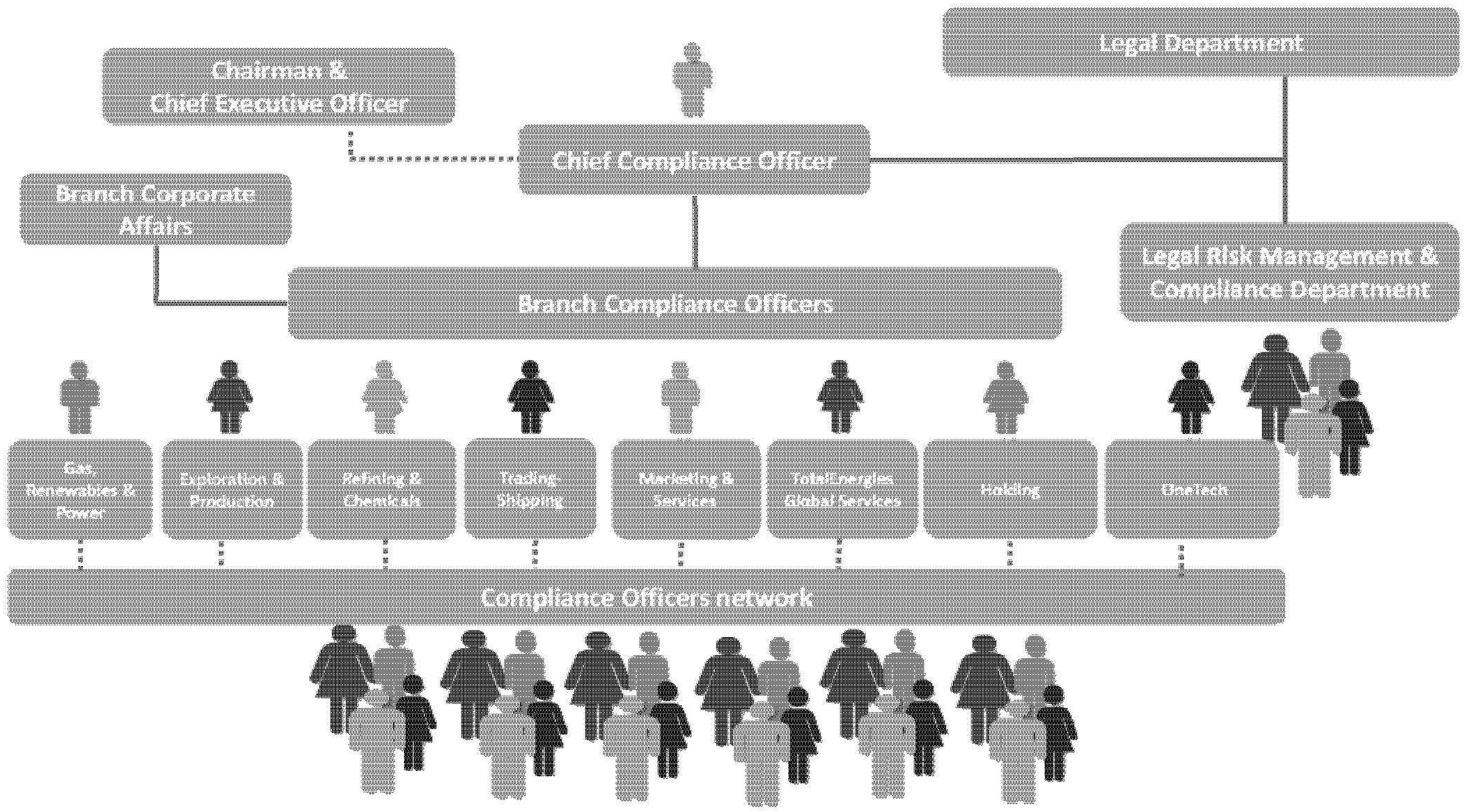
5.4.2.1 Prevention and detection of corruption (G1-3)

A. INTERNAL ANTI-CORRUPTION PROCEDURES

The Company rejects corruption in all its forms, whether public or private, active or passive.

TotalEnergies has set up an anti-corruption compliance program based on the principle of "zero tolerance". It is drawn up, promoted, and monitored by a dedicated organization acting at the Company and business segment levels, namely: the Compliance and Legal Risk Management department, headed by the Chief Compliance Officer, and the Branch Compliance Officers. They coordinate a network of approximately 380 Compliance Officers in charge of rolling out and running the program at the subsidiary or entity level.

This structured organization lies in close proximity to operational activities while having its own dedicated reporting line.



In 2016, the American authorities deemed this compliance program to be appropriate, and in 2022, the French Anti-Corruption Agency confirmed the quality and maturity of the Company's program, also made recommendations for its improvement. The implementation of a dedicated action plan was finalized in 2023.

The compliance program applies to all companies controlled by the Company, in accordance with their respective decision-making rules and subject to the legal and regulatory provisions applicable locally.

An Anti-Corruption Compliance Directive recaps the main principles and organizes the roll-out of the anti-corruption program. It is complemented by rules that deal with more specific subjects.

Corruption risk mapping

The corruption risk mapping is carried out at two-tier mapping: that of entities coordinated by the Compliance Officer and that of business segments coordinated by the Branch Compliance Officers. At the business segment level, the assessment needs to examine the main types of risk (purchasing, sales, conflicts of interest, gifts and hospitality, human resources, representatives dealing with public officials, mergers and acquisitions, joint-ventures, donations and sponsoring, and influence peddling). This two-tier analysis is aimed at establishing action plans that are appropriate to the risks identified and the realities on the ground.

The Chief Compliance Officer presented the synthesis of the branch risk mappings to the TotalEnergies Risk Management Committee (TRMC) in December 2023 and then to the Executive Committee in 2024.

Due diligence

As part of its anti-corruption compliance program, the internal rule defines a *due diligence* process to evaluate third parties with whom TotalEnergies has contractual relationships and to prevent corruption-related risks.

Due diligence involves collecting information, identifying any risks of corruption and taking the appropriate mitigation measures. This process is performed by the relevant business people with support from their Compliance Officer, who may call on the Branch Compliance Officer. Particular attention is paid to representatives (agents or others) dealing with public officials for whom the applicable internal rule specifically provides for mandatory due diligence and monitoring by operational staff of contractual relationship with such third parties, which may include the verification of invoices, the control of activity reports or the organization of audits.

Reports

The rule on the collection of Integrity alert, associated with the one adopted by the Ethics Committee concerning the collection and processing of reports (refer to point 5.4.1.3 concerning whistleblower protection), covers all situations or behaviors likely to be contrary to the Company's Code of Conduct and highlights the enhanced protection granted to whistleblowers.

Internal investigations are conducted within a predefined framework and implemented in compliance with applicable local laws.

Controls

TotalEnergies has implemented a control and evaluation system for the anti-corruption compliance program, which is deployed at three independent and complementary levels (operational entities, the central compliance team, and internal audit). The main objective of this system is to monitor and evaluate the implementation of the anti-corruption compliance program in light of the risks to which the Company is exposed in the course of its activities.

The communication channels for this system are similar to those for the procedures for collecting and processing reports (refer to point 5.4.1.3).

B. ANTI-CORRUPTION TRAINING

Awareness and training actions are carried out toward all employees. The training system implemented aims to broadly remind the commitments made by the Company in the fight against corruption and to ensure that employees understand and embrace the associated issues. It is based on a set of online anti-corruption training courses consisting of a common base supplemented by more specific training for exposed populations.

In 2022, the Executive Committee reviewed all of the online training courses available, including those on anti-corruption and anti-fraud compliance, and determined the functions deemed to be the most exposed to the risk of corruption.

Common base: online training open to employees

An online training course is open to all employees and is mandatory for target populations. It is based on the assignment of a profile specific to each learner (from beginners to experts), which is determined on the basis of their answers to the questions asked in the introduction to the training course. The profile specific to each learner then allows them to follow the modules best suited to their needs. This training covers various themes of the Company's compliance program. In 2024, approximately 15,200 employees completed this training.

Training for exposed populations to corruption risk

Since 2023, webinars have been provided to the populations within the eight business functions identified by the Executive Committee as the most exposed to the risk of corruption (such as purchasing or human resources). All (100%) of the most exposed populations are covered by these training sessions. They consist of a common part related to anti-corruption procedures, including report, and a specific part (case study) adapted to the targeted function.

Training for the compliance network

A dedicated online training course is open to Compliance Officers and aims to let them know the legal framework of the fight against corruption, recognize situations of corruption, and acquire the right reflexes to act within the applicable legal framework.

In 2024, the Compliance function also organized two two-day face-to-face training sessions for newly appointed Compliance Officers, which were also attended by Branch Compliance Officers and the Chief Compliance Officer, during which the Company's anti-corruption procedures were detailed.

Several additional training sessions are organized each year by the segments, both online and in person, for their network of Compliance Officers.

C. COMMUNICATION OF REPORTING RESULTS

The consolidated data from reporting, which reflects the results of the implemented policies, is presented once a year to the Executive Committee as well as to the Governance and Ethics Committee of the Board of Directors. This presentation provides an opportunity to report the result of the actions undertaken at the very highest level and to review the roadmap aligned with the identified areas for improvement.

5.4.2.2 Case of corruption (G1-4)

In 2024, TotalEnergies was not subject to any convictions and did not receive any fines for violations of anti-corruption legislation and acts of corruption.

The Company processed reports and proven cases of corruption, and in accordance with the "zero tolerance" principle, proven cases were subject to disciplinary sanctions and remediation measures.

5.4.3 Supplier relationship management (G1-2)

Present in about 120 countries, the Company works with a network of over 100,000 suppliers of goods and services. In 2024, the Company's purchases of goods and services (excluding petroleum products and vessel chartering by Trading & Shipping) represented approximately $31 billion worldwide. The allocation of purchasing expenditures at Company level is approximately 25% for goods (products, materials, etc.) and 75% for services (such as consulting services, materials supply operations, transportation, etc.). TotalEnergies' activities generate hundreds of thousands of direct and indirect jobs worldwide.

The activities of the Company's suppliers are likely to present the same risks as those associated with TotalEnergies' activities. The main risks relate basically to human rights in the workplace (forced labor, child labor, discrimination, decent working conditions), health and safety and security, corruption, fraud and respect for the environment.

The Company ensures that contractual conditions are negotiated in an equitable manner with its suppliers. TotalEnergies' Code of Conduct reminds this requirement and the three essential principles that guide the Company's relations with its suppliers: dialogue, professionalism and compliance with commitments. As part of the development of best practice in business relations, an email address (mediation.fournisseurs@totalenergies.com) available on TotalEnergies' website allows the Company's suppliers to contact the dedicated internal mediator. Its mission is to facilitate relationships between the Company and its French and international suppliers. The general purchasing terms and conditions also mention the possibility of using mediation.

Management of the Company's supplier relations is coordinated by TotalEnergies Global Procurement, which is specifically tasked with providing Purchasing services, assisting the Company's entities and sites[1], promoting best practices in terms of purchasing and expressing requirements for contracts, from expression of need to end of contract.

The Company attaches particular importance to working with sustainable suppliers who respect both human rights and the environment, throughout its supply chain. The Company expects its suppliers to adhere to the Fundamental principles of purchasing and has structured a sustainable procurement program.

5.4.3.1 Fundamental principles of purchasing

The Fundamental principles of purchasing[2] are the foundation for the long-term relationships that the Company wishes to build with its suppliers. These principles apply to suppliers the principles set out in the Company's Code of Conduct. They include the fundamental principles defined by:

- the United Nations Universal Declaration of Human Rights,
- the Fundamental Conventions of the International Labor Organization,
- the United Nations Guiding Principles on Business & Human Rights,
- United Nations Global Compact, Voluntary Principles on Security and Human Rights,
- as well as the OECD Guidelines for Multinational Enterprises.

TotalEnergies expects its direct (tier one) suppliers to adhere and comply with the Fundamental principles of purchasing of TotalEnergies and to ensure that their own suppliers and subcontractors also comply with them. These Principles are as follows:

- Principle 1: Respect human rights at work (such as prohibition and prevention of forced labor and child labor),
- Principle 2: Protect of health, safety and security,
- Principle 3: Act in favor of climate,
- Principle 4: Respect the environment (such as water, air, soil, biodiversity),
- Principle 5: Prevent corruption, conflicts of interest and fight of fraud,
- Principle 6: Respect competition law,
- Principle 7: Promote economic and social development.

The Fundamental principles of purchasing are available in French and English on the TotalEnergies website (under the sustainable development).

5.4.3.2 The Company's Sustainable Procurement program

A PROCESS OF CONTINUOUS IMPROVEMENT

In accordance with the Company's ambition to integrate all aspects of sustainable development at the heart of its strategy, projects and operations, TotalEnergies is engaged in a process of continuous improvement regarding Sustainable procurement.

TotalEnergies Global Procurement is responsible for raising awareness among those involved in procurement, both internally and externally, and for steering the Sustainable Procurement program. The implementation of this program, adopted by the Executive Committee, is monitored in particular by the Company's management bodies.

DESCRIPTION OF THE PROGRAM

The Sustainable Procurement program has five axes:

- strengthen the Sustainable Procurement culture within the Company;
- raise awareness and mobilize suppliers;
- integrate sustainable development criteria at key stage of the procurement process;
- evaluate suppliers with regard to their performance in terms of sustainable development;
- engage the Company's suppliers in a process of continuous improvement.

Some of these axes are associated with a quantified objective allowing the progress made to be measured.

TotalEnergies Sustainable Procurement program is aimed at 1,300 sustainability priority suppliers. These suppliers account for nearly 60% of the Company's purchasing expenditure. They comprise:

- 500 suppliers selected on the basis of the importance of their commercial relations with the Company (amount of purchasing expenditure, irreplaceability, etc.). These 500 suppliers represent approximately 50% of the Company's purchasing expenditure;
- 800 suppliers selected on the basis of the risks they present in terms of human rights and/or the environment due to the business segment and the country in which they operate. These 800 suppliers represent approximately 10% of the Company's purchasing expenditure.

(1) With the exception of certain entities that retain the management of their supplier relations such as Hutchinson, Saft Group and TOTSA TotalEnergies Trading SA.
(2) Or equivalent principles for certain entities that retain management of their supplier relationships.

PROGRAM OBJECTIVES AND ACHIEVEMENTS

Axe 1: Strengthen the Sustainable procurement culture within the Company

Buyers are the first to promote the sustainable procurement process to their internal contacts as well as to the Company's suppliers. A dedicated training mandatory for all new entrant to the role has been in place since 2022.

Achievements in 2024

At the end of 2024, 65% of TotalEnergies purchasing function employees had been trained in sustainable procurement.

In addition to training, awareness-raising initiatives are regularly carried out among the Company's buyers in order to strengthen the sustainable procurement culture .(themed webinar, newsletter).

Axe 2: Raise awareness and mobilize suppliers

The Company regularly raises awareness among its suppliers regarding sustainable development. It engages its main suppliers through supplier days, periodic meetings and other awareness-raising tools. Discussions focus on achievements and difficulties observed in the performance of contractual relations, and on the implementation of corrective actions.

Achievements in 2024

In 2024, the Company organized supplier days, which were an opportunity to raise awareness among stakeholders regarding sustainability issues, notably in China. The Company has also raised awareness among its suppliers through training sessions entirely dedicated to sustainable development, such as the one organized in 2024 in Angola.

The Company also organizes a Suppliers Day every two years, the last having been organized in November 2024. This event brings together approximately 180 representatives of the Company's suppliers. The Chairman and Chief Executive Officer as well as two members of the Executive Committee are intervened and underlined the Company's ambition and the commitments expected from suppliers in terms of sustainable development. This event was the opportunity to award a Sustainability Award to one of the Company's suppliers.

Axe 3: Integrate sustainable development criteria at key stages of the purchasing process

TotalEnergies updated its Procurement directive in 2022 in order to strengthen the sustainable development aspects in the procurement rules and the Company ensures the integration of these criteria at key stages of the process described below.

- The supplier qualification process: This process covers six criteria: administrative, anti-corruption, technical, health and safety, financial, human rights and environmental. During this process, suppliers must share their sustainability commitments via a questionnaire. A supplier may be excluded from the list if its response to the sustainable development questionnaire is not satisfactory.
- Evaluation of offers: TotalEnergies integrates sustainable development criteria into the evaluation of offers. The Company takes account of carbon emissions in calculating the total cost of acquisition for the highest emission categories (marine logistics, rotating machines, etc.).
- Contractualization: The Company ensures that the Fundamental Principles of Purchasing or equivalent principles are included in the contracts concluded with suppliers. These Principles include an audit clause to ensure that suppliers comply with them. Additional clauses, for example relating to local content or HSE, are also included in contracts where relevant.
- Monitoring and execution of the contract: Throughout the duration of the contract, suppliers for whom points of attention have been identified are subject to documentary and/or on-site audits to verify compliance with TotalEnergies' Fundamental Principles of purchasing and to assess their performance in terms of sustainable development.

Achievements in 2024

Buyers include sustainability issues in their regular reviews with suppliers. Since 2024, summary tools have enabled buyers to assess suppliers' maturity in terms of the various aspects of sustainability. This maturity is assessed on the basis climate commitments, as well as on the basis of documentary and on-site audits.

Axe 4: Evaluate suppliers with regard to their performance in terms of sustainable development

In order to control risks in its supply chain and contribute to improving the practices of its suppliers, the Company committed to assess its 1,300 priority suppliers by the end of 2025, via documentary and/or on-site audits carried out by independent third parties.

Achievements in 2024

Since 2023, 76% of the 1,300 priority suppliers were assessed on their sustainable development performance.

- **Supplier evaluation via documentary audits**

  TotalEnergies has partnered with EcoVadis since 2023 to evaluate its priority suppliers in terms of sustainable development.

  EcoVadis carries out a documentary assessment to assess the maturity as well as performance of suppliers in terms of the environment, human rights, ethics and sustainable procurement. Each company is evaluated by independent analysts on essential issues depending on its size, location and business segment. The EcoVadis rating may be shared by the supplier with its other customers. It also gives rise to an improvement plan.

  In 2024, 391 suppliers were evaluated via EcoVadis or equivalent. 95% of them obtained a score above 45/100, a score above which EcoVadis considers that the supplier is "committed to CSR", the average score being 65/100.

- **Supplier assessment via on-site audits**

  Introduced in 2016 and expanded in 2022, these audits, conducted by an independent third party, include an on-site visit, a documentary review and interviews with workers covering aspects of human rights (such as forced labor, child labor, working conditions, health and safety), environment (such as pollution, waste management, water, biodiversity) and climate. The Company achieved its target of auditing 300 suppliers on-site in 2024. In total, since 2023, the Company has audited 600 priority suppliers in more than 60 countries.

Axe 5: Engage our suppliers in a process of continuous improvement

The Company ensures that its suppliers are committed to a process of continuous progress. Thus, in the event of a deficiency observed during the on-site audit, a supplier must put in place an action plan, followed by the TotalEnergies teams and whose effectiveness is verified by an independent external service provider. Of the 600 supplier audits carried out since 2023, more than 260 of them have implemented verified improvements concerning hazardous waste management, access to grievance mechanism and overtime pay.

In addition, training courses for suppliers were organized in 2024 to assist them in their continuous improvement process. In May, training was organized for suppliers in the Asia area, based on the shortcomings identified during the audits.

The Company also strengthened its supplier climate engagement program. On this occasion, TotalEnergies organized an awareness-raising webinar in 2024, attended by over 300 suppliers. In addition, in the context of this program, trainings were run in collaboration with the Carbon Disclosure Project (CDP) supply chain program, enabling suppliers to become more mature and set reduction targets in terms of climate.

In order to support its suppliers in improving their practices, the Company has also published in May 2022 a practical guide on Human Rights at work for suppliers, accessible on the TotalEnergies' website (under sustainable procurement section).

Finally, the Company encourages its main suppliers to reduce their emissions and has set itself the objective that 90% of the 400 most emitting suppliers have adopted reduction objectives for their Scope 1+2 in 2025. At the end of 2024, the objective had been achieved, with 90% of them having adopted targets for reducing their emissions. Suppliers who responded that they have set reduction targets are subject to regular monitoring. Suppliers who have not adopted targets for reducing their emissions are also monitored and the Company asks them for an action plan aimed at ensuring that they adopt targets by the end of 2025.

5.4.3.3 Specific actions in favor of certain categories of suppliers

LOCAL ECONOMIC DEVELOPMENT

TotalEnergies is committed to local economic development. In this respect, insofar as operational constraints allow, the Company uses local employment and subcontracting and also contributes to the development of local skills.

For the Company's large industrial projects, a local content development and management approach has been structured to strengthen the positive impact on local employment and economic activity notably by involving the main suppliers. Calls for tenders include local content criteria aimed to ensure at least equal opportunity for local subcontractors, or, depending on the local context, quantified contractual obligations (use of local subcontractors, employment, investment in local capacities) for subcontractors.

INCLUSIVE PURCHASES IN FRANCE

The Company pays special attention to the adapted and protected sector. TotalEnergies is a member of the French Hosmoz organization and provides its buyers with an online tool that can be used to identify potential suppliers and service providers by region and category. TotalEnergies also took part in the Handiformelles event in 2024, rewarding innovative projects carried out by EA-ESATs (adapted enterprises and vocational rehabilitation centers)

The Company is also a member since 2022 of the Collective of Companies for a More Inclusive Economy and participated in the Inclusive Purchasing Forum to connect the Company's buyers with companies in the adapted sector. In 2023, at the second forum, the Company aligned its objectives with those of the Collective by signing the manifesto *Let's transform our purchasing policy for a more inclusive economy*. This objective aim to increase the share of its inclusive purchases to approximately €5 million in 2025, representing a 30% increase relative to 2022.

In 2024, TotalEnergies also took part in the first meeting of the Collective's *Chief Procurement Officers*, aimed at sharing experience and best practices. The Company also contributes to the organization of "inclusive procurement meetings", webinars bringing together suppliers from the inclusive sector and member companies. In 2024, the Company spent €6 million on supplies from inclusive actors.

SUPPORT FOR SME SUPPLIERS

To support TotalEnergies' SME suppliers, in collaboration with a group of companies from the energy sector (EVOLEN), the Company drew up a guide in 2024 to enable these companies to better meet the requirements and challenges of sustainable development. This guide, aimed specifically at SMEs, includes information on sustainable development issues as they apply to SMEs, as well as explanations on how to implement these requirements within their company (examples of action plans and KPIs).

5.4.3.4 Policy to prevent late payments to suppliers

Employees are regularly reminded of the need to respect supplier payment terms, particularly for SMEs and the most vulnerable, and of existing regulations, throughout the purchasing process from requisition to invoice payment.

In France, an automatic alert system aims to prevent late payments.

5.4.4 Payment practices (G1-6)

TotalEnergies applies a principle of transparency in its payment practices, respecting the legal terms of payment in the countries where the Company operates and the contractual due dates negotiated with direct (tier one) suppliers regardless of their categorization.

Standard payment terms apply to the general purchase terms of TotalEnergies contracts, i.e. thirty (30) days from the last day of the month in which the invoice was issued, corresponding a minimum 30-days period and a maximum 60-days period.

Out of 87.2% of the Company's purchases of goods and services in 2024 (i.e. €24.5 billion out of a total of €28.1 billion equivalent to $31 billion), the average payment period for invoices is 49 days (the average payment period is calculated by taking into account the date of the invoice issued and the effective date of payment).

On an analysed scope of 150 of the Company's entities in France, corresponding to €6.2 billion in purchases of goods and services, the payment of invoices in 2024 was carried out as follows:

- for French small and medium-sized enterprises - SMEs, in 51 days on average with a ratio of 88% (calculated between invoices paid within 60 days from the date of the document and the total number of invoices);
- for French intermediate-sized companies - ETIs, in 43 days on average with a ratio of 83%.

There are no ongoing legal proceedings reported after questioning the subsidiaries at the end of December 2024 regarding late payments.

5.5 Certification reports of the statutory auditors

5.5.1 Report on the certification of sustainability information and verification of the disclosure requirements under Article 8 of Regulation (EU) 2020/852

This is a translation into English of the statutory auditors' report on the certification of sustainability information and verification of the disclosure requirements under Article 8 of Regulation (EU) 2020/852 of the Company issued in French and it is provided solely for the convenience of English speaking users.

This report should be read in conjunction with, and construed in accordance with, French law and the H2A guidelines on "Limited assurance engagement - Certification of sustainability reporting and verification of disclosure requirements set out in Article 8 of Regulation (EU) 2020/852".

To the Annual General Meeting,

This report is issued in our capacity as statutory auditors of TotalEnergies SE. It covers the sustainability information and the information required by Article 8 of Regulation (EU) 2020/852, relating to the year ended December 31, 2024 and included in the management report and presented in the section "Sustainability reporting under the CSRD" of the Chapter 5 of the universal registration document (hereafter "the sustainability report").

Pursuant to Article L.233-28-4 of the French Commercial Code, TotalEnergies SE is required to include the above-mentioned information in a separate section of the management report. This information has been prepared in the context of the first-time application of the aforementioned articles, a context characterized by uncertainties regarding the interpretation of the laws and regulations, the use of significant estimates, the absence of established practices and frameworks in particular for the double-materiality assessment, and an evolving internal control system. It enables an understanding of the impact of the activity of the group on sustainability matters, as well as the way in which these matters influence the development of the business of the group, its performance and position. Sustainability matters include environmental, social and corporate governance matters.

Pursuant to Article L.821-54 paragraph II of the aforementioned Code our responsibility is to carry out the procedures necessary to issue a conclusion, expressing limited assurance, on:

- compliance with the sustainability reporting standards adopted pursuant to Article 29 ter of Directive (EU) 2013/34 of the European Parliament and of the Council of 14 December 2022 (hereinafter ESRS for European Sustainability Reporting Standards) of the process implemented by TotalEnergies SE to determine the information reported, and compliance with the requirement to consult the social and economic committee provided for in the sixth paragraph of Article L. 2312-17 of the French Labour Code;
- compliance of the sustainability information included in the sustainability report with the requirements of Article L. 233-28-4 of the French Commercial Code, including ESRS; and
- compliance with the reporting requirements set out in Article 8 of Regulation (EU) 2020/852.

This engagement is carried out in compliance with the ethical rules, including independence, and quality control rules prescribed by the French Commercial Code.

It is also governed by the H2A guidelines on "*Limited assurance engagement - Certification of sustainability reporting and verification of disclosure requirements set out in Article 8 of Regulation (EU) 2020/852*".

In the three separate sections of the report that follow, we present, for each of the sections of our engagement, the nature of the procedures that we carried out, the conclusions that we drew from these procedures and, in support of these conclusions, the elements to which we paid particular attention and the procedures that we carried out with regard to these elements. We draw your attention to the fact that we do not express a conclusion on any of these elements taken individually and that the procedures described should be considered in the overall context of the formation of the conclusions issued in respect of each of the three sections of our engagement.

Finally, where deemed necessary to draw your attention to one or more disclosures of sustainability information provided by TotalEnergies SE in the management report, we have included an emphasis of matter paragraph hereafter.

Limits of our engagement

As the purpose of our engagement is to express limited assurance, the nature (choice of techniques), extent (scope) and timing of the procedures are less than those required to obtain reasonable assurance.

Furthermore, this engagement does not provide guarantee regarding the viability or the quality of the management of TotalEnergies SE, in particular it does not provide an assessment, of the relevance of the choices made by TotalEnergies SE in terms of action plans, targets, policies, scenario analyses and transition plans, which would go beyond compliance with the ESRS reporting requirements.

It does, however, allow us to express conclusions regarding the process for determining the sustainability information to be reported, the sustainability information itself, and the information reported pursuant to Article 8 of Regulation (EU) 2020/852, as to the absence of identification or, on the contrary, the identification of errors, omissions or inconsistencies of such importance that they would be likely to influence the decisions that readers of the information subject to this engagement might make.

Any comparative information that would be included in the sustainability report are not covered by our engagement.

COMPLIANCE WITH THE ESRS OF THE PROCESS IMPLEMENTED BY TotalEnergies SE TO DETERMINE THE INFORMATION REPORTED, AND COMPLIANCE WITH THE REQUIREMENT TO CONSULT THE SOCIAL AND ECONOMIC COMMITTEE PROVIDED FOR IN THE SIXTH PARAGRAPH OF ARTICLE L. 2312-17 OF THE FRENCH LABOUR CODE.

Nature of procedures carried out

Our procedures consisted in verifying that:

- the process defined and implemented by TotalEnergies SE has enabled it, in accordance with the ESRS, to identify and assess its impacts, risks and opportunities related to sustainability matters, and to identify the material impacts, risks and opportunities, that lead to the publication of information disclosed in the sustainability report, and
- the information provided on this process also complies with the ESRS.

We also checked the compliance with the requirement to consult the social and economic committee.

Conclusion of the procedures carried out

On the basis of the procedures we have carried out, we have not identified any material errors, omissions or inconsistencies regarding the compliance of the process implemented by TotalEnergies SE with the ESRS.

Concerning the consultation of the social and economic committee provided for in the sixth paragraph of Article L. 2312-17 of the French Labour Code we inform you that, as of the date of this report, this consultation has not yet been held.

Elements that received particular attention

We set out below the elements that have been the subject of particular attention in relation to our assessment of compliance with the ESRS of the process implemented by TotalEnergies SE to determine the information reported.

Concerning the identification of stakeholders

Information on the identification of stakeholders is set out in section 5.1.3.2 of the sustainability report.

We interviewed management within TotalEnergies SE as deemed appropriate.

Our work consisted primarily of assessing the consistency of the primary stakeholders identified by TotalEnergies SE in view of the nature of its activities and its geographical location, taking into account its business relationships and value chains.

Concerning the identification of impacts, risks and opportunities

Information on the identification of impacts, risks and opportunities is provided in section 5.1.4.1 of the sustainability report.

We obtained an understanding of the process implemented by TotalEnergies SE to identify actual or potential impacts – both negative and positive – risks and opportunities (IROs), in relation to the sustainability matters mentioned in paragraph AR 16 of ESRS 1, "Application requirements" as presented in section 5.1.4.1 of the sustainability report.

We obtained an understanding of TotalEnergies SE mapping of identified IROs, including in particular a description of their distribution within its own operations and its value chains, as well as their time horizon (short, medium or long term), and assessed the consistency of this mapping with our knowledge of TotalEnergies SE and with the risk analyses conducted within the group.

We have assessed:

- how TotalEnergies SE has taken into account the list of sustainability matters set out in ESRS 1 (AR 16) in its analysis;
- the consistency of actual and potential IROs identified by TotalEnergies SE with available industry analyses.

Concerning the assessment of impact materiality and financial materiality

Information on the assessment of impact materiality and financial materiality is provided in section 5.1.4.1 of the sustainability report.

Through interviews with management and inspection of available documentation, we obtained an understanding of the process implemented by TotalEnergies SE to assess impact materiality and financial materiality, and assessed its compliance with the criteria defined in ESRS 1.

In particular, we assessed the way in which TotalEnergies SE established and applied the materiality criteria defined in ESRS 1, including those relating to the setting of thresholds, in order to determine the material information reported for metrics relating to material IROs identified in accordance with the relevant ESRS standards.

COMPLIANCE OF THE SUSTAINABILITY INFORMATION INCLUDED IN THE SUSTAINABILITY REPORT WITH THE REQUIREMENTS OF ARTICLE L.233-28-4 OF THE FRENCH COMMERCIAL CODE, INCLUDING THE ESRS

Nature of procedures carried out

Our procedures consisted in verifying that, in accordance with legal and regulatory requirements, including the ESRS:

- the disclosures provided enable an understanding of the general basis for the preparation and governance of the sustainability information included in the sustainability report, including the basis for determining the information relating to the value chains and the exemptions from disclosures used;
- the presentation of this information ensures its readability and understandability;
- the scope chosen by TotalEnergies SE for providing this information is appropriate; and
- on the basis of a selection, based on our analysis of the risks of non-compliance of the information provided and the expectations of users, that this information does not contain any material errors, omissions or inconsistencies, i.e. that are likely to influence the judgement or decisions of users of this information.

Conclusion of the procedures carried out

Based on the procedures we have carried out, we have not identified material errors, omissions or inconsistencies regarding the compliance of the sustainability information included in the sustainability report, with the requirements of Article L.233-28-4 of the French Commercial Code, including the ESRS.

Emphasis of matter

Without qualifying the conclusion expressed above, we draw your attention to the information included in section 5.1.1.1 "General basis for the preparation of the Sustainability Report (BP-1)" and section 5.1.1.2 "Disclosure of information on special circumstances (BP-2)" of the sustainability report.

Elements that received particular attention

We set out below the elements that have been the subject of particular attention in relation to our assessment of the compliance of the sustainability information included in the sustainability report with the requirements of Article L.233-28-4 of the French Commercial Code, including the ESRS.

Information provided in application of environmental standards (ESRS E1 to E5)

Information reported in relation to climate change (ESRS E1) is mentioned in section 5.2.1 of the sustainability report.

Our work consisted primarily of assessing:

- through interviews conducted with management, in particular the « Sustainability & Climate » department, whether the description of the policies, actions and targets implemented by TotalEnergies SE addresses the following areas: climate change mitigation, climate change adaptation, energy efficiency and renewable energy deployment;
- the appropriateness of the disclosures provided in the environmental section of the sustainability report and its overall consistency with our knowledge of TotalEnergies SE.

With regard to the information published on the greenhouse gas (GHG) emissions:

- we assessed the consistency of the perimeter considered for the greenhouse gas emissions assessment with the perimeter of the consolidated financial statements, activities under operational control and across the upstream and downstream value chain;
- we obtained an understanding of the greenhouse gas emissions inventory process prepared by TotalEnergies SE, and checked its application, for a selection of emission categories and sites, for scope 1 and scope 2;
- with regard to scope 3 emissions, we assessed the process of gathering information;
- we assessed the appropriateness of a selection of emission factors used and the calculation of the related conversions, as well as a selection of calculation and extrapolation assumptions, taking into account the inherent uncertainty in the state of scientific or economic knowledge and the quality of the external data;
- we reconciled physical data (such as energy consumption), on a sample basis, to the underlying data used to draw up the greenhouse gas emissions assessment and traced to supporting documents;
- we performed analytical procedures as appropriate;
- we verified the accuracy of a selection of calculations used to prepare this information.

With regards to our procedures relating to TotalEnergies SE's strategy for climate change mitigation disclosed in paragraph A of section 5.2.1.1 of the sustainability report, our work primarily consisted of assessing:

- whether the information published as part of this strategy gives an appropriate description of the strategy's underlying key assumptions, it being understood that we are not required to express a conclusion on the appropriateness or the level of ambition of the transition strategy's objectives;
- whether the transition strategy reflects the commitments made by TotalEnergies SE as stated in the minutes of its governance bodies' meetings;
- assessing whether the transition strategy is in line with the strategic plan as approved by the governing bodies and TotalEnergies SE financial planning.

Information provided in application of social standards (ESRS S1 to S4)

The information disclosed on company personnel (ESRS S1) is mentioned in section 5.3.1 of the sustainability report.

With regards to our procedures relating to the workplace safety indicator "TRIR" ("Total Recordable Injury Rate") presented in paragraph C of section 5.3.1.2 of the sustainability report, corresponding to the number of workplace accidents declared per million hours worked, our work consisted primarily of:

- obtaining an understanding of the process to collect and compile the published information, based on interviews conducted with management, in particular the "HSE" department;
- evaluating the process to collect and compile safety-related data in order to assess the collected information and carrying out procedures on the consolidation of these data;
- verifying the accuracy of the calculations to produce the published information, and reconciling, on a sample basis, the underlying data with the supporting documentation within a selection of subsidiaries

COMPLIANCE WITH THE REPORTING REQUIREMENTS SET OUT IN ARTICLE 8 OF REGULATION (EU) 2020/852

Nature of procedures carried out

Our procedures consisted in verifying the process implemented by TotalEnergies SE to determine the eligible and aligned nature of the activities of the entities included in the consolidation.

They also involved verifying the information reported pursuant to Article 8 of Regulation (EU) 2020/852, which involves checking:

- the compliance with the rules applicable to the presentation of this information to ensure that it is readable and understandable;
- on the basis of a selection, the absence of material errors, omissions or inconsistencies in the information provided, i.e. information likely to influence the judgement or decisions of users of this information.

Conclusion of the procedures carried out

Based on the procedures we have carried out, we have not identified any material errors, omissions or inconsistencies relating to compliance with the requirements of Article 8 of Regulation (EU) 2020/852.

Elements that received particular attention

We set out below the elements that have been the subject of our particular attention in relation to the compliance with the information publication requirements of Article 8 of Regulation (EU) 2020/852.

Concerning the alignment of eligible activities

Information on the alignment of activities is set out in section 5.2.6.2 of the sustainability report.

As part of our procedures, we have notably assessed, on a sample basis, the elements on which management based its judgement when assessing whether eligible economic activities met the cumulative conditions, derived from the Taxonomy Regulation, required to qualify as aligned.

Neuilly-sur-Seine and Paris-La Défense, March 31, 2025

The Statutory Auditors

French original signed by

PricewaterhouseCoopers Audit		ERNST & YOUNG Audit	
Olivier Lotz	Cédric Le Gal	Yvon Salaün	Stéphane Pédron
Partner	Partner	Partner	Partner

5.5.2 Reasonable assurance report from the Statutory Auditors of TotalEnergies SE on a selection of sustainability performance indicators for the year ended December 31, 2024

This is a free translation into English of the original report issued in the French language and it is provided solely for the convenience of English-speaking users. This report should be read in conjunction with, and construed in accordance with, French law and applicable professional standards.

To the Chairman and Chief Executive Officer of TotalEnergies SE,

REASONABLE ASSURANCE OPINION

In our capacity as Statutory Auditors of TotalEnergies SE (hereinafter the "Company"), we have conducted a reasonable assurance engagement on certain sustainability performance indicators of the Company, for the year ended December 31, 2024, presented below and included in chapter 5 (section 5.2.1.3 (B) "Indicators") of the Universal Registration Document (hereinafter the "2024 URD") (hereinafter the "Climate Indicators"):

- Gross Scope 1 GHG (Greenhouse Gases) emissions for the operated perimeter for a value of 32.9 Mt CO_2e;
- Gross market-based Scope 2 GHG emissions for the operated perimeter for a value of 1.4 Mt CO_2e;
- Scope 1+2 GHG emissions (market based) for the operated perimeter for a value of 34.3 Mt CO_2e;
- Gross methane emissions for the operated perimeter for a value of 29 kt CH_4.

In our opinion, the Climate Indicators are prepared, in all material respects, in accordance with the internal reporting framework ("Reporting of environmental performance and indicators", reference GM-GR-HSE-100 released on February 15, 2023) and the basis of preparation set out in the section "5.1.1 Basis for preparation (BP-1 and BP-2)" of the 2024 URD (hereinafter "the Framework").

BASIS FOR OPINION

We conducted our reasonable assurance engagement in accordance with International Standard on Assurance Engagements (ISAE) 3000 (Revised), *Assurance engagements other than audits or reviews of historical financial information* ("ISAE 3000 (Revised)"), issued by the International Auditing and Assurance Standards Board (IAASB).

OUR INDEPENDENCE AND QUALITY MANAGEMENT

We have complied with the independence and other ethical requirements of the French Code of Ethics for Statutory Auditors (Code de Déontologie) as well as the provisions set forth in article L.821-28 of the French Commercial Code (Code de Commerce) and the International Code of Ethics for Professional Accountants (including International Independence Standards) issued by the International Ethics Standard Board for Accountants (IESBA Code), which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour.

We apply International Standard on Quality Management 1, which requires our firms to design, implement and operate a system of quality management including policies or procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

RESPONSIBILITIES OF THE COMPANY

Management of the Company is responsible for:

- The selection and application of appropriate methods to produce the Climate Indicators;
- The preparation of the Climate Indicators in accordance with the Framework; and
- Designing, implementing and maintaining such internal control as management determines is necessary to enable the preparation of the Climate Indicators, in accordance with the Framework, that is free from material misstatement, whether due to fraud or error.

Those charged with governance are responsible for overseeing the Company's reporting process of the Climate Indicators.

INHERENT LIMITATIONS IN PREPARING THE CLIMATE INDICATORS

The absence of a significant body of established practice upon which to draw to evaluate and measure the Climate Indicators allows for different, but acceptable, evaluation and measurement techniques that can affect comparability between entities and over time.

Moreover, some information is sensitive to the choice of methodologies and the assumptions and/or estimates used for their preparation and presented in the 2024 URD.

In addition, greenhouse gas emissions quantification is subject to inherent uncertainty given the state of available scientific knowledge used to determine emissions factors and the values needed to combine emissions of different gases.

STATUTORY AUDITORS' RESPONSIBILITIES

Our responsibility is to plan and perform the assurance engagement to obtain reasonable assurance about whether the Climate Indicators are free from material misstatement, whether due to fraud or error, and to issue an assurance report that includes our opinion. These misstatements are considered material if, individually or in the aggregate, they could reasonably be expected to influence decisions of users taken on the basis of the Climate Indicators.

The risk of not detecting a material misstatement resulting from fraud is higher than the one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal controls.

SCOPE OF OUR PROCEDURES

As part of a reasonable assurance engagement in accordance with ISAE 3000 (Revised) we exercise professional judgement and maintain professional skepticism throughout the engagement. We also:

- Determine the suitability of the Framework applied by the Company for the preparation of the Climate Indicators;
- Perform risk assessment procedures, including obtaining an understanding of the internal controls relevant to the preparation of the Climate Indicators by the Company, to identify and assess the risks of material misstatement, whether due to fraud or error, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control;
- Design and perform procedures to address the assessed risks.

We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Neuilly-sur-Seine and Paris-La Défense, March 31, 2025

The Statutory Auditors

French original signed by

PricewaterhouseCoopers Audit		ERNST & YOUNG Audit	
Olivier Lotz	Cédric Le Gal	Yvon Salaün	Stéphane Pédron
Partner	Partner	Partner	Partner

6

TotalEnergies and its shareholders

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6.1 Listing details

6.1.1 Listing

Stock exchanges and markets

- Paris (Euronext Paris);
- Brussels (Euronext Brussels);
- London (London Stock Exchange); and
- New York (New York Stock Exchange or NYSE).

Codes (Euronext)

ISIN	FR0000120271
Reuters	TTEF.PA
Bloomberg	TTE FP
Ticker	TTE
LEI	529900S21EQ1BO4ESM68

Main indices as of December 31, 2024

Index	Weighting in the index
CAC 40	7.28% (3rd)
Euro Stoxx 50	3.53% (6th)
Stoxx Europe 50	2.42% (14th)

Sources: Euronext and Stoxx.

Presence in the main extra-financial indices

DJSI World, DJSI Europe, FTSE4Good, MSCI Europe ESG Leaders, Euro Stoxx 50 ESG, MSCI World ESG Screened and MSCI Europe ESG Screened.

Market capitalization as of December 31, 2024(1)

Market	Market capitalization	Closing price
Euronext	€128.0 billion	€53.37
NYSE	$130.7 billion	$54.50

Market capitalization on Euronext Paris and in the Eurozone as of December 31, 2024(2)

TotalEnergies SE is the fifth-largest market capitalization on the Euronext Paris regulated market and the tenth-largest capitalization of the Euro Stoxx 50.

Free float

As of December 31, 2024, the free float factor determined by Euronext Paris for calculating the weight of TotalEnergies SE in the CAC 40 was 95%. The free float factor determined by Stoxx for calculating the weight of TotalEnergies SE in the Euro Stoxx 50 was 94.46%(3).

Par value

€2.50.

Debt credit rating (long-term/outlook/short-term)

As of December 31	2024	2023	2022
Standard & Poor's	A+/Stable/A-1	A+/Stable/A-1	A+/Stable/A-1
Moody's	Aa3/Stable/P-1	A1/Stable/P-1	A1/Stable/P-1

6.1.2 Share performance

6.1.2.1 Change in share prices between January 1 and December 31, 2024

The change in TotalEnergies' share price in 2024, compared with that of the share prices of its main peers listed in Europe and the United States, is shown in the following tables:

In Europe

(% calculated on the basis of the closing price in local currency)

TotalEnergies (euro)	**(13.36)%**
Shell (euro)	1.06%
BP (pound sterling)	(15.70)%
ENI (euro)	(14.71)%

Source: Bloomberg.

In the United States (American Depositary Receipts prices for European companies)

(% calculated on the basis of the closing price in US$)

TotalEnergies	(19.12)%
ExxonMobil	7.59%
Chevron	(2.90)%
Shell	(4.79)%
BP	(16.50)%
ENI	(19.55)%

Source: Bloomberg.

(1) Based on a share capital composed of 2,397,679,661 shares as of December 31, 2024.
(2) Source: Bloomberg.
(3) Source: Stoxx.

6.1.2.2 Shareholder's annual return

€1,000 invested in TotalEnergies shares by an individual residing in France, assuming that the dividends are reinvested in TotalEnergies shares, would have generated the following returns as of December 31, 2024 (excluding tax and social withholding):

	Shareholder's annual return		Value as of December 31, 2024 of €1,000 invested	
Investment term	TotalEnergies	CAC 40[(a)]	TotalEnergies	CAC 40
1 year	(8.93%)	0.91%	911	1,009
5 years	8.28%	7.21%	1,488	1,417
10 years	8.32%	8.81%	2,225	2,326
15 years	7.12%	7.73%	2,806	3,056

(a) CAC 40 prices taken into account to calculate the annual returns include all dividends distributed by the companies that are in the index.
Sources: Non-Adjusted data from Euronext Paris, Bloomberg.

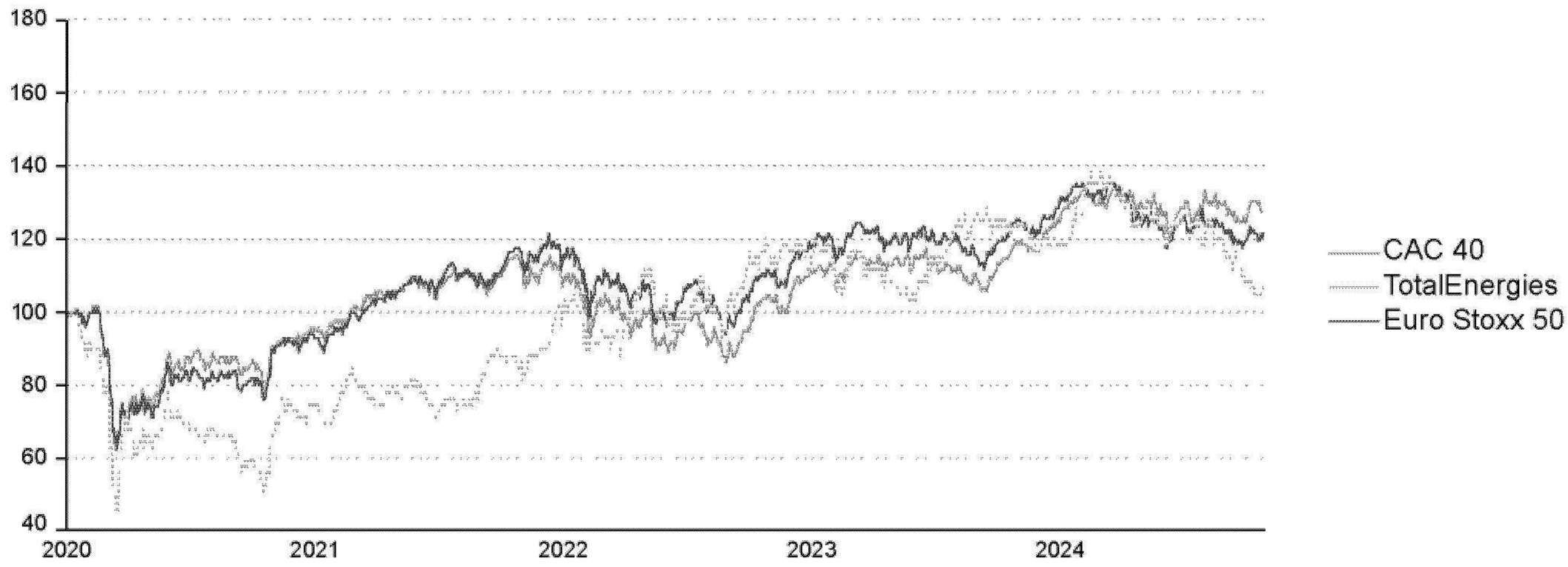
6.1.2.3 Market information summary

TotalEnergies share prices over the 2020-2024 period *(in €)*	2020	2021	2022	2023	2024
Highest (during trading session)	50.93	45.55	60.44	64.80	70.11
Lowest (during trading session)	21.12	33.91	43.60	50.55	50.80
Last price of the year (closing)	35.30	44.63	58.65	61.60	53.37
Average of the last 30 trading sessions (closing)	36.34	43.53	57.95	61.96	54.12

Trading volume *(average per session)*					
Euronext Paris[(a)]	8,528,721	6,716,595	6,952,567	4,719,338	3,687,727
NYSE[(b)]	2,965,225	2,155,119	2,426,647	1,435,870	1,556,615

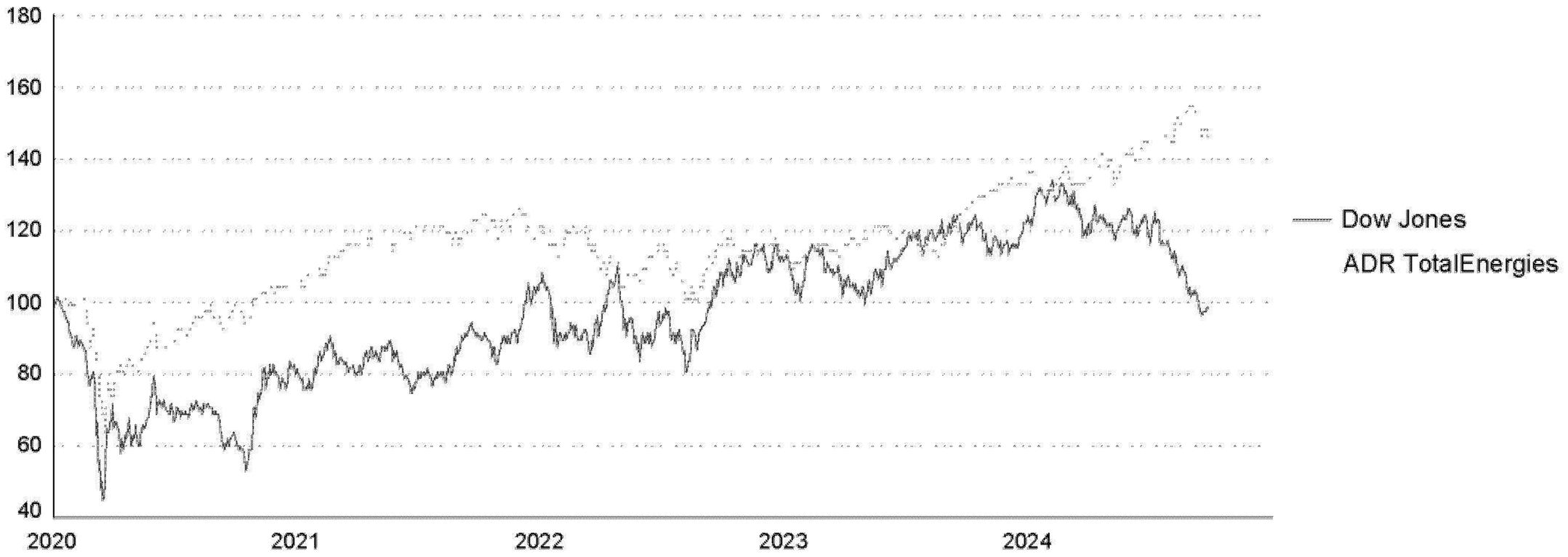
(a) Number of TotalEnergies shares traded.
(b) Number of American Depositary Receipts (ADR) traded.
Sources: Non-adjusted data from Euronext Paris, NYSE.

Change in TotalEnergies share price at closing on Euronext Paris (2020-2024)



Base 100 at 01/01/2020.
Sources: Non-adjusted data from Euronext Paris, Bloomberg.

Change in TotalEnergies ADR price at closing on NYSE (2020-2024)

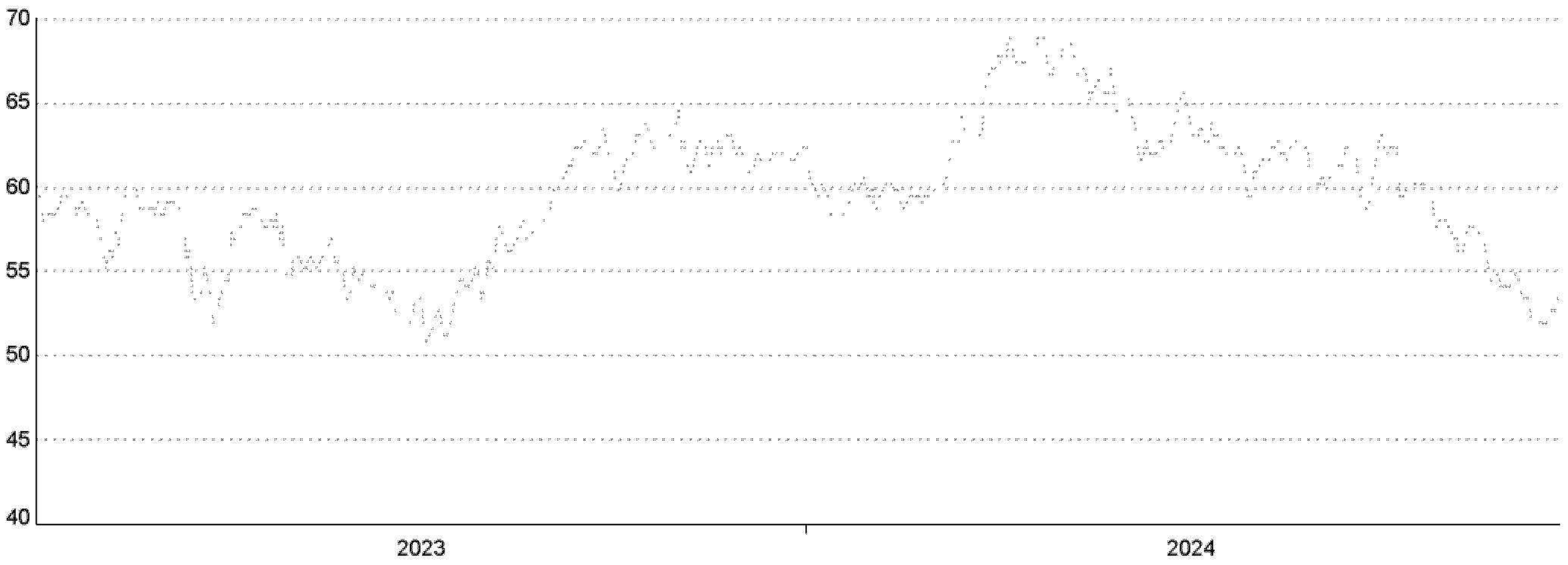


Base 100 at 01/01/2020.

Sources: NYSE, Bloomberg.

Change in TotalEnergies share price at closing on Euronext Paris (2023-2024)

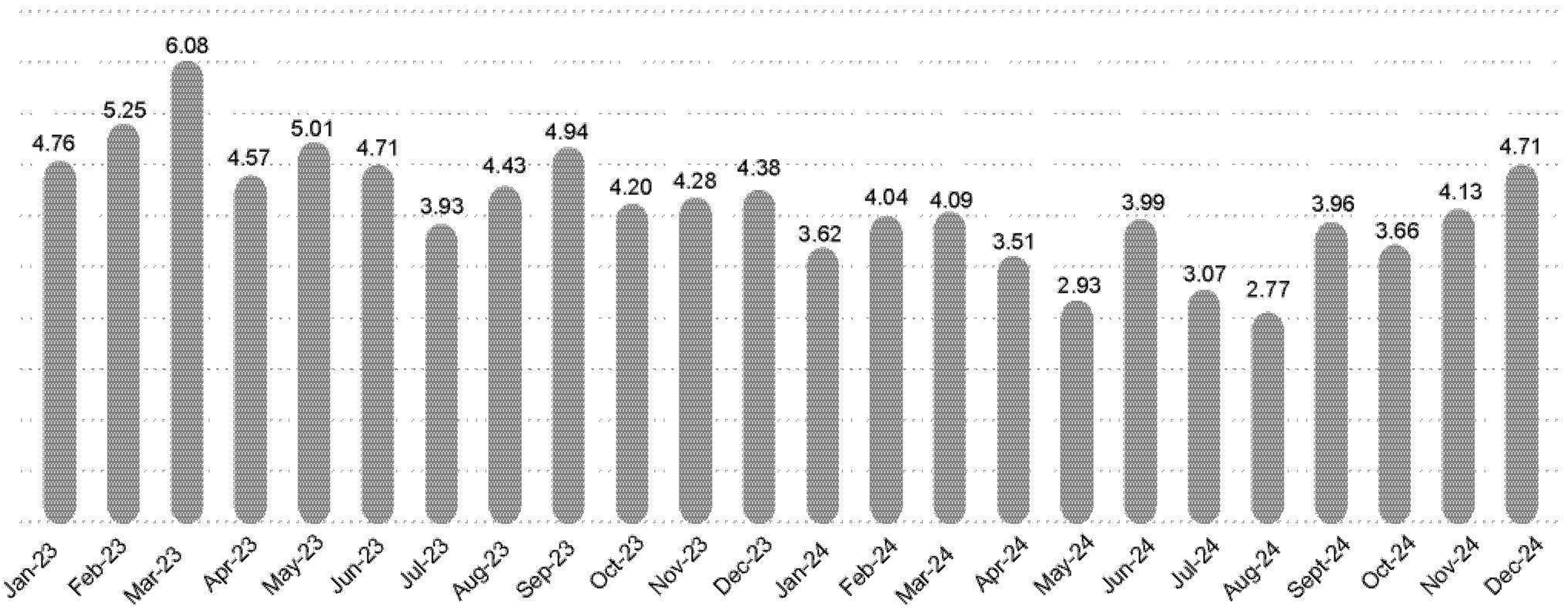
(in €)



Source: Non-adjusted data from Euronext Paris.

Average number of TotalEnergies shares traded on Euronext Paris (2023-2024)

(in millions of shares)



Source: Non-adjusted data from Euronext Paris.

6.2 Shareholder return and dividend

6.2.1 Shareholder return policy

SHAREHOLDER RETURN FOR 2024

The Board of Directors, at its meeting on February 4 2024, after having closed the financial statements for fiscal year 2024, decided to propose at the Shareholders' Meeting to be held on May 23, 2025, the distribution of an ordinary dividend amounting to €3.22/share for fiscal year 2024 compared to the ordinary dividend of €3.01/share for fiscal year 2023, *i.e.*, an increase in 7.0%. As a consequence, taking into account these three interim dividends of €0.79/share previously decided by the Board of Directors, the final ordinary dividend for fiscal year 2024 amount to €0.85/share.

Following the Board of Directors' meeting on October 2, 2024, TotalEnergies confirmed its shareholder distribution guidance to more than 40% of CFFO through cycles. Thanks to the clear and disciplined investment policy and the perspective for +$10 billion of free cash flow[1] growth by 2030 (versus 2024 at same price deck), the Board of directors had taken the following decisions:

- in 2024, execute $8 billion in share buybacks[2], corresponding to approximately 5% of the Corporation's capital. Anticipated shareholder return is above 45% of 2024 cash flow,
- in 2025, continue share buybacks of $2 billion per quarter assuming reasonable market conditions, and increase the dividend per share by at least 5% based on the 2024 share buybacks.

The implementation of these decisions set the return to shareholders to 50% of 2024 cash flow.

The Board of Directors, at its meeting on February 6, 2024, after having closed the financial statements for fiscal year 2023, decided to propose at the Shareholders' Meeting to be held on May 24, 2024, the distribution of an ordinary dividend amounting to €3.01/share for fiscal year 2023 compared to the ordinary dividend of €2.81/share for fiscal year 2022, *i.e.*, an increase in 7.1%. As a consequence, taking into account these three interim dividends of €0.74/share previously decided by the Board of Directors, the final ordinary dividend for fiscal year 2023 amount to €0.79/share.

In 2023, at its meeting on February 7, the Board of Directors indicated a shareholder return policy for 2023 targeting a pay-out between 35-40%, which will combine an increase in interim dividends of more than 7% to €0.74/share and share buybacks of $2 billion in the first quarter. In addition, in view of the growth in structural cash flow forecast and the share buybacks carried out in 2022 (5% of the share capital), the Board of Directors proposed to the Shareholders' Meeting the distribution of a final 2022 ordinary dividend of €0.74/share, an increase of 6.4% for the ordinary 2022 dividend to €2.81/share, plus the special dividend of €1/share paid in December 2022.

Following the Board of Directors' meeting on September 27, 2023, TotalEnergies announced to expect to distribute about 44% of its CFFO in 2023 to its shareholders and to increase shareholder distribution guidance to more than 40% of CFFO beyond 2023. Confident in the strong fundamentals of the Company, the clear and disciplined investment policy, and the solid potential for cash generation growth in the coming years, the Board of directors had taken the following decisions:

- in 2023, allocate $1.5 billion of the Canadian assets' divestment proceeds to share buybacks, to reach $9 billion for the year. The Company expected to return about 44% of CFFO to shareholders in 2023,
- increase the shareholder distribution guidance to more than 40% of CFFO through the cycles keeping net investments between $16-18 billion per year over 2024-28 to implement the transition of the Company.

The implementation of these decisions set the return to shareholders to 46% of 2023 cash flow.

In 2022, at its meeting on February 9, 2022, the Board of Directors decided to propose to the Shareholders' Meeting the distribution of a final dividend of €0.66/share for the fiscal year 2021, equal to the previous three interim dividends paid for this fiscal year 2021, thus setting the dividend for 2021 at €2.64/share. The Board of Directors, at its meetings on April 2022, July 2022 and October 2022 decided to distribute a first, a second and a third interim dividends for the fiscal year 2022, respectively, 5% higher than the interim dividends and the proposed final dividend for fiscal 2021, i.e. €0.69/share. In addition to this 5% increase for the interim dividends for the fiscal 2022, the Board of Directors decided to distribute an exceptional interim dividend of €1 per share in December 2022 and to maintain the share buyback program at $7 billion. The implementation of these decisions sets the return to shareholders to 37.2% of 2022 cash flow.

SHAREHOLDER RETURN POLICY FOR 2025

In the view of the free cash flow[3] growth outlook and share buybacks executed in 2024 (5% of the share capital), the Board of Directors, at its meeting on February 4, 2025, confirmed a shareholder return policy for 2025 targeting >40% CFFO payout, which will combine an increase in interim dividends of 7.6% to €0.85/share and $2 billion of share buybacks per quarter, a level which is pursued under reasonable market conditions, in line with the following cash flow allocation priorities:

- a sustainable ordinary dividend through cycles, that was not cut during the Covid crisis, and whose increase is supported by free cash flow growth,
- disciplined investments to support of a strategy balanced between the various energies,
- maintaining a strong balance sheet,
- buybacks to share surplus cash flow generated at high prices.

(1) Refer to the glossary for definitions and additional information on alternative performance measures (APM, Non-GAAP measures) and to point 1.9 of chapter 1 for reconciliation tables.
(2) Including coverage of employees share grant plans.
(3) Refer to the glossary for definitions and additional information on alternative performance measures (APM, Non-GAAP measures) and to point 1.9 of chapter 1 for reconciliation tables.

6.2.2 Dividend payment policy

On October 28, 2010, the Corporation's Board of Directors adopted a policy based on quarterly dividend payments starting in fiscal year 2011.

The decision of TotalEnergies SE's subsidiaries to declare dividends is made by their relevant Shareholders' Meetings and is subject to the provisions of applicable local laws and regulations. As of December 31, 2024, there is no restriction under such provisions that would materially restrict the distribution to TotalEnergies SE of the dividends declared by those subsidiaries.

Dividends for fiscal year 2024

On February 4, 2025, the Board of Directors, after having closed the financial statements for fiscal year 2024, decided to propose to the Shareholders' Meeting on May 23, 2025, the distribution of an ordinary dividend of €3.22/share for fiscal year 2024.

Subject to the Shareholders' decision on May 23, 2025, considering the first three interim dividends already decided by the Board of Directors, the final ordinary dividend for fiscal year 2024 will amount to €0.85/share.

2024 dividend	First interim	Second interim	Third interim	Final
Amount	€0.79	€0.79	€0.79	€0.85
Set date	April 25, 2024	July 24, 2024	October 30, 2024	May 23, 2025
Ex-dividend date	September 25, 2024	January 2, 2025	March 26, 2025	June 19, 2025
Payment date	October 1, 2024	January 6, 2025	April 1, 2025	July 1, 2025

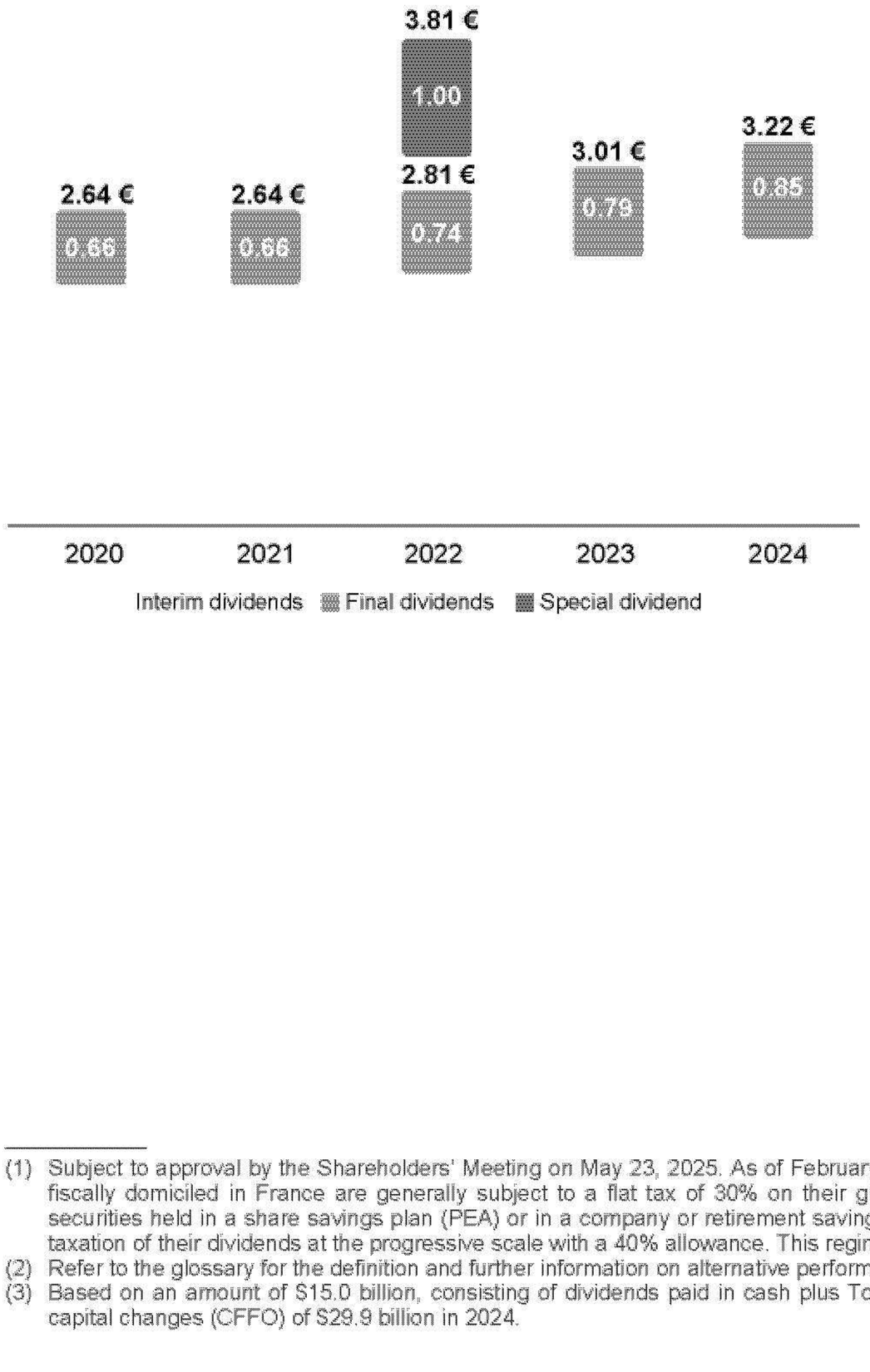
Dividends for fiscal year 2025

Subject to the applicable legislative and regulatory provisions, as well as the pending approval by the Board of Directors and the Shareholders' Meeting called to approve the 2025 financial statements, the ex-date and payment calendar for the interim and final dividends for fiscal year 2025 is expected to be as follows:

	Ex-dividend date	Payment date
First interim	October 1, 2025	October 3, 2025
Second interim	January 2, 2026	January 6, 2026
Third interim	April 1, 2026	April 7, 2026
Final	July 1, 2026	July 3, 2026

The provisional ex-dividend and payment dates above relate to the shares admitted for trading on Euronext.

Dividends for the last five fiscal years[1]



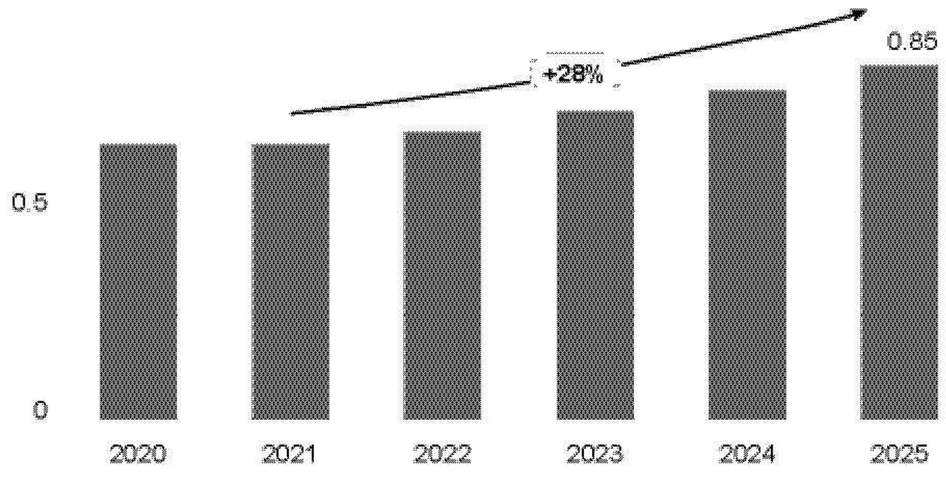
Payout

The rate of return to shareholders is calculated on the basis of the amount of dividends paid during the year, plus the amount of TotalEnergies share buybacks in view of their cancellation carried out by the Corporation during the year, divided by the cash flow from operations excluding working capital (CFFO)[2] for the fiscal year in question.

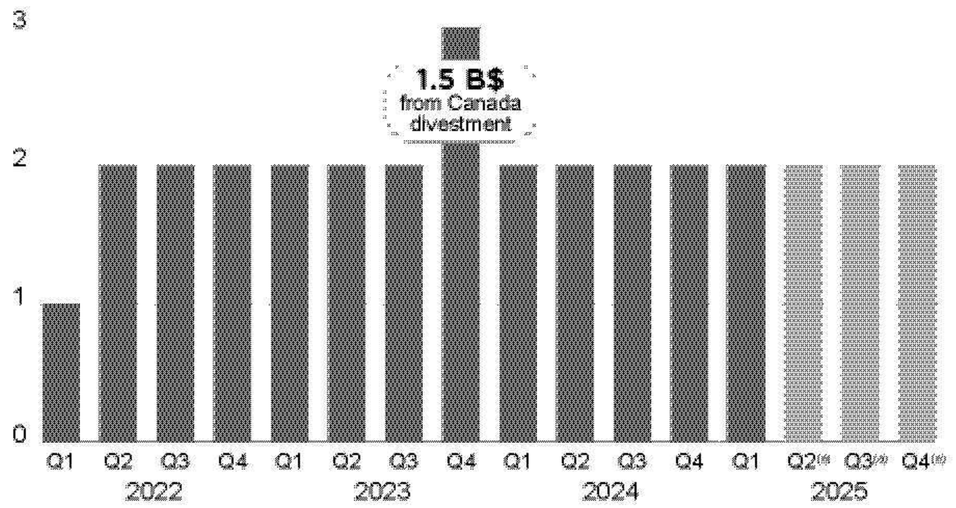
The payout (rate of return to shareholders) for fiscal year 2024 was 50.3%[3].

(1) Subject to approval by the Shareholders' Meeting on May 23, 2025. As of February 28, 2025, and according to the provisions in force since 2018, dividends received by individuals fiscally domiciled in France are generally subject to a flat tax of 30% on their gross amount (i.e., 12.8% for income tax and 17.2% for social security contributions), excluding securities held in a share savings plan (PEA) or in a company or retirement savings plan (PEE or PER) in particular. Regarding income tax, the taxpayer can, however, opt for the taxation of their dividends at the progressive scale with a 40% allowance. This regime is nevertheless subject to change.
(2) Refer to the glossary for the definition and further information on alternative performance measures (Non-GAAP measures) and to point 1.9 of chapter 1 for reconciliation tables.
(3) Based on an amount of $15.0 billion, consisting of dividends paid in cash plus TotalEnergies share buybacks for cancellation in 2024 plus an operating cash flow before working capital changes (CFFO) of $29.9 billion in 2024.

Quarterly dividend *(€/share)*



Share buybacks *(B$)*



(a) Assuming reasonable market conditions.

6.2.3 Dividend payment

Société Générale Securities Services manages the payment of the dividend, which is made through financial intermediaries using the Euroclear France direct payment system.

JP Morgan Chase Bank N.A. (383 Madison Avenue, Floor 11, New York, 10179, USA) manages the payment of dividends to holders of TotalEnergies ADR.

Dividend payment on stock certificates

The Corporation issued stock certificates (*certificats représentatifs d'actions*, CR Actions) in Belgium as part of the public exchange offer for TotalEnergies Petrochemicals & Refining (formerly Petrofina) shares.

The CR Actions is a stock certificate provided for by French rules, issued by Euroclear France, intended to circulate exclusively outside of France, and which may not be held by French residents. Since January 1, 2018, in compliance with Belgian law, CR Actions may only be issued in the form of a dematerialized certificate. CR Actions issued before this date are freely convertible from a physical certificate into a dematerialized certification in the form of a security registered on a custody account.

In addition, ING Belgique is the bank handling the payment of all coupons detached from outstanding CR Actions. No fees are applicable to the payment of coupons detached from CR Actions, except for any income or withholding taxes; the payment may be received on request at the following bank branches:

- ING Belgique, Avenue Marnix 24, 1000 Brussels, Belgium;
- BNP Paribas Fortis, Avenue des Arts 45, 1040 Brussels, Belgium; and
- KBC BANK N.V., Avenue du Port 2, 1080 Brussels, Belgium.

6.2.4 Coupons

Fiscal year	Ex-dividend date	Payment date	Date of expiration	Type of coupon	Amount *(in €)*
2017	09/25/2017	10/12/2017	10/12/2022	Interim dividend	0.62
	12/19/2017	01/11/2018	01/11/2023	Interim dividend	0.62
	03/19/2018	04/09/2018	04/09/2023	Interim dividend	0.62
	06/11/2018	06/28/2018	06/28/2023	Final dividend	0.62
2018	09/25/2018	10/12/2018	10/12/2023	Interim dividend	0.64
	12/18/2018	01/10/2019	01/10/2024	Interim dividend	0.64
	03/19/2019	04/05/2019	04/05/2024	Interim dividend	0.64
	06/11/2019	06/13/2019	06/13/2024	Final dividend	0.64
2019	09/27/2019	10/01/2019	10/01/2024	Interim dividend	0.66
	01/06/2020	01/08/2020	01/08/2025	Interim dividend	0.66
	03/30/2020	04/01/2020	04/01/2025	Interim dividend	0.68
	06/29/2020	07/01/2020	07/01/2025	Final dividend	0.68
2020	09/25/2020	10/02/2020	10/02/2025	Interim dividend	0.66
	01/04/2021	01/11/2021	01/11/2026	Interim dividend	0.66
	03/25/2021	04/01/2021	04/01/2026	Interim dividend	0.66
	06/24/2021	07/01/2021	07/01/2026	Final dividend	0.66
2021	09/21/2021	10/01/2021	10/01/2026	Interim dividend	0.66
	01/03/2022	01/13/2022	01/13/2027	Interim dividend	0.66
	03/22/2022	04/01/2022	04/01/2027	Interim dividend	0.66
	06/21/2022	07/01/2022	07/01/2027	Final dividend	0.66
2022	09/21/2022	10/03/2022	10/03/2027	Interim dividend	0.69
	12/06/2022	12/16/2022	12/16/2027	Special dividend	1.00
	01/02/2023	01/12/2023	01/12/2028	Interim dividend	0.69
	03/22/2023	04/03/2023	04/03/2028	Interim dividend	0.69
	06/21/2023	07/03/2023	07/03/2028	Final dividend	0.74
2023	09/20/2023	10/02/2023	10/02/2028	Interim dividend	0.74
	01/02/2024	01/12/2024	01/12/2029	Interim dividend	0.74
	03/20/2024	04/03/2024	04/03/2029	Interim dividend	0.74
	06/19/2024	07/01/2024	07/01/2029	Final dividend	0.79
2024[(a)]	09/25/2024	10/01/2024	10/01/2029	Interim dividend	0.79
	01/02/2025	01/06/2025	01/06/2030	Interim dividend	0.79
	03/26/2025	04/01/2025	04/01/2030	Interim dividend	0.79
	06/19/2025	07/01/2025	07/01/2030	Final dividend	0.85

(a) Subject to approval by the Shareholders' Meeting on May 23, 2025.

6.3 Share buybacks

The Shareholders' Meeting on May 24, 2024, after considering the report from the Board of Directors, authorized the Board of Directors, pursuant to the provisions of Article L. 22-10-62 of the French Commercial Code, of Regulation (EU) No. 596/2014 of April 16, 2014, on market abuse and of the General Regulation (*règlement général*) of the French Financial Markets Authority (*Autorité des marchés financiers*), to buy or sell shares of the Corporation. The number of shares acquired may not exceed 10% of the share capital. The maximum purchase price was set at €100 per share. This authorization was granted for a period of 18 months and replaced the previous authorization granted by the Shareholders' Meeting on May 26, 2023.

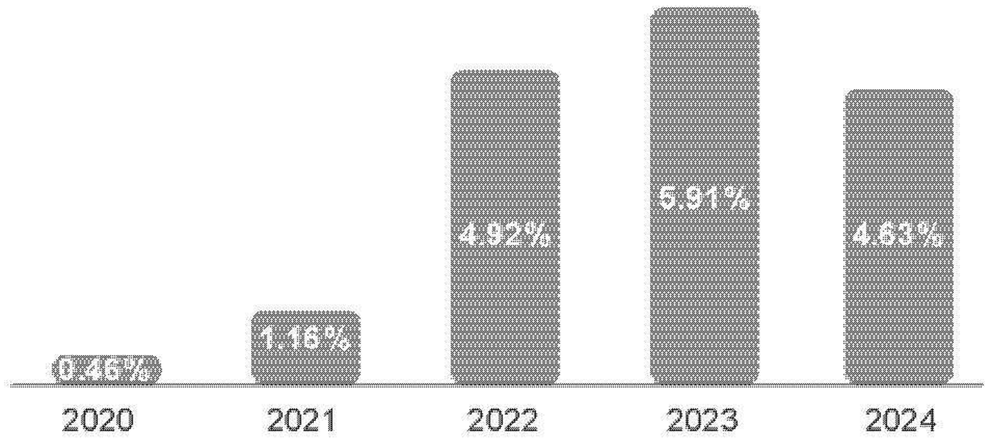
In 2024, TotalEnergies SE bought back 120,463,232 TotalEnergies shares including:

- 110,946,44 TotalEnergies shares in order to cancel them in an amount of $7.33 billion; and
- 9,516,888 TotalEnergies shares in order to cover the share grant plans approved by the Board of Directors.

In addition, since the closing of fiscal year 2024 until February 28, 2025, TotalEnergies SE bought back 22,697,036 TotalEnergies shares of which:

- 21,040,288 TotalEnergies shares in order to cancel them in an amount of $1,237 million; and
- 1,656,748 TotalEnergies shares in order to cover the share grant plans approved by the Board of Directors.

Percentage of share capital bought back in order to cancel (2020-2024)



6.3.1 Board of Directors' report on share buybacks and sales

6.3.1.1 Share buybacks during fiscal year 2024

Following the Board of Directors' decisions during its meetings on December 13, 2023 and March 13, May 24, September 26 and October 2, 2024, and pursuant to the authorizations granted by the Shareholders' Meetings on May 26, 2023 and May 24, 2024, the Corporation bought back 110,946,344 TotalEnergies shares during fiscal year 2024, in order to cancel them, *i.e.*, 4.63% of the share capital as of December 31, 2024. These shares were bought back for a total amount of €6.77 billion, or $7.33 billion[1], at an average unit price of €61.05.

In addition, the Corporation bought back, in 2024, a total of 9,516,888 TotalEnergies shares for a total of €590 million, at an average unit price of €62.04, in order to cover the share grant plans decided by the Board of Directors, using the authorizations granted by the Shareholders' Meetings.

6.3.1.2 Cancellation of Corporation shares during fiscal years 2022 to 2024

The Board of Directors, pursuant to the authorization granted by the Shareholders' Meetings on May 26, 2017 and on May 25, 2022, to reduce the Corporation's share capital in one or more steps by cancelling shares, in accordance with the provisions of Articles L. 22-10-62 and L. 225-213 of the French Commercial Code, cancelled the following TotalEnergies shares:

Fiscal year	Date of Board of Directors' decision	Number of shares bought back and cancelled	Percentage of share capital cancelled[a]
2024	**February 6, 2024[b]**	**25,405,361**	**1.05%**
2023	September 21, 2023[c]	86,012,344	3.44%
	February 7, 2023	128,869,261	4.92%
2022	February 9, 2022	30,665,526	1.16%

(a) Percentage of the share capital that the cancelled shares represented on the operations' date.
(b) Cancellation effective as of February 12, 2024.
(c) Cancellation effective as of September 25, 2023.

6.3.1.3 Transfer of shares during fiscal year 2024

6,071,266 TotalEnergies shares were transferred to the beneficiaries during fiscal year 2024 following the final award of TotalEnergies shares under share grant plans decided by the Board of Directors.

6.3.1.4 Shares held in the name of the Corporation as of December 31, 2024

As of December 31, 2024, the Corporation held 149,529,818 treasury shares representing 6.24% of TotalEnergies SE's share capital on that same date, including 7,431,259 shares to cover share grant plans and the remainder in order to cancel.

In accordance with French law, these shares are deprived of voting rights and do not entitle the right to dividends.

In addition, shares bought back in order to be allocated to employees of the Corporation or other TotalEnergies' companies when such shares are held to cover the share grant plans that were not granted by the end of the vesting period, may be held under the conditions applicable to the holding by the Corporation of its own shares and used in accordance with the purposes specified share buyback by the Corporation.

(1) At the ECB exchange rate on the date of the share buybacks.

6.3.1.5 Reallocation of shares for other purposes during fiscal year 2024

Treasury shares held by the Corporation were not, during fiscal year 2024, reallocated for purposes other than those initially planned when purchased.

6.3.1.6 Conditions for the share buybacks and use of derivative instruments

No derivative instruments were used in the context of the share buyback programs authorized by the Shareholders' Meetings on May 26, 2023, and May 24, 2024. TotalEnergies has no open purchase or sale position as of December 31, 2024.

TRANSACTIONS COMPLETED BY THE CORPORATION INVOLVING ITS TREASURY SHARES FROM JANUARY 1 TO DECEMBER 31, 2024

	Cumulative gross movements	
	Purchases	Sales/Transfers
Number of shares	120,463,232	6,071,266[a]
Average transaction price[b] *(in €)*	61.14	–
Amount of transactions *(in €)*	7,364,966,277.85[c]	–

(a) Corresponds to the final award of TotalEnergies shares under the share grant plans.
(b) Including brokerage fees (excluding taxes).
(c) Including €1,012,288.16 of brokerage fees (excluding taxes).

TREASURY SHARES AT DECEMBER 31, 2024

Percentage of share capital held by TotalEnergies SE	**6.24%**
Number of shares held in portfolio	149,529,818[a]
Par value of the portfolio *(in €m)*	373.8[b]
Book value of the portfolio *(in €m)*	9,177.5
Market value of the portfolio *(in €m)*	7,980.4[c]

(a) Including 7,431,259 shares held to cover the share grant plans.
(b) Based on a TotalEnergies share par value of €2.50.
(c) Based on TotalEnergies' closing share price of €53.37 on Euronext Paris on December 31, 2024.

6.3.2 Share buyback program

6.3.2.1 Description of the share buyback program under Articles 241-1 et seq. of the AMF General Regulation

The objectives of the share buyback program are as follows:

- reduce the Corporation's capital through the cancellation of shares;
- honor the Corporation's obligations related to securities convertible or exchangeable into Corporation shares;
- honor the Corporation's obligations related to stock option programs or other share grants to the Corporation's executive directors or to employees of the Corporation or of subsidiaries of TotalEnergies; and
- stimulate the secondary market or the liquidity of the TotalEnergies share under a liquidity agreement.

6.3.2.2 Legal framework

Implementation of this share buyback program, which is covered by Articles L. 22-10-62 *et seq.*, L. 225-213 of the French Commercial Code, Articles 241-1 *et seq.* of the General Regulation of the AMF, and the provisions of Regulation (EU) No 596/2014 on market abuse, is subject to approval by the TotalEnergies SE Shareholders' Meeting on May 23, 2025, under the proposed fourth resolution, which reads as follows:

"Upon presentation of the report by the Board of Directors and information appearing in the description of the program prepared pursuant to Articles 241-1 *et seq.* of the General Regulation *(règlement général)* of the French Financial Markets Authority *(Autorité des marchés financiers)*, and voting under the conditions of quorum and majority required for Ordinary Shareholders' Meetings, the shareholders hereby authorize the Board of Directors, with the possibility to sub-delegate such authority under the terms provided for by French law, pursuant to the provisions of Article L. 22-10-62 of the French Commercial Code and of Regulation (EU) No. 596/2014 of April 16, 2014, on market abuse and of the General Regulation of the AMF, to buy or sell shares of the Corporation within the framework of a share buyback program.

The purchase, sale or transfer of such shares may be transacted by any means on regulated markets, multilateral trading facilities or over the counter, including the purchase or sale by block trades, in accordance with the regulations of the relevant market regulatory authorities. Such transactions may include the use of any financial derivative instrument traded on regulated markets and implementing option strategies.

These transactions may be carried out at any time, in accordance with the applicable rules and regulations at the date of the operations under consideration, except during any public offering periods applying to the Corporation's share capital.

The maximum purchase price is set at €100 per share.

In the case of a share capital increase by incorporation of reserves and free share grants or in the case of a stock split or a reverse stock split, this maximum price shall be adjusted by applying the ratio of the number of shares outstanding before the transaction to the number of shares outstanding after the transaction.

Pursuant to the provisions of Article L. 22-10-62 of the French Commercial Code, the maximum number of shares that may be bought back under this authorization may not exceed 10% of the total number of shares composing the capital as of the date on which this authorization is used. This limit of 10% is applicable to the share capital of the Corporation which will be adjusted as a result of transactions impacting the share capital after the date of the present Meeting. Purchases made by the Corporation may under no circumstances result in the Corporation holding more than 10% of the share capital, either directly or indirectly through subsidiaries.

As of February 28, 2025, out of the 2,270,057,201 outstanding shares, the Corporation held 44,602,344 shares directly. As a result, the maximum number of shares that the Corporation could buy back is 182,403,376 shares and the maximum amount that the Corporation would spend to acquire such shares is €18,240,337,600.00 (excluding acquisition fees).

The purpose of this share buyback program is to reduce the number of outstanding shares of the Corporation or to allow it to fulfill its engagements in connection with:

- convertible or exchangeable securities that may give holders rights to receive shares of the Corporation; and/or
- share purchase option plans, free share plans, employee shareholding plans, company savings plans or other share allocation programs for executive directors or employees of the Corporation or TotalEnergies' companies.

The purpose of buybacks may also be the implementation of the market practice accepted by the French Financial Markets Authority (*Autorité des marchés financiers*), i.e., support the secondary market or the liquidity of TotalEnergies shares by an investment services provider by means of a liquidity agreement compliant with the deontology charter recognized by the French Financial Markets Authority (*Autorité des marchés financiers*).

This program may also be used by the Corporation to trade in its own shares, either on or off the market, for any other purpose that is authorized under the applicable law or any other permitted market practice that may be authorized at the date of the operations under consideration. In case of transactions other than the abovementioned intended purposes, the Corporation will inform its shareholders in a press release.

According to the intended purposes, the treasury shares acquired could in particular be either:

- canceled, up to the legal limit of 10% of the total number of shares composing the capital on the date of the operation, per each 24-month period;
- granted for no consideration to the employees and to the executive directors of the Corporation or of TotalEnergies' companies;
- delivered to the beneficiaries of the Corporation's shares purchase options having exercised such options;
- sold to employees, either directly or through the intermediary of company savings funds;
- delivered following the exercise of rights attached to securities giving rights to the allocation of Corporation shares, either through redemption, conversion, exchange, presentation of a warrant or in any other manner; and
- used in any other way consistent with the purposes stated in this resolution.

The shares bought back and held by the Corporation will be deprived of voting rights and dividend rights.

This authorization is granted for an 18-month period from the date of this Meeting. It renders ineffective, up to the unused portion, any previous authorization having the same purpose.

The Board of Directors is hereby granted full authority, with the right to sub-delegate such authority, to undertake all actions authorized by this resolution."

6.3.2.3 Conditions

Maximum share capital to be purchased and maximum funds allocated to the transaction

The maximum number of shares that may be purchased under the authorization provided by the Shareholders' Meeting on May 23, 2025[1], may not exceed 10% of the total number of shares composing the capital, with this limit applying to an amount of the Corporation's share capital that will be adjusted, if necessary, to include transactions affecting the share capital subsequent to this Meeting. Purchases made by the Corporation may under no circumstances result in the Corporation holding more than 10% of the share capital, either directly or indirectly through subsidiaries.

Before any share cancellation under the authorization granted by the Shareholders' Meeting on May 23, 2025, based on the number of shares outstanding as of February 28, 2025[2] and given the 44,602,344 shares held by the Corporation as of February 28, 2025, representing 1.96% of the share capital, the maximum number of shares that may be purchased would be 182,403,376 representing a theoretical maximum investment of €18,240,337,600.00 (excluding acquisition fees) based on the maximum purchase price of €100.

(1) Subject to approval of the Shareholders' Meeting on May 23, 2025.
(2) 2,270,057,201 shares.

Conditions for buybacks

Such shares may be bought back by any means on regulated markets, multilateral trading facilities or over the counter, including through the purchase or sale of blocks of shares, under the conditions authorized by the relevant market regulatory authorities. These means include the use of any financial derivative instrument traded on a regulated market or over the counter and the implementation of option strategies, with the Corporation taking measures, however, to avoid increasing the volatility of its stock. The portion of the program carried out through the purchase of blocks of shares will not be subject to quota allocation, up to the limit set by this resolution. These transactions may be carried out at any time, in accordance with the applicable rules and regulations, except during any public offering periods applying to the Corporation's share capital.

Duration and schedule of the share buyback program

In accordance with the fourth resolution, submitted to the Shareholders' Meeting on May 23, 2025, the share buyback program may be implemented over an 18-month period following the date of this Meeting, *i.e.*, until November 23, 2026.

Transactions carried out under the previous program

Transactions carried out under the previous program are listed in the special report of the Board of Directors on share buybacks (refer to point 6.3.1).

6.4 Shareholders

6.4.1 Major shareholders

6.4.1.1 Changes in major shareholders' holdings

TotalEnergies SE's major shareholders[1] as of December 31, 2024, 2023 and 2022 were as follows:

	2024			2023		2022	
As of December 31	% of share capital	% of voting rights	% of theoretical voting rights[a]	% of share capital	% of voting rights	% of share capital	% of voting rights
BlackRock, Inc.[b]	6.1	5.8	5.5	6.5	6.1	6.6	6.0
Company employees[c]	7.7	8.2	7.7	7.4	7.6	6.8	12.4
of which FCPE TotalEnergies Actionnariat France (French employee mutual fund)	*4.8*	*5.1*	*4.8*	*4.6*	*4.7*	*4.2*	*8.1*
Other shareholders	86.2	86.0	86.8	86.1	86.3	86.6	81.6
of which holders of ADR[d]	*8.3*	*8.9*	*8.3*	*8.2*	*8.4*	*8.7*	*8.5*

(a) Pursuant to Article 223-11 of the AMF General Regulation, the number of theoretical voting rights is calculated on the basis of all shares to which voting rights are attached, including treasury shares that are deprived of voting rights.
(b) Information taken from threshold notification form filed by BlackRock, Inc ("BlackRock") and sent to TotalEnergies on September 9, 2024, in which BlackRock stated that it has 130,688,680 voting rights of TotalEnergies (*i.e.*, 5.8% of the Corporation's voting rights). BlackRock did not filed any form Schedule 13G with the SEC on December 31, 2024.
(c) On the basis of the definition of employee shareholding set forth in Article L. 225-102 of the French Commercial Code and, since 2020, Article 11 para. 6 of the Corporation's Articles of Association. Amundi, the holding company of Amundi Asset Management, which in turn manages the TotalEnergies Actionnariat France fund (refer to below), filed a Schedule 13G with the SEC on February 12, 2025, declaring a holding of 231,246,997 TotalEnergies shares as of December 31, 2024 (9.6% of the Corporation's share capital). Amundi stated that it does not have any exclusive voting rights or exclusive right to dispose of these shares and that it has joint voting rights on 48,422,971 of these shares (*i.e.*, 2.2% of the Corporation's voting rights) and a joint right to dispose of all of these shares.
(d) Including all the American Depositary Shares represented by ADR listed on the NYSE.

The percentage of the holdings of the major shareholders was calculated based on the below data:

As of December 31	2024	2023	2022
Number of shares composing the share capital	2,397,679,661	2,412,251,835	2,619,131,285
Number of voting rights attached to the shares	2,248,149,843	2,351,708,622	2,671,776,303
Number of theoretical voting rights	2,397,679,661[a]	2,412,251,835[b]	2,808,963,970[c]

(a) Exercisable at the Shareholders' Meeting taking into account all shares to which voting rights are attached, including 149,529,818 treasury shares that are deprived of voting rights.
(b) Exercisable at the Shareholders' Meeting as of December 31, 2023.
(c) Exercisable at the Shareholders' Meeting as of December 31, 2022.

6.4.1.2 Holdings above the legal thresholds

In accordance with the provisions of Article L. 233-13 of the French Commercial Code, to TotalEnergies SE's' knowledge, one identified shareholders held 5% or more of the share capital or voting rights at year-end 2024: BlackRock held, as of December 31, 2024, 6.1% of the share capital representing 5.8% of the voting rights exercisable at Shareholders' Meetings and 5.5% of the theoretical voting rights.

(1) Major shareholders are defined herein as shareholders whose interest exceeds 5% of the share capital or voting rights.

6.4.1.3 Legal threshold notifications in fiscal year 2024

TotalEnergies SE is not aware of any legal threshold notifications among its shareholders in fiscal year 2024.

6.4.1.4 Threshold notifications required by the bylaws

In addition to the legal obligations to inform notably the Corporation and the French Financial Markets Authority when the number of shares (or securities similar to shares or voting rights pursuant to Article L. 233-9 of the French Commercial Code) held represents more than 5%, 10%, 15%, 20%, 25%, 30%, one third, 50%, two thirds, 90% or 95% of the share capital or theoretical voting rights, such information being made at the latest on the close of the fourth trading day after the threshold is exceeded (Article L. 233-7 of the French Commercial Code and Article 223-14 of the AMF General Regulation), any individual or legal entity who directly or indirectly comes to hold a percentage of the share capital, voting rights or rights giving future access to the Corporation's share capital that is equal to or greater than 1%, or a multiple of this percentage, is required to notify the Corporation within 15 days of the date on which each of the above thresholds is exceeded, by registered mail with return receipt requested, and indicate the number of shares held.

If not declared, any shares held in excess of the threshold that should have been declared will be deprived of voting rights at Shareholders' Meetings if, at a Shareholders' Meeting, the failure to make a declaration is acknowledged and if one or more shareholders holding collectively at least 3% of the Corporation's share capital or voting rights so request at that Meeting.

Any individual or legal entity is also required to notify the Corporation in due form and within the time limits stated above when their direct or indirect holdings fall below each of the thresholds mentioned above.

Notifications must be sent to the Head of Investor Relations, contact details provided in point 6.6.6.

6.4.1.5 Temporary transfer of securities

Pursuant to legal provisions, any legal entity or individual (with the exception of those described in paragraph IV-3 of Article L. 233-7 of the French Commercial Code) holding alone or in concert a number of shares representing more than two percent of the Corporation's voting rights pursuant to one or more temporary transfer or similar operations as described in Article L. 22-10-48 of the aforementioned Code is required to notify the Corporation and the AMF of the number of shares temporarily owned no later than the second business day preceding the Shareholders' Meeting at midnight (Paris time).

Notifications must be emailed to the Corporation at the following address: holding.df-declarationdeparticipation@totalenergies.com.

If no notification is sent, any shares acquired under any of the above temporary transfer operations will be deprived of voting rights at the relevant Shareholders' Meeting and at any Shareholders' Meeting that may be held until such shares are transferred again or returned.

6.4.1.6 Shareholders' agreements

TotalEnergies SE is not aware of any agreements among its shareholders.

6.4.2 Employee shareholding

As of December 31, 2024, based on the definition of employee shareholding set forth in Article L. 225-102 of the French Commercial Code and Article 11 paragraph 6 of the Corporation's Articles of Association, the Company's employees held, directly or indirectly, 184,978,472 TotalEnergies shares, representing 7.71% of the Corporation's share capital and 8.23% of the exercisable voting rights after deduction of 149,529,818 treasury shares, distributed as follows:

FCPE TotalEnergies Actionnariat France	115,481,457
FCPE TotalEnergies Actionnariat International Capitalisation	42,180,487
FCPE Direct Energie	86,331
Shares subscribed by employees in the United States	1,319,253
Shares subscribed by employees in Italy, Germany, Spain and Denmark	1,558,211
TotalEnergies shares resulting from the exercise of stock options and held as registered shares within a Company Savings Plan	195,982
TotalEnergies shares granted for free to employees	24,156,751
Total shares held by employees	**184,978,472**

The management of each of the collective investment funds (FCPEs) mentioned above is controlled by a dedicated Supervisory Board, two thirds of its members representing holders of fund units and one third representing the company. In accordance with legal provisions, the employees representing the unitholders are elected from among the unitholder employees as a whole based on the number of units held by each unitholder and, for the exercise of the voting rights attached to the securities issued by the company, after discussion in the presence of the company representatives, the voting operations take place without the latter being present.

The Supervisory Board is responsible for reviewing the collective investment fund's management report and annual financial statements, as well as the financial, administrative and accounting management of the fund, exercising voting rights attached to portfolio securities, deciding contributions of securities in case of a public tender offer, deciding mergers, spin-offs or liquidations, and granting its approval prior to changes in the rules and procedures of the collective investment fund in the conditions provided for by the rules and procedures.

These rules and procedures also stipulate a simple majority vote for decisions, except for decisions requiring a qualified majority vote of two thirds plus one related to a change in a fund's rules and procedures, its conversion or disposal.

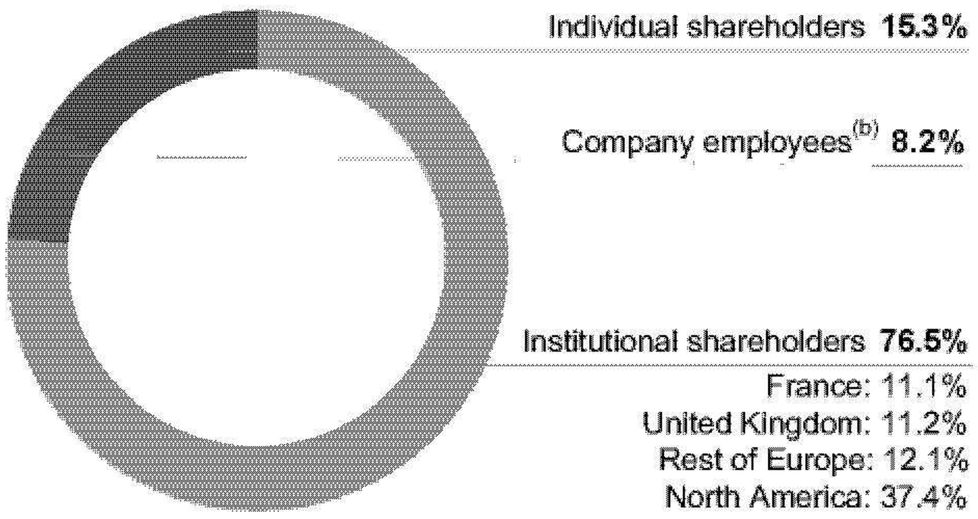
For employees holding shares outside of the employee collective investment funds mentioned in the table above, voting rights are exercised individually.

The information regarding shares held by the administration and management bodies is set forth in point 4.1.6 of chapter 4.

6.4.3 Shareholding structure

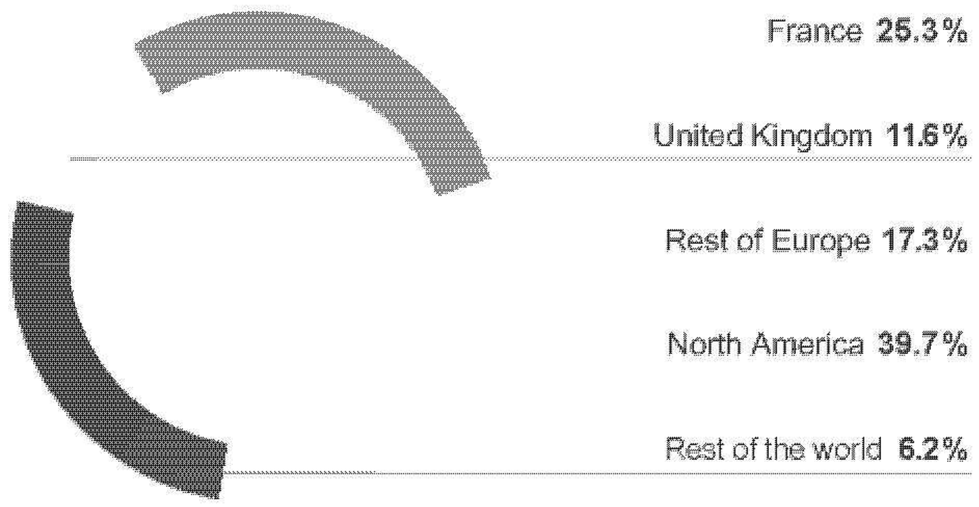
Estimate as of December 31, 2024, based on the request for the identification of shareholders made on that date, pursuant to Article L. 228-2 of the French Commercial Code.

By shareholder type[a]



(a) Excluding treasury shares.
(b) Based on the definition of employee shareholding set forth in Article L. 225-102 of the French Commercial Code and Article 11 paragraph 6 of the Corporation's Articles of Association.

By area[a]



(a) Excluding treasury shares.

6.5 Information for foreign shareholders

6.5.1 American holders of ADRs

Information for holders of TotalEnergies ADRs, representing American Depositary Shares, is provided in TotalEnergies' annual report on Form 20-F filed with the SEC for the fiscal year ended December 31, 2024.

6.5.2 Non-resident shareholders (other than U.S. shareholders)

The information set forth below is a general overview. Shareholders are invited to consult their tax advisor to determine the applicable procedures, the effect of tax treaties and, more generally, the tax impacts applicable to their particular situation. In addition, the following summary does not address the tax treatment applicable to transfers of shares and other similar transactions which could in certain circumstances, fall within the scope of application of the anti-abuse rules set forth in Article 119 bis A of the French General Tax Code[1].

TAXATION OF DIVIDENDS

Dividends distributed by TotalEnergies SE have in principle been subject to a withholding tax in France at (i) 25% since January 1, 2022 when they are paid to non-resident legal entities shareholders, (ii) 12.8% since January 1, 2018 when they are paid to non-resident individual shareholders, subject to compliance with certain procedural formalities, or (iii) 75% for dividends paid outside France in a Non-Cooperative Country or Territory ("NCCT"), as defined by Article 238-0 A of the General Tax Code[2].

These withholding tax rates are applicable subject to, as the case might be, the benefit of more favourable provisions of double tax treaties.

Therefore, under many tax treaties signed between France and other countries for the avoidance of double taxation ("Tax Treaties") and subject to specific conditions[3], the withholding tax rate can be reduced in cases where the dividends are paid to a shareholder resident in one of the countries that signed such Tax Treaties (for example, 15% for dividends paid to a resident of Austria, Belgium, Canada, Germany, Indonesia, Ireland, Italy, Luxembourg, the Netherlands, Norway, Singapore, South Africa, Spain, Switzerland, the United Kingdom and the United States; 10% for dividends paid to a resident of China, India or Japan; 0% for dividends paid to a resident of Qatar or the United Arab Emirates).

Furthermore, collective investment schemes governed by foreign law are not subject to withholding tax on dividends distributed by TotalEnergies SE if they meet the following conditions: (i) they are located in a State of the European Union or in another State or territory having concluded an administrative assistance agreement with France with a view to combating fraud and tax evasion, (ii) they raise capital from a certain number of investors with a view to invest them in the interest of the latter, in accordance with a defined investment policy and (iii) they have characteristics similar to those of certain collective investment schemes under French law (OPCVM and certain alternative investment funds).

The withholding tax is generally deducted from the gross amount of the dividends. However, the 2022 French Finance Act introduced the possibility for shareholders that are legal entities established in a State of the European Union, or in a State party to the Agreement on the European Economic Area ("EEA") and which has entered into an administrative assistance agreement with France with a view to combating tax evasion and tax avoidance, or in a third State which is not an NCCT and which has entered into such agreement, to calculate the withholding tax on the net amount of the dividend and to request, subject to compliance with certain conditions, the reimbursement of the excess part of the tax withheld from the French tax authorities.

(1) The French finance law for 2025 broadens the definition of operations falling within the scope of application of this article.
(2) Apart from the countries and territories mentioned in point 2 bis (2) of the same article. As of February 18, 2024, the NCCTs concerned by the provision are: Anguilla, Bahamas, Seychelles, Turks and Caicos Islands and Vanuatu. Bahamas and Turks and Caicos Islands are expected to be removed from the list soon.
(3) Notably, the condition of being the effective beneficiary of the dividend.

If certain conditions are met, legal entity shareholders having a loss-making tax result and residing in one of the States mentioned in the foregoing paragraph provided that, with regard to the States parties to the EEA agreement and third countries, the latter have, in addition, concluded with France an agreement on mutual assistance in matters of recovery with a scope similar to the one provided for by Council Directive 2010/24/EU of 16 March 2010, may request a temporary refund of the withholding tax levied on the dividends received, which must be repaid when their tax result becomes profitable.

TAXATION OF SALE OF SHARES

Capital gains on sales of shares realized by shareholders that are tax residents outside France are generally exempt from income tax in France. Two exceptions are provided, without any threshold condition: one for sales of shares where the seller has a permanent establishment or a fixed base in France to which his or her shares are attached, and the other for sales carried out by individuals or organizations residing or established in a NCCT, as defined by Article 238-0 A of the French General Tax Code[1].

The shareholder may be taxed on the capital gain realized on the sale of shares in his or her country of residence. Shareholders are invited to consult their own tax advisor to obtain confirmation of the applicable tax treatment.

A financial transactions tax ("FTT") applies, except under exceptional circumstances, to purchases of shares of companies listed on a French, European or foreign regulated market, provided that the purchase results in a transfer of ownership and that the securities are issued by a French company whose market capitalization exceeds €1 billion at December 1 of the year preceding the year of taxation.

The French tax authorities publish a list of these companies every year. TotalEnergies SE is included in the list of companies with a market capitalization of more than €1 billion as of December 1, 2024.

The FTT also applies to securities representing title to equity issued by a company. Transactions carried out on certificates representing shares, such as ADRs or European Depositary Receipts, are therefore subject to this tax.

Since January 1, 2017, the FTT has been equal to 0.3% of the share purchase price. Further to the vote on the French Finance Act for 2025, its rate increases to 0.4% for transactions carried out from April 1, 2025. Stamp duties are not applicable to sales of shares subject to the FTT.

Taxation of dividends outside France varies according to each country's local tax legislation. In most countries, the gross amount of dividends is included in the shareholder's taxable income. Based on certain requirements and limitations, the French withholding tax deducted from dividends generally entitles the shareholder to a tax credit to be deducted from the foreign income tax payable by the shareholder.

Excluding exceptions, dividends paid in shares and dividends paid in cash have the same tax treatment.

6.6 Investor relations

6.6.1 Documents on display

Information and documents regarding TotalEnergies SE, its bylaws and the Corporation's Statutory and Consolidated Financial Statements for the year ended December 31, 2024, or previous fiscal years, may be consulted at the Corporation's registered office pursuant to the legal and regulatory provisions in force, as well as on TotalEnergies' website.

In addition, TotalEnergies SE's Reference Documents or Universal Registration Documents (including the annual financial reports) and the interim financial reports (filed with the market authorities) for each of the past 10 financial years are available on the Corporation's website (under Investors/Publications and regulated information). The Company's half-yearly results and outlook presentations, as well as the quarterly financial information, are also available on the TotalEnergies website.

Furthermore, in order to meet its obligations related to the listing of its shares in the United States, the Corporation also files an annual report on Form 20-F, in English, with the SEC. This report is also available on the Corporation's website.

(1) Apart from the countries and territories mentioned in point 2 bis (2°) of Article 238-0 A of the French General Tax Code. As of February 18, 2024, the NCCTs concerned by the provision are: Anguilla, Bahamas, Seychelles, Turks and Caicos Islands and Vanuatu. Bahamas and Turks and Caicos Islands are expected to be removed from the list soon.

6.6.2 Relationships with institutional investors, financial analysts and individual shareholders

Members of the Company's General Management and Investor Relations regularly meet with institutional investors and financial analysts in the leading financial centers. In 2024, the Company kept up a sustained rate of meetings. Approximately 1,200 meetings were held.

Each year, two main presentations are given to the financial community: one in February following the publication of the results for the previous fiscal year, and the other in September to present the Company's outlook and objectives. A series of meetings is held after each of these presentations. In addition, each year the Chief Financial Officer hosts three conference calls to discuss results for the first, second and third quarters of the year. The information presented and broadcast at these events are available on the TotalEnergies website.

The Finance Division maintains an ongoing dialogue with investors, analysts and extra-financial rating agencies on climate issues and, more generally, on sustainability themes. In all, more than 450 meetings were organized in France and abroad in 2024, as well as a site visit in Uganda; the latter included site visits to Tilenga and EACOP projects as well as exchanges with several stakeholders.

In 2024, the Lead Independent Director engaged in an extensive dialogue with shareholders, representing nearly a quarter of the Company's capital ahead before the Shareholders' Meeting to prepare for the resolution votes. The Lead Independent Director also steered the ongoing dialogue with proxy advisors. This dialogue continued after the Shareholders' Meeting.

The Sustainability & Climate - Progress Report 2024, reporting on the progress made in the implementation of the Corporation's ambition with respect to sustainable development and energy transition and its related targets by 2030, was submitted to an advisory vote at the Annual Shareholders' Meeting held on May 24, 2024. The resolution was approved by the shareholders at close to 80% of the votes cast.

In addition, the Company has an ISO 9001 certified team dedicated to relationships with individual shareholders and offering a comprehensive communication package, featuring:

- a direct-line, email address, and postal address (refer to point 6.6.6),
- documentation and material provided for individual shareholders (e.g., the shareholders' newsletter, e-newsletter, etc.),
- shareholder meetings and fairs in France and abroad,
- the Shareholders' Club, which organizes visits to industrial facilities, cultural events sponsored by the TotalEnergies Foundation and conferences about the Company,
- the Shareholders' e-Advisory Committee, which expresses its views on the communication service as a whole.

The documentation on relationships with individual shareholders is available on the TotalEnergies website (under Investors/Individual shareholders).

This team also organized the Annual Shareholders' Meeting which was held on May 24, 2024, in Paris. As the Company is particularly committed to preserving this key moment in the expression of shareholder democracy, it took care to implement the necessary means to facilitate remote participation by shareholders. They were able to follow the meeting in full and live, thanks to its broadcast on the Company's website. Shareholders also had the opportunity to ask questions online via a dedicated platform accessible from the Company's website between May 10 and May 20, 2024, with around 30 questions received. As every year, the Chairman and Chief Executive Officer spent more than an hour answering them. The replay of the Shareholders' Meeting remains accessible on the TotalEnergies website.

SHAREHOLDER DIALOGUE

1. Shareholder engagement policy

The Company and its Board of Directors are committed to a rich and constructive shareholder dialogue throughout the year.

In addition to the actions implemented by the investor relations team on financial matters, the Company has developed a shareholder engagement program on extra-financial topics. This program allows for regular interactions with shareholders throughout the year on the Company's strategy, climate policy, sustainability matters, and governance practices.

These interactions are ensured by the Chairman and Chief Executive Officer, the Lead Independent Director, the members of the executive committee, and the investor relations team. In parallel with exchanges with its shareholders, the Company maintains regular communication with proxy advisors, extra-financial rating agencies, and investor coalitions such as CA100+ to better understand their expectations.

The Company also has a dedicated service for relations with individual shareholders, which maintains a particularly active dialogue. Individual shareholders are also informed of the Company's news through the Shareholders' Journal (3 issues per year) and the Shareholders' Webzine (6 to 8 issues per year) as well as through visits organized within the framework of the Shareholders' Club. Several meetings also take place each year with the Shareholders' Advisory Committee, bringing together a representative panel of individual shareholders.

All of these exchanges, both verbal and written, form the basis on which TotalEnergies analyzes the expectations of its investors. These expectations are assessed as often as necessary by the General Management and the Board of Directors, and more specifically before and after the Shareholders' Meeting. The results of the votes at the shareholders' meetings, as well as potential comments from shareholders and stakeholders, are reviewed by the Governance and Ethics Committee and the Board of Directors.

In addition to the ongoing dialogue, the shareholder engagement program is structured around key moments as described in the table below.

Key moments of the annual shareholder engagement program

Pre-Shareholders' Meeting dialogue (April – May)	In addition to the ongoing dialogue, a specific engagement campaign is conducted prior to the Shareholders' Meeting. The objective is to address shareholders' questions regarding the agenda and the resolutions presented at the Shareholders' Meeting.
Shareholders' Meeting (May)	The Shareholders' Meeting, which generally holds in May, is an important moment in shareholder dialogue. In addition to exercising their voting rights, shareholders have the opportunity to ask questions either online before the Shareholders' Meeting via a dedicated platform accessible from the Company's website, or during the session. The Company responds to these questions, and each year, the Chairman and Chief Executive Officer dedicates significant time to answering them during the session. Shareholders also have the ability to submit written questions to the Board of Directors before the Shareholders' Meeting, with responses published on the Corporation's website.
Review of the Shareholders' Meeting votes (July)	The Governance and Ethics Committee and the Board of Directors analyze the results of the Shareholders' Meeting votes as well as the comments expressed by shareholders and main proxy advisors, and the lessons to be learned from them. This discussion then feeds into the work of the Committees and the Board throughout the year.
ESG Survey (November – January)	An ESG survey is sent to TotalEnergies' institutional shareholders to collect their expectations regarding the Company's extra-financial reporting. This ESG survey enables quality shareholder dialogue on extra-financial topics, particularly on the Company's progress in decarbonization and sustainability. A formal analysis of the ESG survey results illustrating shareholder expectations is conducted by General Management. Third-party evaluations (extra-financial ratings, CA100+ assessment, etc.) and the voting policies of proxy advisors are also reviewed on this occasion. These expectations are then taken into account in the development of the Company's publications and practices.

2. Deployment of the shareholders dialogue in 2024

In 2024, close to 1,200 meetings were organised with investors (individual interviews and roadshows) worldwide, including around 450 dedicated to extra-financial matters.

In addition to these meetings, shareholder dialogue carried out in 2024 included in particular the following:

Dialogue with the Lead Independent Director

In 2024, the Lead Independent Director had an extensive dialogue ahead of the Shareholders' Meeting with shareholders representing a total of nearly a quarter of the Company's capital in order to prepare the vote on the resolutions. The Lead Independent Director also led the sustained dialogue with proxy advisors. This dialogue continued after the Shareholders' Meeting.

The modalities and themes of this dialogue are presented in the report by the Lead Independent Director on the exercise of their mission, which appears in point 4.1.3 of this Universal Registration Document.

Like every year in July, the Governance and Ethics Committee, under the chairmanship of the Lead Independent Director, and then the Board of Directors, reviewed the results of the votes to the Shareholders' Meeting resolutions and the lessons to be learned. This analysis has been integrated into the subsequent exchanges of the Lead Independent Director with shareholders.

Visit of Tilenga and EACOP site

A site visit was organised in Uganda in April 2024, to allow shareholders to discover the Tilenga and EACOP sites and to engage with various local stakeholders. This visit, spread over several days, allowed for transparent discussion of the controversies surrounding these projects.

Pre-Shareholders' Meeting Engagement Campaign

A comprehensive engagement program was conducted prior to the 2024 Shareholders' Meeting with 62 shareholders, representing 27% of TotalEnergies' share capital. The dialogue focused on the agenda of the Shareholders' Meeting, the Board of Directors' position on advisory shareholder resolutions, the 'Say on Climate' resolution, the functioning of the Board of Directors, and the proposed changes to the Chairman and Chief Executive Officer's compensation policy.

ESG Survey

The questionnaire, composed of 43 questions covering ESG data, Say on Climate, the Sustainability & Climate – 2024 Progress Report, and shareholder dialogue, was sent at the end of November to approximately 200 institutional shareholders representing around 60% of TotalEnergies' share capital. The numerous responses received were analyzed in detail and presented to General Management in January 2025. The Board of Directors particularly examined the responses regarding Say on Climate in March 2025 (refer to below).

Dialogue with individual shareholders

Several site visits were organised, both with the Shareholders' Club and the Shareholders' Advisory Committee, notably at the Normandie platform, the FSRU in Le Havre, and at Industreet. The Shareholders' Advisory Committee was also invited to exchange in April at the Company's headquarters around the theme of the 100th anniversary.

3. Examples of changes implemented following shareholder engagement

The analysis of voting results and shareholder feedback feeds into the decision-making process of the Board of Directors. Over the years, many improvements have been implemented in this context. This includes:

Shareholders' expectations	Changes implemented in response
Example 1: Elimination of double voting rights *Engagement theme: Shareholder equality* Institutional shareholders, proxy advisors, and extra-financial rating agencies expressed their commitment to the governance principle of 'one share, one vote' and the alignment between shareholders' economic exposure and their voting rights.	In order to meet these expectations, the Board of Directors submitted a proposal to the 2023 Shareholders' Meeting to eliminate double voting rights and engaged in constructive dialogue with employee shareholders who were attached to double voting rights. The proposal was approved by 99.78%, and double voting rights were therefore eliminated.
Example 2: Diversity within the Board of Directors *Engagement theme: Governance* Shareholders' wish for greater internationalization of the Board, given the global exposure of the Company's activities and additional expertise in electricity and renewables. This wish also emerged from the assessment of the Board's functioning	In order to meet these expectations, the Board of Directors submitted to the 2023 Shareholders' Meeting the appointment of Mr. Dierk Paskert, a German national with extensive experience in the electricity and renewables sectors, as well as Ms. Anelise Lara, a Brazilian national with long-standing experience in the Oil & Gas and Gas & Power sectors and a good knowledge of Brazil, a country where the Company's investments are significant. Mr. Dierk Paskert and Ms. Anelise Lara were appointed directors by 2023 Shareholders' Meeting with approval rates above 99%.
Example 3: Scope 3 & compensation *Engagement theme: Compensation; Climate Strategy* The 2023 performance shares plan no longer included a criterion related to Scope 3, which was replaced by a criterion on reducing methane emissions. In a context where shareholder expectations are diverse and even contradictory regarding the setting of Scope 3 targets, some shareholders wanted the reintroduction of a Scope 3 target within the performance share plans.	Starting from the 2024 performance share plan, the Board of Directors replaced the criterion related to the evolution of GHG emissions from operated facilities (Scope 1+2), which was also used in the variable part of the compensation, with the criterion related to the lifecycle carbon intensity of energy products sold to the customers of the Company (Scope 1+2+3). The lifecycle carbon intensity of energy products sold measures the average GHG emissions of energy products used by the Company's customers, throughout their life cycle, from production to final use, per unit of energy. The results of this indicator are directly readable in the Company's annual publications. The use of this new criterion allows for linking long-term incentive compensation to the Company's ambition and the ultimate goal of the transition strategy: to reduce the carbon content of energy products sold to the Company's customers while providing them with more energy. This criterion thus reflects the Company's progress in implementing its transition strategy.
Example 4: Transparency *Engagement theme: Transparency* The dialogue with shareholders and the CA100+ coalition in 2023 and 2024 has fueled reflections on potential changes to the Company's publications. The identified expectations mainly focused on climate issues, just transition, and representation of interests.	Additional elements have been incorporated into the Sustainability & Climate 2024 Progress Report. This included providing greater granularity of information on the levers to achieve the Scope 1+2 target for operated facilities, additional data on so-called 'non-conventional' production, and on 'Just Transition'. Furthermore, the Company published a report in 2024 presenting the detailed results of the review of associations.

4. The inclusion of a formal item on the agenda of the Annual Shareholders' Meeting on the Sustainability & Climate report

The Company has adopted a balanced multi-energy strategy that allows it to address global challenges and position itself as the leader among its peers in decarbonizing the energy mix.

TotalEnergies annually publishes a Sustainability & Climate Progress Report presenting the concrete progress of the transition strategy in which the Company is engaged. Furthermore, fully assuming its driving role in the industry, the Company has submitted this report to a consultative vote (say on climate) by its shareholders for four consecutive years since 2021: over these four years, the Shareholders' Meeting has voted in favor of these resolutions by a very large majority. The approval rate obtained at the Shareholders' Meeting on May 24, 2024, close to 80%, constitutes the best approval rate among Oil & Gas companies that submitted a say on climate in 2024.

In a context of major regulatory changes and controversies surrounding the practice of say on climate (the number of these resolutions initiated by a Board of Directors was halved between 2022 and 2024 globally, and TotalEnergies was the only CAC40 company to consult its shareholders in 2024), the Board of Directors conducted a review of peer practices, market developments, and a consultation with shareholders and major proxy advisors to gather their expectations regarding say on climate.

The investor relations team held bilateral dialogue meetings in September and October 2024 with 15 investors representing approximately 20% of the share capital.

Furthermore, as part of its annual ESG survey, the investor relations team sent a questionnaire at the end of November 2024 to approximately 200 institutional shareholders representing around 60% of the Company's share capital. They were specifically asked whether they are in favor of TotalEnergies submitting a say on climate to its Shareholders' Meeting. Shareholders representing a total of 14% of the share capital responded to the survey. In terms of shareholder weight, 40% of them were against the say on climate, 39% were in favor but not every year (only in case of significant strategy changes), 6% were indifferent, while only 15% of shareholders were in favor of an annual say on climate. Therefore, it emerges from this survey that a very large majority of the shareholders consulted are not in favor of an annual say on climate.

The results of this survey are consistent with the feedback from bilateral dialogue meetings with investors held in September and October 2024.

While a significant portion of the shareholders wishes to maintain consultation in case of significant strategy changes, some shareholders believe that the practice of say on climate contravenes the fundamental principle that shareholders elect directors who are responsible for determining the strategy and overseeing its implementation. This opposition to the very principle of say on climate has led some shareholders to vote against say on climate or abstain from voting on it.

The Board of Directors has noted the overwhelming satisfaction of shareholders with the consistency of TotalEnergies over the years and the progress made. The Board of Directors has also noted that the Company's shareholders are strongly committed to climate transparency. However, in a context of major regulatory changes and a substantial decline in the practice of say on climate, a clear majority of them perceive an annual vote as a constraint and a tool disconnected from the Company's energy transition timelines.

In this context, the Board has decided to include a formal item on the agenda of the Shareholders' Meeting on May 23, 2025, (without a resolution submitted to shareholder vote) on the presentation of the Sustainability & Climate 2025 Report reporting the progress made in implementing the Company's ambition in terms of sustainability and energy transition towards carbon neutrality and its related objectives by 2030.

The Board of Directors intends to make this practice of including an item on the agenda a permanent feature at future shareholders' meetings. In the event of a significant change in the strategy, a consultative vote by shareholders on the Sustainability & Climate strategy would be initiated by the Board of Directors.

6.6.3 Registered shareholding

TotalEnergies shares can be held in bearer form or registered form. In the latter case, shareholders are identified by TotalEnergies SE, in its capacity as the issuer, or by its agent, Société Générale Securities Services, which is responsible for keeping the register of shareholders' registered shares.

REGISTERED SHARES

There are two forms of registration:

- administered registered shares: shares are registered with TotalEnergies through the Corporation's agent, but the holder's financial intermediary continues to administer them (sales, purchases, coupons, etc.),
- pure registered shares: TotalEnergies holds and directly administers shares on behalf of the holder through the Corporation's agent (sales, purchases, coupons, Shareholders' Meeting notices, etc.), so that the shareholder does not need to appoint a financial intermediary.

MAIN ADVANTAGES OF REGISTERED SHARES

The advantages of registered shares include:

- a customer relations center, Nomilia, available in six languages 24/7 by phone on +33 (0)2 51 85 67 89 (local call rate) with access to an advisor from Société Générale Securities Services, from Monday to Friday (business days) from 8.30 a.m. to 6.00 p.m., Paris time,
- registration as a recipient of all information published by the TotalEnergies for its shareholders,
- the ability to join the TotalEnergies Shareholders' Club by holding at least 50 shares.

The advantages of pure registered shares, in addition to those of administered registered shares, include:

- no custodial fees,
- easier placement of market orders[1] (phone, mail, fax, Internet),
- brokerage fees of 0.19% (incl. tax) of the gross amount of the trade, with no minimum charge and up to €1,000 per trade,
- the option to view and manage shareholdings online via the Sharinbox site.

To convert TotalEnergies shares into pure registered shares, shareholders must fill out a form that can be obtained upon request from the Individual Shareholder Relations Department and send it to their financial intermediary.

(1) Provided the subscriber has signed the market service agreement. Signing this agreement is free of charge.

6.6.4 Forecast financial calendar for 2025

February 5, 2025	Results of the fourth quarter and full year 2024 and Investors' Day
March 26, 2025	Ex-dividend date for the third 2024 interim dividend
March 27, 2025	Sustainability & Climate 2025 Progress Report Presentation
April 1, 2025	Payment date for the third 2024 interim dividend
April 30, 2025	Results of the first quarter of 2025
May 23, 2025	2025 Annual Shareholders' Meeting in Paris
June 19, 2025	Ex-dividend date for the 2024 final dividend[a]
July 1, 2025	Payment date for the 2024 final dividend[a]
July 24, 2025	Results of the second quarter and first half of 2025
October 1, 2025	Ex-dividend date for the first 2025 interim dividend[b]
October 3, 2025	Payment date for the first 2025 interim dividend[b]
September 29, 2025	Investors' Day (outlook and objectives)
October 30, 2025	Results of the third quarter and first nine months of 2025

(a) Subject to approval at the Annual Shareholders' Meeting called to approve the 2024 financial statements.
(b) Subject to the Board of Directors' decision.

The calendar including Shareholders' Meetings and investor fairs is available on the TotalEnergies website (under Investors).

6.6.5 Forecast financial calendar for 2026

January 2, 2026	Ex-dividend date for the second 2025 interim dividend[a]
January 6, 2026	Payment date for the second 2025 interim dividend[a]
April 1, 2026	Ex-dividend date for the third 2025 interim dividend[a]
April 7, 2026	Payment date for the third 2025 interim dividend[a]
May 29, 2026	2026 Annual Shareholders' Meeting
July 1, 2026	Ex-dividend date for the 2025 final dividend[b]
July 3, 2026	Payment date for the 2025 final dividend[b]

(a) Subject to the Board of Directors' decision.
(b) Subject to approval at the Annual Shareholders' Meeting called to approve the 2025 financial statements.

6.6.6 Contacts

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Tel. (Monday to Friday from 9:00 a.m. to 12:30 p.m. and from 1:30 p.m. to 5:00 p.m., Paris time):

- from France: 0800 039 039 (toll-free number from a landline);
- from other countries: +33 (0) 1 47 44 24 02.

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7.1 Share capital

7.1.1 Amount of share capital

On February 4, 2025, the Board of Directors decided, with effect as of February 10, 2025, to decrease the share capital of TotalEnergies SE by way of cancellation of 127,622,460 treasury shares. As of February 10, 2025, the share capital of the Corporation amounts to €5,675,143,002.50 and is divided into 2,270,057,201 shares.

As of December 31, 2024, the share capital amounted to €5,994,199,152.50, divided into 2,397,679,661 ordinary shares, each with a par value of €2.50. All shares issued have been fully paid up.

7.1.2 Features of the shares

There is a single category of shares. The shares are held in registered or bearer form, at the shareholder's discretion.

The shares are in book-entry form and registered in an account.

7.1.3 Potential capital as of December 31, 2024

The potential share capital consists of the existing share capital to which are added the new TotalEnergies shares that could be issued in the event of (i) the conversion or reimbursement in shares of all the securities giving access to the share capital, or (ii) the exercise of all the share subscription options.

As of December 31, 2024, there were no financial instruments likely to result in the issuance of new TotalEnergies shares.

7.1.4 Changes in share capital between 2022 and 2024

Transaction acknowledgment date	Shares created/ (canceled) *(number of shares)*	Type of transaction *(share capital increase/reduction)*	Nominal amount of the transaction *(euros)*	Issuance/ share premium per share *(euros)*	Share capital after the transaction *(euros)*	Number of shares composing the capital after the transaction
Fiscal year 2022						
February 9, 2022	(30,665,526)	Reduction – Cancellation of treasury shares	(76,663,815.00)	n/a	6,524,409,507.50	2,609,763,803
April 26, 2022	9,471	Increase - Deferred contribution pursuant to the 2017 capital increase reserved for employees	23,677.50	n/a	6,524,433,185.00	2,609,773,274
June 8, 2022	9,358,011	Share capital increase reserved for employees	23,395,027.50	34.50[a]	6,547,828,212.50	2,619,131,285

(a) Only the created 9,130,380 shares subscribed by the employees as part of the share capital increase included an issuance premium. The 227,631 shares created for the matching contribution, in the form of free shares pursuant to Article L. 3332-21 of the French Labor Code, did not include an issuance premium.

Transaction acknowledgment date	Shares created/ (canceled) *(number of shares)*	Type of transaction *(share capital increase/reduction)*	Nominal amount of the transaction *(euros)*	Issuance/ share premium per share *(euros)*	Share capital after the transaction *(euros)*	Number of shares composing the capital after the transactio
Fiscal year 2023						
February 7, 2023	(128,869,261)	Reduction – Cancellation of treasury shares	(322,173,152.50)	n/a	6,225,655,060.00	2,490,262,024
June 7, 2023	8,002,155	Share capital increase reserved for employees	20,005,387.50	43.10[a]	6,245,660,447.50	2,498,264,179
September 25, 2023	(86,012,344)	Reduction – Cancellation of treasury shares	(215,030,860.00)	n/a	6,030,629,587.50	2,412,251,835

(a) Only the created 7,760,062 shares subscribed by the employees as part of the share capital increase included an issuance premium. The 242,093 shares created for the matching contribution, in the form of free shares pursuant to Article L. 3332-21 of the French Labor Code, did not include an issuance premium.

Transaction acknowledgment date	Shares created/ (canceled) *(number of shares)*	Type of transaction *(share capital increase/reduction)*	Nominal amount of the transaction *(euros)*	Issuance/ share premium per share *(euros)*	Share capital after the transaction *(euros)*	Number of shares composing the capital after the transaction
Fiscal year 2024						
February 12, 2024	(25,405,361)	Reduction – Cancellation of treasury shares	(63,513,402.50)	n/a	5,967,116,185.00	2,386,846,474
June 6, 2024	10,833,187	Share capital increase reserved for employees	27,082,967.50	44.40[a]	5,994,199,152.50	2,397,679,661

(a) Only the created 10,251,337 shares subscribed by the employees as part of the share capital increase included an issuance premium. The 581,850 shares created for the matching contribution, in the form of free shares pursuant to Article L. 3332-21 of the French Labor Code, did not include an issuance premium.

7.2 Articles of Association; other information

The Annual Shareholders' Meeting held on May 29, 2020 approved to transform TOTAL S.A. into a European company *(Societas Europaea* or SE). The legal status of a European company is common to all the countries in the European Union and is used by an increasing number of companies in France and in Europe. This status better reflects the economic and social reality of TotalEnergies and ensures that its European dimension is fully recognized.

The Corporation officially became a European company on the date it was registered under its new status in the Nanterre Trade and Companies Register, on July 16, 2020. The process was completed without the creation of a new legal entity and had no impact on the Company's governance, activities, tax affairs or organization, the listing places or the location of the registered office, which remained in France.

The Shareholders' Meeting on May 28, 2021 decided to change the corporate name to TotalEnergies SE, thereby anchoring the Corporation's transformation into an integrated energy company.

7.2.1 General information concerning the Corporation

The Corporation's name is TotalEnergies SE.

TotalEnergies SE is a European company governed by French law. The registered office is located at 2, Place Jean Millier, La Défense 6, 92400 Courbevoie, France. It is registered in the Nanterre Trade and Companies Register under No. 542 051 180.

The Corporation's term was extended until March 28, 2119, *i.e.*, it will expire on March 28, 2119, unless dissolved prior to this date or extended.

Fiscal year: from January 1 to December 31 of each year.

LEI (Legal Entity Identifier): 529900S21EQ1BO4ESM68.

EC Registration Number: FR 59 542 051 180.

APE Code (NAF): 111Z until January 7, 2008; 7010Z since January 8, 2008.

The Corporation's Articles of Association are available on the Company's website.

The telephone number is +33 (0)1 47 44 45 46 and its Internet address is totalenergies.com.

7.2.2 Corporate purpose

The purpose of the Corporation, directly and indirectly and in all countries, is:

1. All activities relating to production and distribution of all forms of energy, including electricity from renewables;
2. The search for and extraction of mining deposits, particularly all forms of hydrocarbons, and the production, refining, transportation, processing and trading in said materials as well as their derivatives and by-products;
3. All activities relating to the chemicals sector in all its forms and to the rubber sector;

And in general, all financial, commercial, industrial, securities or real estate transactions, and acquisitions of interests or holdings in any form whatsoever, in any business or company existing or to be created that may relate, directly or indirectly, to the above-mentioned purposes or to any similar or related purposes, of such nature as to promote the Company's expansion or its development.

7.2.3 Provisions of the Articles of Association governing the administration and management bodies

7.2.3.1 Election of directors and term of office

Directors are elected up to a maximum number of directors authorized by law (currently 18) by the Shareholders' Meeting, which determines the duration of their term of office not to exceed three years, subject to the legal provisions that allow the term to be extended until the next Ordinary Shareholders' Meeting called to approve the financial statements for the previous fiscal year.

In addition, one director representing the employee shareholders is elected by the Shareholders' Meeting for a three-year term from a list of at least two candidates preselected by the employee shareholders under the conditions provided for by the laws, regulations and Articles of Association in force. However, his or her term shall expire automatically once this director is no longer an employee or a shareholder. The Board of Directors may meet and conduct valid deliberations until the date his or her replacement is named.

In addition, a director representing the employees is designated by the Corporation's Central Social and Economic Committee. Where the number of directors appointed by the Shareholders' Meeting is greater than eight[1], a second director representing the employees is designated by the TotalEnergies European Works Council (the SE Committee). In accordance with applicable legal provisions, the director elected by the Central Social and Economic Committee must have held an employment contract with the Corporation or one of its direct or indirect subsidiaries, whose registered office is based in mainland France, for at least two years prior to appointment. By way of derogation, the second director elected by the SE Committee must have held an employment contract with the Corporation or one of its direct or indirect subsidiaries for at least two years prior to appointment. The term of office for a director representing the employees is three years. However, the term of office ends following the Ordinary Shareholders' Meeting called to approve the financial statements for the last fiscal year and held in the year during which the said director's term of office expires.

7.2.3.2 Age limit of directors

On the closing date of each fiscal year, the number of individual directors over the age of 70 may not be greater than one third of the directors in office. If that number is exceeded, the oldest Board member is automatically considered to have resigned. The permanent representative of a legal entity director must be less than 70 years old.

7.2.3.3 Age limit of the Chairperson of the Board and the Chief Executive Officer

The office of the Chairperson of the Board of Directors automatically ceases on his or her 70th birthday at the latest.

To hold this office, the Chief Executive Officer must be under the age of 67. When the age limit is reached during his or her duties, such duties automatically cease, and the Board of Directors elects a new Chief Executive Officer. However, his or her duties as Chief Executive Officer will continue until the date of the Board of Directors' meeting aimed at electing his or her successor. Subject to the age limit specified above, the Chief Executive Officer can always be re-elected.

The age limits specified above are stipulated in the Corporation's Articles of Association.

7.2.3.4 Minimum interest in the Company held by directors

Each director (other than the director representing employee shareholders or the directors representing employees) must own at least 1,000 shares during his or her term of office. If, however, any director ceases to own the required number of shares, they may adjust their position subject to the conditions set by law. The director representing employee shareholders must hold, during his or her term of office, either individually or through a Company Savings Plan (*Fonds Commun de Placement d'Entreprise*, FCPE) governed by Article L. 214-165 of the French Monetary and Financial Code, at least one share or a number of units in said fund equivalent to at least one share. The directors representing employees are not required to be shareholders.

7.2.3.5 Majority rules for Board meetings

Decisions are adopted by a majority vote of the directors present or represented. In the event of a tie vote, the person chairing the meeting shall cast the deciding vote.

When permitted by applicable regulations, directors participating in the meeting by means of video conferencing or telecommunications as defined by decree shall be deemed present for the calculation of the *quorum* and the majority.

7.2.3.6 Rules of procedure and Committees of the Board of Directors

Refer to point 4.1.2 of chapter 4.

7.2.3.7 Form of management

Management of the Corporation is assumed either by the Chairperson of the Board of Directors (who then holds the title of Chairman and Chief Executive Officer), or by another person appointed by the Board of Directors with the title of Chief Executive Officer. It is the responsibility of the Board of Directors to choose between these two forms of management under the majority rules described above.

At its meeting on December 16, 2015, the Board of Directors decided to reunify the positions of Chairperson and Chief Executive Officer of the Corporation as from December 19, 2015. Since that date, Mr. Pouyanné has held the position of Chairman and Chief Executive Officer of TotalEnergies SE. After his term of office as director was renewed for a three-year period at the Shareholders' Meeting on May 24, 2024, the Board of Directors reappointed Mr. Pouyanné as Chairman and Chief Executive Officer for the same period, expiring at the end of the 2027 Shareholders' Meeting called to approve the financial statements for fiscal year 2026.

The Board of Directors, at its meeting held on September 21, 2023, after reaffirming its support to the quality and the relevance of the strategy implemented, considered that it is highly desirable that Mr. Patrick Pouyanné, Chairman and Chief Executive Officer, continues to drive this strategy's deployment at the helm of the Company. On the proposal of the Governance and Ethics Committee, it has therefore been unanimously decided that the renewal of the mandate of Mr. Patrick Pouyanné will be proposed to the Shareholders' Meeting to be held on May, 24 2024. In the frame of the balanced governance implemented since 2015, it also unanimously decided to propose the renewal of the mandate of Mr. Jacques Aschenbroich, who has held the position of Lead Independent Director since May 2023.

Unified management form

The discussions held with the Governance and Ethics Committee in the best interests of the Corporation had led to a firm proposal to continue to combine the functions of Chairman and Chief Executive Officer. Indeed, this management form of the Corporation is considered to be the most appropriate for dealing with the challenges and specificities of the energy sector, which is facing major transformations. More than ever, this context requires agility of movement, which the unity of command reinforces, by giving the Chairman and Chief Executive Officer the power to act and increased representation of the Corporation in its strategic negotiations with States and partners of the Company.

(1) Neither the director representing employee shareholders, elected by the Annual Shareholders' Meeting, nor the director(s) representing employees are taken into consideration when calculating the eight-member threshold, which is assessed on the date on which the employee director(s) is/are elected.

Balance of power

The unity of the power to manage and represent the Corporation is also particularly well regulated by the Corporation's governance.

The balance of power is established through the quality, complementarity and independence of the members of the Board of Directors and its four Committees, as well as through the Articles of Association and the Board's Rules of Procedure, which define the means and prerogatives of the Lead Independent Director, notably:

- in his relations with the Chairman and Chief Executive Officer: contribution to the agenda of Board meetings or the possibility of requesting a meeting of the Board of Directors and sharing opinions on major issues;
- in his contribution to the work of the Board of Directors: chairing meetings in the absence of the Chairman and Chief Executive Officer, or when the examination of a subject requires his abstention, evaluation and monitoring of the functioning of the Board, prevention of conflicts of interest, and dialogue with the directors and Committee Chairpersons;
- in his relations with shareholders: the possibility, with the approval of the Chairman and Chief Executive Officer, of meeting with them on corporate governance issues, a practice that has already been used on several occasions.

The balance of power within the governance bodies, in addition to the independence of its members, is further strengthened by the full involvement of the directors, whose participation in the work of the Board and its Committees is exemplary. The diversity of their skills and expertise also enables the Chairman and Chief Executive Officer to benefit from a wide range of contributions.

In addition, the Board's rules of procedures provide that any investment or divestment transactions contemplated by the Company involving amounts in excess of 3% of shareholders' equity must be approved by the Board, which is also kept informed of all significant events concerning the Corporation's operations, in particular investments and divestments in excess of 1% of shareholders' equity.

Lastly, the Corporation's Articles of Association provide the necessary guarantees of compliance with good governance practices in the context of a unified management structure. In particular, they provide that the Board may be convened by any means, including orally, or even at short notice depending on the urgency of the matter, by the Chairman or by one third of its members, including the Lead Independent Director, at any time and as often as the interests of the Corporation require.

7.2.4 Rights, privileges and restrictions attached to the shares

In addition to the voting right, each share entitles the holder to a portion of the corporate assets, distributions of profits and liquidation dividend that is proportional to the number of shares issued, subject to the laws and regulations in force, as well as the Articles of Association.

No privilege is attached to a specific class of shares or to a specific class of shareholders.

Since the decision of the Extraordinary Shareholders' Meeting held on May 26, 2023, which decided to eliminate double voting rights, no double voting right is attached to the shares of the Corporation.

7.2.4.1 Voting rights

Each share of the Corporation entitles to one vote.

7.2.4.2 Limitation of voting rights

Article 18 of the Corporation's Articles of Association provides that at Shareholders' Meetings, no shareholder may cast, by himself or through his agent, on the basis of the voting rights attached to the shares he holds directly or indirectly and the shares for which he holds powers, more than 10% of the total number of voting rights attached to the shares of the Corporation.

Additionally, Article 18 of the Articles of Association also provides that the limitation on voting rights no longer applies, absent any decision of the Shareholders' Meeting, if an individual or a legal entity acting solely or together with one or more individuals or entities acquires at least two thirds of the shares of the Corporation following a public tender offer for all the shares of the Corporation. In that case, the Board of Directors acknowledges that the limitation no longer applies and carries out the necessary procedure to modify the Corporation's Articles of Association accordingly.

Once acknowledged, the fact that the limitation no longer applies is final and applies to all Shareholders' Meetings following the public tender offer under which the purchase of at least two thirds of the overall number of shares of the Corporation was made possible, and not solely to the first meeting following that public tender offer.

Since in such circumstances the limitation no longer applies, such limitation on voting rights cannot prevent or delay any takeover of the Corporation, except in case of a public tender offer where the bidder does not acquire at least two thirds of the Corporation's share capital.

7.2.4.3 Fractional rights

Whenever it is necessary to own several shares in order to exercise a right, a number of shares less than the number required does not give the owners any right with respect to the Corporation; in such case, the shareholders are responsible for aggregating the required number of shares.

7.2.4.4 Statutory allocation of profits

The Corporation may distribute dividends under the conditions provided for by the French Commercial Code and the Corporation's Articles of sociation.

The net profit for the period is equal to the net income minus general expenses and other personnel expenses, all amortization and depreciation of the assets, as well as all provisions for commercial and industrial contingencies.

From this profit, minus prior losses, if any, the following items are deducted in the order indicated:

- 5% to constitute the legal reserve fund, until said fund reaches 10% of the share capital,
- the amounts set by the Shareholders' Meeting in order to fund reserves for which it determines the allocation or use, and
- the amounts that the Shareholders' Meeting decides to retain.

The remainder is paid to the shareholders as dividends.

The Board of Directors may pay interim dividends.

The Shareholders' Meeting held to approve the financial statements for the fiscal year may decide to grant shareholders an option, for all or part of the dividend or interim dividends, between payment of the dividend in cash or in shares.

The Shareholders' Meeting may decide at any time, but only based on a proposal by the Board of Directors, to make a full or partial distribution of the amounts in the reserve accounts, either in cash or in shares of the Corporation.

Dividends that have not been claimed at the end of a five-year period are forfeited to the French State.

7.2.5 Amending shareholders' rights

Any amendment to the Articles of Association must be approved or authorized by the Shareholders' Meeting voting with the *quorum* and majority required by the laws and regulations governing Extraordinary Shareholders' Meetings.

7.2.6 Shareholders' Meetings

Refer to point 4.4.3 of chapter 4 for the terms and conditions of the notice of and admission to Shareholders' Meetings.

7.2.7 Identification of the holders of bearer shares

In accordance with Article 9 of its Articles of Association, TotalEnergies SE is entitled to make use of the legal provisions regarding identification of holders of securities that grant an immediate or future voting right at the Corporation Shareholders' Meetings.

Law No. 2019-486 of May 22, 2019, on the growth and transformation of businesses amended Article L. 228-2 of the French Commercial Code to stipulate that this ability to make use of the procedure is a matter of law, and any provision of the Articles of Association to the contrary shall be deemed unwritten.

7.2.8 Thresholds to be declared according to the Articles of Association

Any individual or entity who directly or indirectly acquires a percentage of the share capital, voting rights or rights giving future access to the share capital of the Corporation that is equal to or greater than 1%, or a multiple of this percentage, is required to notify the Corporation within 15 days of crossing each threshold, by registered mail with return receipt requested, and to declare the number of securities held.

In the event that the shares above these thresholds are not declared, as specified in the preceding paragraph, any shares held in excess of the threshold that should have been declared will be deprived of voting rights at Shareholders' Meetings if, at a Shareholders' Meeting, the failure to make a declaration is acknowledged and if one or more shareholders holding collectively at least 3% of the Corporation's share capital or voting rights so request at that meeting.

All individuals and entities are also required to notify the Corporation, in due form and within the time limits stated above, when their direct or indirect holdings fall below each of the thresholds mentioned in the first paragraph.

7.2.9 Changes in the share capital

The Corporation's share capital may be changed only under the conditions stipulated by the legal and regulatory provisions in force. No provision of the Articles of Association, charter, or internal regulations provide for more stringent conditions than the law governing changes in the Corporation's share capital.

The French Commercial Code stipulates that shareholders hold, in proportion to their number of shares, a preemptive subscription right to shares issued for cash as par of share capital increase. The Extraordinary Shareholders' Meeting can decide, under the conditions provided for by law, to remove this preemptive subscription right.

7.3 Historical financial information and additional information

7.3.1 2024, 2023 and 2022 Consolidated Financial Statements

The Consolidated Financial Statements of TotalEnergies SE for the years ended December 31, 2024, 2023 and 2022 were prepared in accordance with International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB) and adopted by the European Union.

7.3.2 Statutory financial statements of TotalEnergies SE

The statutory financial statements of TotalEnergies SE, the parent company of the Company, for the years ended December 31, 2024, 2023 and 2022 were prepared in accordance with applicable French accounting standards.

7.3.3 Audit of the historical financial information

The Consolidated Financial Statements for fiscal year 2024 presented in chapter 8 of this Universal Registration Document were certified by the Corporation's statutory auditors. A translation into English for information purposes only of the statutory auditors' report on the Consolidated Financial Statements is provided in point 8.1 of chapter 8.

The statutory financial statements of TotalEnergies SE for fiscal year 2024, shown in chapter 10 of this Universal Registration Document, were also certified by the Corporation's statutory auditors. A translation into English for information purposes only of the statutory auditors' report on the Statutory Financial Statements for 2024 is provided in point 10.1 of chapter 10.

Furthermore, pursuant to Article 19 of Regulation (EU) 2017/1129 dated June 14, 2017, and Commission Delegated Regulation (EU) 2019/980 repealing Commission Regulation (EC) No 809/2004, the following is incorporated by reference in this Universal Registration Document:

- the Consolidated and Statutory Financial Statements for fiscal year 2023, together with the statutory auditors' reports on the Statutory and Consolidated Financial Statements presented on pages 416 and 588 respectively of the Universal Registration Document for 2023 which was filed with the AMF on March 29, 2024 (and a translation for information purposes only is reproduced on pages 416 and 588 of the English version of this Universal Registration Document), and
- the Consolidated and Statutory Financial Statements for fiscal year 2022, together with the statutory auditors' reports on the Statutory and Consolidated Financial Statements presented on pages 408 and 592 respectively of the Universal Registration Document for 2022 which was filed with the AMF on March 24, 2023 (and a translation for information purposes only is reproduced on pages 408 and 592 of the English version of this Universal Registration Document).

7.3.4 Additional information

Certain items of financial information other than those contained in chapters 8 and 10, in particular ratios, statistical data or other calculated data used to describe TotalEnergies or its business performance, were not extracted from the audited financial statements of the issuer. Except where otherwise stated, this additional information is based on internal TotalEnergies data.

In particular, the supplemental oil and gas provided in points 9.1 and 9.2 of chapter 9 has not been extracted from the audited financial statements of the issuer and has not been certified by the Corporation's statutory auditors. This additional information was prepared by the Corporation based on information available to it, using its own calculations or estimates and taking into account of the U.S. standards to which the Corporation is subject for this kind of information due to the listing of its shares (in the form of ADRs) on the NYSE.

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Consolidated Financial Statements

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8.1 Statutory auditors' report on the consolidated financial statements

This is a translation into English of the statutory auditors' report on the consolidated financial statements of the Company issued in French and it is provided solely for the convenience of English-speaking users. This statutory auditors' report includes information required by European regulation and French law, such as information about the appointment of the statutory auditors or verification of the information concerning the Group presented in the management report and other documents provided to the shareholders.

This report should be read in conjunction with, and construed in accordance with, French law and professional auditing standards applicable in France.

To the Annual General Meeting of TotalEnergies SE,

OPINION

In compliance with the engagement entrusted to us by your Annual General Meeting, we have audited the accompanying consolidated financial statements of TotalEnergies SE for the year ended December 31, 2024.

In our opinion, the consolidated financial statements give a true and fair view of the assets and liabilities and of the financial position of the Group as at December 31, 2024 and of the results of its operations for the year then ended in accordance with International Financial Reporting Standards as adopted by the European Union.

The audit opinion expressed above is consistent with our report to the Audit Committee.

BASIS FOR OPINION

Audit Framework

We conducted our audit in accordance with professional standards applicable in France. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Our responsibilities under those standards are further described in the *Statutory Auditors' Responsibilities for the Audit of the Consolidated Financial Statements* section of our report.

Independence

We conducted our audit engagement in compliance with the independence requirements of the French Commercial Code *(Code de commerce)* and the French Code of Ethics for Statutory Auditors *(Code de déontologie de la profession de commissaire aux comptes)* for the period from January 1, 2024 to the date of our report and specifically we did not provide any prohibited non-audit services referred to in Article 5(1) of Regulation (EU) No. 537/2014.

JUSTIFICATION OF ASSESSMENTS – KEY AUDIT MATTERS

In accordance with the requirements of Articles L. 821-53 and R. 821-180 of the French Commercial Code *(Code de commerce)* relating to the justification of our assessments, we inform you of the key audit matters relating to risks of material misstatement that, in our professional judgment, were of most significance in our audit of the consolidated financial statements of the current period, as well as how we addressed those risks.

These matters were addressed in the context of our audit of the consolidated financial statements as a whole and in forming our opinion thereon, and we do not provide a separate opinion on specific items of the consolidated financial statements.

Impact of climate change and energy transition on the financial statements

Risk identified	Our response
As set out in the "Climate change and energy transition" paragraph of the "Major judgments and accounting estimates" note to the consolidated financial statements as at December 31, 2024, TotalEnergies ambition is to get to carbon neutrality by 2050, together with society. As since 2021, your Board of Directors submitted to the Annual General Meeting of May 24, 2024, to a consultative vote of the Shareholders of TotalEnergies SE its Sustainability & Climate – Progress Report 2024 on the progress made in the implementation of the Company's ambition with respect to sustainable development and energy transition and its related targets by 2030. Thus, TotalEnergies assesses the robustness of its portfolio, particularly new material capital expenditure investments, on the basis of relevant scenarios and sensitivity tests. Each material capex investment, including in the exploration, acquisition or development of oil and gas resources, as well as in other energies and technologies, is subject to an evaluation that takes into consideration the objectives of the Paris Agreement. The "Major judgments and accounting estimates" note to the consolidated financial statements highlights the following: – in order to confirm the resilience of its assets recognized on the balance sheet, the Company considers for the impairment calculations of its exploration and production activities an oil price trajectory that converges in the long term towards the price retained in 2050 in the International Energy Agency (IEA) Net Zero Emissions (NZE) scenario, i.e. $\$25.8_{2024}$ per barrel; the prices retained for gas stabilize until 2040 at lower levels than current prices, before also converging towards the prices of IEA's NZE scenario in 2050;	With the support of team members with specialized expertise in climate change and energy transition included in the audit team, we assessed the impact of climate change and energy transition on the financial statements, during the audit planning phase and throughout the execution of our procedures. Our procedures mainly consisted in: – understanding the Company's processes in connection with the integration of the challenges related to climate change and energy transition into the LTP and investment decisions: – confirming how the ambition to achieve carbon neutrality was taken into account in the 2024 LTP and how this objective was translated into investment and divestment decisions, with the Finance and the Strategy & Sustainability divisions, – testing that the process of integrating the challenges relating to climate change and energy transition was considered by the Company's various validation committees, by analyzing a sample of investment decisions made in order to verify their compliance with the investment criteria presented in the paragraph 5.1.3.1 "Strategy, business model and value chain (SBM-1)" of the 2024 Sustainability Report included in the section 5 of the 2024 Universal Registration Document; – taking into account the climate challenges in the execution of the procedures relating to the key audit matter concerning the evaluation of the impairment of non-current assets used in exploration and production activities;

Risk identified	Our response
– for upstream oil & gas projects, TotalEnergies prioritizes projects with low technical costs (less than $20/b for operating costs plus investment costs) or with low breakeven points (less than $30/b including taxes) and low emissions, with each new oil and gas project having to contribute to lowering the average intensity of greenhouse gas (GHG) emissions (scope 1+2) in their respective category: – for new oil and gas projects, the intensity of scope 1+2 GHG emissions is compared, depending on their nature, to the intensity of the average GHG emissions of the Company's upstream production assets; – for additional investments in existing assets, the investment must lower the scope 1+2 emissions intensity of the asset in question; – for investment decisions and the determination of recoverable amounts of tangible and intangible assets, TotalEnergies includes a CO_2 price of $100/t or the applicable price in a given country, if it is higher, incorporating the existing free emission rights scheme in Europe. The CO_2 price is inflated by 2% per year beyond 2030; – the strategy is implemented in the Company's long-term plan ("LTP"), which covers five years, updated once a year and validated by the Board of Directors. It reflects the economic environment, the Company's ambition for progress towards carbon neutrality together with society, the related targets by 2030 and the current energy transition dynamics in the various countries, knowing that there is still significant uncertainty on the path to energy transition that the various countries will take. The financial statements have been prepared in line with the main technical and economic assumptions of the LTP and the objectives described above. The main judgments and accounting estimates impacted by these challenges are: – hydrocarbon reserves; – useful life of the assets. Given the characteristics of the Company's portfolio of oil and gas assets, its current value on the balance sheet will be almost entirely depreciated by 2040. Consequently, TotalEnergies does not anticipate significant changes in the useful life of its existing oil and gas assets; – impairment of non-current assets; – provisions related to asset retirement obligations or disputes. We considered the impact of climate change and energy transition on the financial statements to be a key audit matter as Management's assessment of the assumptions described above involves a high degree of judgment, as it concerns projections related to future events.	– regarding the key assumptions and the relevance of disclosures in the notes to the consolidated financial statements: – appreciating the description of the main impacts of energy transition and climate change in the judgments and accounting estimates primarily impacted by these challenges, – analyzing the CO_2 price assumptions included in the future cash flows, notably by comparing them with current market data and publicly available segment information (in particular those published by IEA), – comparing the CO_2 emission assumptions (scope 1+2) used in the future cash flows with those included in the 2025 budget and the Company's LTP approved by the executive committee and the Board of Directors, – comparing the hydrocarbon price scenarios used by the Company with publicly available industry information (from the IEA, brokers and consultants as applicable); in particular the price scenarios relating to the Announced Pledges Scenario (APS) and NZE, considered by the IEA to be compatible with the objective of the Paris Agreement to limit the temperature increase to "well below 2°C", – assessing the consistency of the dates used in the calculation of depreciation and provisions for asset retirement obligations with those provided for in the contracts concerning license expiration and for the end of production in the cash flow projections used for impairment tests, – assessing the absence of significant residual production after 2040 on the basis of the current proved reserves of the portfolio of existing oil and gas assets and assessing the information given in the notes to the consolidated financial statements with respect to their depreciation, – analyzing the risks and relevance of the provisions linked to climate-related disputes and the information disclosed in note 12.2 "Other risks and contingent liabilities" to the consolidated financial statements, in particular by discussing with the Company and Sectors Legal Departments and by seeking confirmations from the Company's external legal advisors and lawyers; – assessing the lack of obvious inconsistencies between the financial statements and the following TotalEnergies' publications addressing the challenges related to climate change: Sustainability & Climate – Progress Report 2024, TotalEnergies Energy Outlook 2024 and the paragraph 5.2.1 "Climate change (E1)" of the 2024 Sustainability Report included in the section 5 of the 2024 Universal Registration Document.

Evaluation of the impairment of non-current assets used in exploration and production activities in the Exploration and Production (E&P) and the Integrated LNG (iLNG) segments

Risk identified	Our response
As stated in notes 7.1 "Intangible assets", 7.2 "Property, plant and equipment" and 8.1 "Equity affiliates: investments and loans" to the consolidated financial statements as at December 31, 2024, the non-current assets used in exploration and production activities in the E&P and iLNG segments are mainly comprised of proved mineral interests (M$ 8,700 - net amount), unproved mineral interests (M$ 11,150 - net amount), proved properties (M$ 61,881 - net amount), work in progress (M$ 20,328 - net amount) and a portion of the M$ 34,405 value of investments and loans in equity affiliates. The principles applied in determining the recoverable amounts of these assets are described in notes 7.1, 7.2, 3.C "Asset impairment" and "Major judgments and accounting estimates" to the consolidated financial statements. The recoverable amount of these assets is tested for impairment as soon as any indication for impairment exists, these tests being carried out by the Company at the level of the related cash-generating units (CGUs). CGUs include the hydrocarbon sites and industrial assets enabling the production, processing and extraction of hydrocarbons. The value in use of a CGU is determined by reference to the discounted expected future cash flows of these assets, based upon Management's expectation of future economic and operating conditions. The main assumptions considered by the Company in assessing the value in use include hydrocarbon prices scenarios, future CO_2 price, operating costs, estimates of hydrocarbon reserves, and discount rate.	We obtained an understanding, evaluated the design and tested the operating effectiveness of certain controls implemented by the Company to address the risk of material misstatement relating to the evaluation of the impairment of non-current assets used in exploration and production activities in the E&P and iLNG segments. Our work included testing control activities linked to the identification of triggering events and the assessment of key assumptions by Management supporting the recoverable value of the assets tested. The procedures we performed consisted mainly in: – assessing whether an indication of impairment existed for these assets, such as a specific geopolitical context, a significant decline in production, the enactment of a new tax law or the impact of new assumptions on hydrocarbon prices, in connection with the Company's ambition of carbon neutrality by 2050, together with society; – for those assets which required an impairment test: – comparing the hydrocarbon price scenarios applied by the Company with publicly available industry information (from the IEA, brokers and consultants as applicable), in particular the price scenarios relating to the APS and NZE, considered by the IEA to be compatible with the objective of the Paris Agreement to limit the temperature increase to "well below 2°C",

Risk identified	Our response
As described in the notes "Major judgments and accounting estimates" and 3.C to the consolidated financial statements, the Company retains an oil price trajectory that converges in the long term towards the price retained in 2050 by the IEA NZE scenario, i.e. $\$25.8_{2024}$/b. The prices retained for gas stabilize until 2040 at lower levels than the current prices, before also converging towards the IEA's NZE scenario prices in 2050. The determination of value in use takes also into account the impact of the assets CO_2 emissions. Future scope 1+2 emissions over the life of the assets are valued at $100/t or the applicable price in a given country, if it is higher, incorporating the existing free emission rights scheme in Europe. Beyond 2030, the CO_2 price is inflated by 2% per year. Finally, as described in notes 7.1, 7.2 and "Major judgments and accounting estimates" to the consolidated financial statements, exploration costs capitalized in unproved mineral interests or in work in progress are subject to specific impairment tests to ensure that: – the exploratory wells have found a sufficient quantity of hydrocarbons; – sufficient progress is made in the assessment of the reserves and the economic and operating viability of the project. Impairments of non-current assets of exploration and production activities in the E&P and iLNG segments for 2024 amounted to M$ 982 in net income (TotalEnergies share). As described in the "Major judgments and accounting estimates – Russian-Ukrainian conflict" note to the consolidated financial statements, Russian assets were fully impaired in 2022, with the exception of the shares held in the Yamal LNG company. An impairment test of the investment in Yamal LNG was carried out, resulting in the absence of impairment charge as at December 31, 2024. As described in note 12.2 "Other Risks and Contingent Liabilities" to the consolidated financial statements, considering the evolution of the security situation in the north of the Cabo Delgado province in Mozambique, the TotalEnergies company has confirmed on April 26, 2021, the withdrawal of all Mozambique LNG project personnel. This situation led the Company, as operator of Mozambique LNG project, to declare force majeure. In order to assess the resilience of the portfolio to different parameters, sensitivity analysis to several assumptions was carried out by Management, including a 10% and 20% decrease in the hydrocarbon prices over the duration of the price scenario, as well as considering a CO_2 price of $200/t, inflated by 2% per year beyond 2030 for all assets. We considered the evaluation of the impairment of non-current assets used in exploration and production activities in the E&P and iLNG segments to be a key audit matter as evaluating the Company's assumptions described above involves a high degree of judgment, notably forecasts relating to future events.	– analyzing the CO_2 price assumptions included in the future cash flows, by comparing them with current market data compiled by us and publicly available industry information (in particular IEA), – comparing the CO_2 emission assumptions (scope 1+2) included in the future cash flows with those included in the Company's 2025 budget and long-term plan approved by the executive committee and the Board of Directors, – assessing the consistency of the production end-dates used in the future cash flows with those included in the contracts for license expiration, – comparing the key assumptions (hydrocarbon prices, operating costs, hydrocarbon reserves estimates, discount rates and expected future dividends) to those included in the Company's 2025 budget and long-term plan approved by the executive committee and the Board of Directors, – assessing the consistency of the assumptions on operating costs by calculating cost-to-production ratios and comparing them year over year, – comparing production profiles to the proved and probable hydrocarbon reserves prepared as part of the Company's internal procedures, – with the assistance of our valuation specialists, we re-performed the calculation of the discount rate used by management and compared it to the rates calculated by market analysts, – assessing the consistency of the tax rates used with the applicable tax schemes and oil and gas agreements in place, – assessing the information disclosed in note 3.C "Asset impairment" to the consolidated financial statements, including the sensitivity analysis of net income (TotalEnergies share) to the oil and gas prices and CO_2 price; – for exploration costs capitalized as unproved mineral interests or work in progress: – inspecting the documentation supporting sufficient quantity of hydrocarbons or that sufficient progress is made in the assessment of the reserves and the economic and operating viability of the project; – finally specifically: – for the Company's minority stakes in the Novatek, Yamal LNG and Arctic LNG 2 companies, assessing their related value as of December 31, 2024 in a particular and evolving context, notably given sanctions, and in connection with the consolidation methods applied; – for assets located in Mozambique, assessing their value as of December 31, 2024 in the context of force majeure and in connection with the assumptions regarding the restart of the Mozambique LNG project.

Effect of estimated proved developed hydrocarbon reserves on the depreciation of the oil and gas assets used in production activities in the Exploration & Production (E&P) and integrated LNG (iLNG) segments

Risk identified	Our response
As discussed in the "Estimation of hydrocarbon reserves" paragraph of the "Major judgments and accounting estimates" note to the consolidated financial statements, the estimation of proved and proved developed hydrocarbon reserves is a key factor in the Successful Efforts method used to account for the Company's oil and gas activities. Notes 7.1 "Intangible Assets" and 7.2 "Property, Plant and Equipment" to the consolidated financial statements outline that under this method oil and gas assets are depreciated using the unit-of-production method based on either proved hydrocarbon reserves or proved developed hydrocarbon reserves. Those reserves are estimated by the Company's petroleum engineers in accordance with industry practice and Securities and Exchange Commission (SEC) regulations. The main assumptions used by the Company to estimate the proved and proved developed hydrocarbon reserves in order to calculate the depreciation of the oil and gas assets used in production activities in the E&P and iLNG segments include the following: geoscience and engineering data used to estimate deposit quantities, the contractual arrangements that determine the Company's share of the reserves, and hydrocarbon prices.	We obtained an understanding, evaluated the design and tested the operating effectiveness of certain controls, implemented by the Company, to address the risk of material misstatement relating to the depreciation of oil and gas assets used in production activities in the E&P and iLNG segments, depending on proved developed hydrocarbon reserves. Our work included testing certain controls on the determination and evaluation of deposit quantities and the modeling of the contractual arrangements that determine the Company's share of proved developed hydrocarbon reserves.

Risk identified	Our response
We considered the impact, which is material, of estimated proved developed hydrocarbon reserves on the depreciation of oil and gas assets used in production activities in the E&P and iLNG segments to be a key audit matter as the assumptions used by the Company to determine the reserves involve a high degree of judgment due to their uncertain nature.	The procedures we performed on the estimation of the proved developed hydrocarbon reserves by the Company consisted mainly in: – evaluating the professional qualifications and experience of the Company's petroleum engineers responsible for the preparation of the reserve estimates, these engineers specialized in the fields of geoscience and reservoir engineering being also trained to the Company's internal procedures as well as knowledgeable of the applicable SEC rules; – assessing the independence of the committees, which include these petroleum engineers, responsible for the annual review of the Company's reserves; – analyzing the main changes in proved developed hydrocarbon reserves compared to the previous year; – comparing previously forecasted production to actual 2024 production; – inspecting evidence from contractual arrangements that determine the Company's share of proved developed hydrocarbon reserves until the end of the license agreements; – assessing the consistency of the end of production dates used to calculate depreciation with those provided for in the contracts concerning license expiration and in the cash flow forecasts used for the impairment tests; – assessing the absence of significant residual proved developed hydrocarbon reserves to be produced after 2040 on the basis of the current portfolio of oil and gas assets; – assessing the methodology applied by the Company to estimate these proved developed hydrocarbon reserves, and comparing them with the SEC regulations and the 12-month average market price for 2024.

SPECIFIC VERIFICATIONS

We have also performed, in accordance with professional standards applicable in France, the specific verifications required by laws and regulations of the information relating to the Group given in the Board of Directors' management report.

We have no matters to report as to its fair presentation and its consistency with the consolidated financial statements.

REPORT ON OTHER LEGAL AND REGULATORY REQUIREMENTS

Format of preparation of the consolidated financial statements intended to be included in the annual financial report

We have also verified, in accordance with the professional standard applicable in France relating to the procedures performed by statutory auditors regarding the annual and consolidated financial statements prepared in the European single electronic format, that the preparation of the consolidated financial statements intended to be included in the annual financial report mentioned in Article L. 451-1-2, I of the French Monetary and Financial Code (*Code monétaire et financier*), prepared under the Board of Directors' responsibility, complies with the single electronic format defined in Commission Delegated Regulation (EU) No. 2019/815 of December 17, 2018. Regarding consolidated financial statements, our work includes verifying that the tagging thereof complies with the format defined in the above-mentioned regulation.

On the basis of our work, we conclude that the preparation of the consolidated financial statements intended to be included in the annual financial report complies, in all material respects, with the European single electronic format.

We have no responsibility to verify that the consolidated financial statements that will ultimately be included by your Company in the annual financial report filed with the AMF *(Autorité des marchés financiers)* agree with those on which we have performed our work.

Appointment of the Statutory Auditors

We were appointed as statutory auditors of TotalEnergies SE by your Annual General Meeting held on May 25, 2022 for PricewaterhouseCoopers Audit and on May 14, 2004, for ERNST & YOUNG Audit.

As at December 31, 2024, PricewaterhouseCoopers Audit and ERNST & YOUNG Audit were respectively in the 3rd year and 21st year of uninterrupted engagement.

RESPONSABILITIES OF MANAGEMENT AND THOSE CHARGED WITH GOVERNANCE FOR THE CONSOLIDATED FINANCIAL STATEMENTS

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with International Financial Reporting Standards as adopted by the European Union and for such internal control as Management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, Management is responsible for assessing the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless it is expected to liquidate the Company or to cease operations.

The Audit Committee is responsible for monitoring the financial reporting process and the effectiveness of internal control and risk management systems and where applicable, its internal audit, regarding the accounting and financial reporting procedures.

The consolidated financial statements were approved by the Board of Directors.

STATUTORY AUDITORS' RESPONSIBILITIES FOR THE AUDIT OF THE CONSOLIDATED FINANCIAL STATEMENTS

Objectives and audit approach

Our role is to issue a report on the consolidated financial statements. Our objective is to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement. Reasonable assurance is a high level of assurance but is not a guarantee that an audit conducted in accordance with professional standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users made on the basis of these consolidated financial statements.

As specified in Article L. 821-55 of the French Commercial Code (*Code de commerce*), our statutory audit does not include assurance on the viability of the Company or the quality of management of the affairs of the Company.

As part of an audit conducted in accordance with professional standards applicable in France, the statutory auditor exercises professional judgment throughout the audit and furthermore:

- Identifies and assesses the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, designs and performs audit procedures responsive to those risks, and obtains audit evidence considered to be sufficient and appropriate to provide a basis for his opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtains an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the internal control.
- Evaluates the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by Management in the consolidated financial statements.
- Assesses the appropriateness of Management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. This assessment is based on the audit evidence obtained up to the date of his audit report. However, future events or conditions may cause the Company to cease to continue as a going concern. If the statutory auditor concludes that a material uncertainty exists, there is a requirement to draw attention in the audit report to the related disclosures in the consolidated financial statements or, if such disclosures are not provided or inadequate, to modify the opinion expressed therein.
- Evaluates the overall presentation of the consolidated financial statements and assesses whether these statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtains sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. The statutory auditor is responsible for the direction, supervision and performance of the audit of the consolidated financial statements and for the opinion expressed on these consolidated financial statements.

Report to the Audit Committee

We submit to the Audit Committee a report which includes in particular a description of the scope of the audit and the audit program implemented, as well as the results of our audit. We also report significant deficiencies, if any, in internal control regarding the accounting and financial reporting procedures that we have identified.

Our report to the Audit Committee includes the risks of material misstatement that, in our professional judgment, were of most significance in the audit of the consolidated financial statements of the current period and which are therefore the key audit matters that we are required to describe in this report.

We also provide the Audit Committee with the declaration provided for in Article 6 of Regulation (EU) No. 537/2014, confirming our independence within the meaning of the rules applicable in France as set out in particular in Articles L. 821-27 to L. 821-34 of the French Commercial Code *(Code de commerce)* and in the French Code of Ethics for Statutory Auditors *(Code de déontologie de la profession de commissaire aux comptes)*. Where appropriate, we discuss with the Audit Committee the risks that may reasonably be thought to bear on our independence, and the related safeguards.

Neuilly-sur-Seine and Paris-La Défense, March 31, 2025

The Statutory Auditors
French original signed by

PricewaterhouseCoopers Audit		ERNST & YOUNG Audit	
Olivier Lotz	Cécile Saint-Martin	Yvon Salaün	Stéphane Pédron

8.2 Consolidated statement of income

TotalEnergies

For the year ended December 31, *(M$)*[a]		2024	2023	2022
Sales	(Notes 3, 4, 5)	**214,550**	**237,128**	**280,999**
Excise taxes	(Notes 3 & 5)	(18,940)	(18,183)	(17,689)
Revenues from sales	(Notes 3 & 5)	195,610	218,945	263,310
Purchases, net of inventory variation	(Note 5)	(127,664)	(143,041)	(169,448)
Other operating expenses	(Note 5)	(29,860)	(30,419)	(29,789)
Exploration costs	(Note 5)	(999)	(573)	(1,299)
Depreciation, depletion and impairment of tangible assets and mineral interests	(Note 5)	(12,025)	(12,762)	(12,221)
Other income	(Note 6)	2,112	3,677	2,849
Other expense	(Note 6)	(1,281)	(2,396)	(7,344)
Financial interest on debt		(3,016)	(2,820)	(2,386)
Financial income and expense from cash & cash equivalents		1,786	1,801	1,143
Cost of net debt	(Note 15)	(1,230)	(1,019)	(1,243)
Other financial income	(Note 6)	1,403	1,285	896
Other financial expense	(Note 6)	(835)	(731)	(533)
Net income (loss) from equity affiliates	(Note 8)	1,575	1,845	(1,892)
Income taxes	(Note 11)	(10,775)	(13,301)	(22,242)
Consolidated net income		**16,031**	**21,510**	**21,044**
TotalEnergies share		15,758	21,384	20,526
Non-controlling interests		273	126	518
Earnings per share ($)		6.74	8.72	7.91
Fully-diluted earnings per share ($)		6.69	8.67	7.85

(a) Except for per share amounts.

8.3 Consolidated statement of comprehensive income

TotalEnergies

For the year ended December 31, *(M$)*		2024	2023	2022
Consolidated net income		**16,031**	**21,510**	**21,044**
Other comprehensive income				
Actuarial gains and losses	(Note 10)	20	(114)	574
Change in fair value of investments in equity instruments	(Note 8)	144	(11)	112
Tax effect		46	(11)	(96)
Currency translation adjustment generated by the parent company	(Note 9)	(4,163)	2,573	(4,976)
Items not potentially reclassifiable to profit and loss		**(3,953)**	**2,437**	**(4,386)**
Currency translation adjustment	(Note 9)	2,759	(3,277)	1,734
Cash flow hedge	(Notes 15 & 16)	3,119	2,898	(5,452)
Variation of foreign currency basis spread	(Note 15)	(32)	(11)	65
Share of other comprehensive income of equity affiliates, net amount	(Note 8)	(246)	(208)	3,497
Other		1	(2)	(16)
Tax effect		(814)	(730)	1,449
Items potentially reclassifiable to profit and loss		**4,787**	**(1,330)**	**1,277**
Total other comprehensive income (net amount)		**834**	**1,107**	**(3,109)**
Comprehensive income		16,865	22,617	17,935
— *TotalEnergies share*		*16,636*	*22,534*	*17,419*
— *Non-controlling interests*	(Note 9)	*229*	*83*	*516*

8.4 Consolidated balance sheet

TotalEnergies

As of December 31, (M$)		2024	2023	2022
ASSETS				
Non-current assets				
Intangible assets, net	(Notes 4 & 7)	34,238	33,083	31,931
Property, plant and equipment, net	(Notes 4 & 7)	109,095	108,916	107,101
Equity affiliates: investments and loans	(Note 8)	34,405	30,457	27,889
Other investments	(Note 8)	1,665	1,543	1,051
Non-current financial assets	(Note 15)	2,305	2,395	2,731
Deferred income taxes	(Note 11)	3,202	3,418	5,049
Other non-current assets	(Note 6)	4,006	4,313	2,388
Total non-current assets		**188,916**	**184,125**	**178,140**
Current assets				
Inventories, net	(Note 5)	18,868	19,317	22,936
Accounts receivable, net	(Note 5)	19,281	23,442	24,378
Other current assets	(Note 5)	23,687	20,821	36,070
Current financial assets	(Note 15)	6,914	6,585	8,746
Cash and cash equivalents	(Note 15)	25,844	27,263	33,026
Assets classified as held for sale	(Note 2)	1,977	2,101	568
Total current assets		**96,571**	**99,529**	**125,724**
Total assets		285,487	283,654	303,864
LIABILITIES & SHAREHOLDERS' EQUITY				
Shareholders' equity				
Common shares		7,577	7,616	8,163
Paid-in surplus and retained earnings		135,496	126,857	123,951
Currency translation adjustment		(15,259)	(13,701)	(12,836)
Treasury shares		(9,956)	(4,019)	(7,554)
Total shareholders' equity - TotalEnergies share	(Note 9)	**117,858**	**116,753**	**111,724**
Non-controlling interests		**2,397**	**2,700**	**2,846**
Total shareholders' equity		**120,255**	**119,453**	**114,570**
Non-current liabilities				
Deferred income taxes	(Note 11)	12,114	11,688	11,021
Employee benefits	(Note 10)	1,753	1,993	1,829
Provisions and other non-current liabilities	(Note 12)	19,872	21,257	21,402
Non-current financial debt	(Note 15)	43,533	40,478	45,264
Total non-current liabilities		**77,272**	**75,416**	**79,516**
Current liabilities				
Accounts payable		39,932	41,335	41,346
Other creditors and accrued liabilities	(Note 5)	35,961	36,727	52,275
Current borrowings	(Note 15)	10,024	9,590	15,502
Other current financial liabilities	(Note 15)	664	446	488
Liabilities directly associated with the assets classified as held for sale	(Note 2)	1,379	687	167
Total current liabilities		**87,960**	**88,785**	**109,778**
Total liabilities & shareholders' equity		285,487	283,654	303,864

8.5 Consolidated statement of cash flow

TotalEnergies

For the year ended December 31, *(M$)*		2024	2023	2022
Cash flow from operating activities				
Consolidated net income		16,031	21,510	21,044
Depreciation, depletion, amortization and impairment	(Note 5.3)	13,107	13,818	13,680
Non-current liabilities, valuation allowances, and deferred taxes	(Note 5.5)	190	813	4,594
(Gains) losses on disposals of assets		(1,497)	(3,452)	369
Undistributed affiliates' equity earnings		124	649	6,057
(Increase) decrease in working capital	(Note 5.5)	2,364	6,091	1,191
Other changes, net		535	1,250	432
Cash flow from operating activities		**30,854**	**40,679**	**47,367**
Cash flow used in investing activities				
Intangible assets and property, plant and equipment additions	(Note 7)	(14,909)	(17,722)	(15,690)
Acquisitions of subsidiaries, net of cash acquired		(2,439)	(1,772)	(94)
Investments in equity affiliates and other securities		(2,127)	(3,477)	(3,042)
Increase in non-current loans		(2,275)	(1,889)	(976)
Total expenditures		**(21,750)**	**(24,860)**	**(19,802)**
Proceeds from disposals of intangible assets and property, plant and equipment		727	3,789	540
Proceeds from disposals of subsidiaries, net of cash sold		2,167	3,561	835
Proceeds from disposals of non-current investments		347	490	577
Repayment of non-current loans		1,177	566	2,734
Total divestments		**4,418**	**8,406**	**4,686**
Cash flow used in investing activities		**(17,332)**	**(16,454)**	**(15,116)**
Cash flow from financing activities				
Issuance (repayment) of shares:				
– Parent company shareholders		521	383	370
– Treasury shares		(7,995)	(9,167)	(7,711)
Dividends paid:				
– Parent company shareholders		(7,717)	(7,517)	(9,986)
– Non-controlling interests		(322)	(311)	(536)
Net issuance of perpetual subordinated notes	(Note 9)	(457)	(1,081)	–
Payments on perpetual subordinated notes	(Note 9)	(314)	(314)	(339)
Other transactions with non-controlling interests		(67)	(126)	(49)
Net issuance (repayment) of non-current debt	(Note 15)	7,532	130	1,108
Increase (decrease) in current borrowings		(5,142)	(14,289)	(6,073)
Increase (decrease) in current financial assets and liabilities	(Note 15)	(464)	2,562	3,944
Cash flow from / (used in) financing activities		**(14,425)**	**(29,730)**	**(19,272)**
Net increase (decrease) in cash and cash equivalents		(903)	(5,505)	12,979
Effect of exchange rates		(516)	(258)	(1,295)
Cash and cash equivalents at the beginning of the period		27,263	33,026	21,342
Cash and cash equivalents at the end of the period	(Note 15)	25,844	27,263	33,026

8.6 Consolidated statement of changes in shareholders' equity

TotalEnergies

(M$)	Common shares issued		Paid-in surplus and retained earnings	Currency translation adjustment	Treasury shares		Shareholders' equity - TotalEnergies share	Non-controlling interests	Total shareholders' equity
	Number	Amount			Number	Amount			
As of January 1, 2022	**2,640,429,329**	**8,224**	**117,849**	**(12,671)**	**(33,841,104)**	**(1,666)**	**111,736**	**3,263**	**114,999**
Net income 2022	–	–	20,526	–	–	–	20,526	518	21,044
Other comprehensive income	–	–	(2,933)	(174)	–	–	(3,107)	(2)	(3,109)
Comprehensive income	**–**	**–**	**17,593**	**(174)**	**–**	**–**	**17,419**	**516**	**17,935**
Dividend	–	–	(9,989)	–	–	–	(9,989)	(536)	(10,525)
Issuance of common shares	9,367,482	26	344	–	–	–	370	–	370
Purchase of treasury shares	–	–	–	–	(140,207,743)	(7,711)	(7,711)	–	(7,711)
Sale of treasury shares[a]	–	–	(318)	–	6,195,654	318	–	–	–
Share-based payments	–	–	229	–	–	–	229	–	229
Share cancellation	(30,665,526)	(87)	(1,418)	–	30,665,526	1,505	–	–	–
Net issuance (repayment) of perpetual subordinated notes	–	–	(44)	–	–	–	(44)	–	(44)
Payments on perpetual subordinated notes	–	–	(331)	–	–	–	(331)	–	(331)
Other operations with non-controlling interests	–	–	45	9	–	–	54	37	91
Other items	–	–	(9)	–	–	–	(9)	(434)	(443)
As of December 31, 2022	**2,619,131,285**	**8,163**	**123,951**	**(12,836)**	**(137,187,667)**	**(7,554)**	**111,724**	**2,846**	**114,570**
Net income 2023	–	–	21,384	–	–	–	21,384	126	21,510
Other comprehensive income	–	–	1,987	(837)	–	–	1,150	(43)	1,107
Comprehensive income	**–**	**–**	**23,371**	**(837)**	**–**	**–**	**22,534**	**83**	**22,617**
Dividend	–	–	(7,611)	–	–	–	(7,611)	(311)	(7,922)
Issuance of common shares	8,002,155	22	361	–	–	–	383	–	383
Purchase of treasury shares	–	–	–	–	(144,700,577)	(9,167)	(9,167)	–	(9,167)
Sale of treasury shares[a]	–	–	(396)	–	6,463,426	396	–	–	–
Share-based payments	–	–	291	–	–	–	291	–	291
Share cancellation	(214,881,605)	(569)	(11,737)	–	214,881,605	12,306	–	–	–
Net issuance (repayment) of perpetual subordinated notes	–	–	(1,107)	–	–	–	(1,107)	–	(1,107)
Payments on perpetual subordinated notes	–	–	(294)	–	–	–	(294)	–	(294)
Other operations with non-controlling interests	–	–	30	(28)	–	–	2	85	87
Other items	–	–	(2)	–	–	–	(2)	(3)	(5)
As of December 31, 2023	**2,412,251,835**	**7,616**	**126,857**	**(13,701)**	**(60,543,213)**	**(4,019)**	**116,753**	**2,700**	**119,453**
Net income 2024	–	–	15,758	–	–	–	15,758	273	16,031
Other comprehensive income	–	–	2,436	(1,558)	–	–	878	(44)	834
Comprehensive income	**–**	**–**	**18,194**	**(1,558)**	**–**	**–**	**16,636**	**229**	**16,865**
Dividend	–	–	(7,756)	–	–	–	(7,756)	(455)	(8,211)
Issuance of common shares	10,833,187	29	492	–	–	–	521	–	521
Purchase of treasury shares	–	–	–	–	(120,463,232)	(7,995)	(7,995)	–	(7,995)
Sale of treasury shares[a]	–	–	(395)	–	6,071,266	395	–	–	–
Share-based payments	–	–	556	–	–	–	556	–	556
Share cancellation	(25,405,361)	(68)	(1,595)	–	25,405,361	1,663	–	–	–
Net issuance (repayment) of perpetual subordinated notes	–	–	(576)	–	–	–	(576)	–	(576)
Payments on perpetual subordinated notes	–	–	(272)	–	–	–	(272)	–	(272)
Other operations with non-controlling interests	–	–	–	–	–	–	–	(67)	(67)
Other items	–	–	(9)	–	–	–	(9)	(10)	(19)
As of December 31, 2024	**2,397,679,661**	**7,577**	**135,496**	**(15,259)**	**(149,529,818)**	**(9,956)**	**117,858**	**2,397**	**120,255**

(a) Treasury shares related to the performance share grants.

Changes in equity are detailed in Note 9.

8.7 Notes to the Consolidated Financial Statements

On February 4, 2025, the Board of Directors established and authorized the publication of the Consolidated Financial Statements of TotalEnergies SE for the year ended December 31, 2024, which will be submitted for approval to the Shareholders' Meeting to be held on May 23, 2025.

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Basis of preparation of the consolidated financial statements

The Consolidated Financial Statements of TotalEnergies SE and its subsidiaries (the Company) are presented in U.S. dollars and have been prepared on the basis of IFRS (International Financial Reporting Standards) as adopted by the European Union and IFRS as issued by the IASB (International Accounting Standard Board) as of December 31, 2024.

The accounting principles applied for the Consolidated Financial Statements at December 31, 2024, were the same as those that were used for the financial statements at December 31, 2023, except for amendments and interpretations of IFRS which were mandatory for the periods beginning after January 1, 2024. Their application did not have a significant impact on the financial statements as of December 31, 2024.

The international tax reform Pillar 2, applicable in France from January 1, 2024, introduces a minimum tax rate of 15% on the profits of companies in each of their operating countries. Given the high tax rates in the Company's operating countries and the increases in countries with lower rates, the application of this minimum tax will not result in the payment of additional tax for 2024.

Major judgments and accounting estimates

The preparation of financial statements in accordance with IFRS for the closing as of December 31, 2024 requires the General Management to make estimates, assumptions and judgments that affect the information reported in the Consolidated Financial Statements and the Notes thereto.

These estimates, assumptions and judgments are based on historical experience and other factors believed to be reasonable at the date of preparation of the financial statements. They are reviewed on an on-going basis by General Management and therefore could be revised as circumstances change or as a result of new information.

Different estimates, assumptions and judgments could significantly affect the information reported, and actual results may differ from the amounts included in the Consolidated Financial Statements and the Notes thereto.

The following summary provides further information about the key estimates, assumptions and judgments that are involved in preparing the Consolidated Financial Statements and the Notes thereto. It should be read in conjunction with the sections of the Notes mentioned in the summary.

Estimation of hydrocarbon reserves

The estimation of oil and gas reserves is a key factor in the Successful Efforts method used by TotalEnergies to account for its oil and gas activities.

TotalEnergies' oil and gas reserves are estimated by TotalEnergies' petroleum engineers in accordance with industry standards and SEC (*U.S. Securities and Exchange Commission)* regulations.

Proved oil and gas reserves are those quantities of oil and gas, which, by analysis of geosciences and engineering data, can be determined with reasonable certainty to be recoverable (from a given date forward, from known reservoirs, and under existing economic conditions, operating methods, and government regulations), prior to the time at which contracts providing the rights to operate expire, unless evidence indicates that renewal is reasonably certain, regardless of whether deterministic or probabilistic methods are used for the estimation.

Proved oil and gas reserves are calculated using a 12-month average price determined as the unweighted arithmetic average of the first-day-of-the-month price for each month of the relevant year unless prices are defined by contractual arrangements, excluding escalations based upon future conditions. TotalEnergies reassesses its oil and gas reserves at least once a year on all its properties.

The Successful Efforts method and the mineral interests and property, plant and equipment of exploration and production are presented in Note 7 “Intangible and tangible assets”.

Impairment of property, plant and equipment, intangible assets and goodwill

As part of the determination of the recoverable value of assets for impairment (IAS 36), the estimates, assumptions and judgments mainly concern hydrocarbon prices scenarios, operating costs, production volumes and oil and gas proved and probable reserves, refining margins and product marketing conditions (mainly petroleum, petrochemical and chemical products as well as renewable industry products). The estimates and assumptions used by the General Management are determined in specialized internal departments in light of economic conditions and external expert analysis. The discount rate is reviewed annually.

In 2020, in line with its new Climate Ambition announced on May 5, 2020, which aims at carbon neutrality, TotalEnergies had reviewed its oil assets that could be qualified as "stranded", and therefore had decided to impair its oil sands assets in Canada sold in 2023.

Impairment of assets and the method applied are described in Note 3 "Business segment information".

Asset retirement obligations

Asset retirement obligations, which result from a legal or constructive obligation, are recognized based on a reasonable estimate in the period in which the obligation arises.

This estimate is based on information available in terms of costs and work program. It is regularly reviewed to take into account the changes in laws and regulations, the estimates of reserves and production, the analysis of site conditions and technologies.

The discount rate is reviewed annually.

Asset retirement obligations and the method used are described in Note 12 "Provisions and other non-current liabilities".

Climate change and energy transition

Climate change and the energy transition were considered in preparing the Consolidated Financial Statements. They may have significant impacts on the value of TotalEnergies's assets and liabilities mentioned below, and on similar assets and liabilities that may be recognized in the future.

TotalEnergies supports the goals of the 2015 Paris Agreement, which calls for reducing greenhouse gas emissions in the context of sustainable development and the fight against poverty, and which aims to keep the increase in average global temperatures well below 2°C compared to pre-industrial levels.

TotalEnergies wants to rise to the dual challenge of meeting the energy needs of a growing world population while reducing global warming, and play an active role in the ongoing energy transition of the word.

The Company is thus implementing its transition strategy aimed at ensuring the growth of its energy production to reach a sales mix of 30% oil, 50% gas and 20% electricity and low-carbon molecules by 2030, with carbon intensity (Scope 1+2+3) decreasing by 25% compared to 2015.

TotalEnergies has embedded the changing energy markets into its strategy by investing in renewables and electricity, developing the production of biofuels, biogas and low-carbon hydrogen, favoring the use of natural gas, the transition fuel whose flexibility offers a lower carbon alternative to coal for electricity production and helps to mitigate the intermittency of solar and wind energies, targeting its investments in low-cost and low-emission oil, and developing nature-based carbon storage solutions as well as CO_2 capture and sequestration.

TotalEnergies is committed to reducing its carbon footprint caused by the production, processing and supply of energy to its customers. Although the pace of the transition will depend on public policy, consumption patterns and resulting demand, TotalEnergies has set itself the mission to offer its customers energy products that are affordable and generate less CO_2 and to support its partners and suppliers in their own low-carbon strategies.

TotalEnergies' ambition is to get to carbon neutrality by 2050, together with society. As since 2021, the Board of Directors submitted at the Annual Shareholders' Meeting on May 24, 2024 to a consultative vote of the shareholders of TotalEnergies SE, the Sustainability & Climate - Progress Report 2024 reporting on the progress made in the implementation of the Corporation's ambition with respect to sustainable development and energy transition and its related targets by 2030 (resolution approved at close to 80% of votes cast).

TotalEnergies evaluates the solidity of its portfolio, particularly new material capital expenditure investments, on the basis of relevant scenarios and sensitivity tests. Each material capex investment, including in the exploration, acquisition or development of oil and gas resources, as well as in other energies and technologies, is subject to an evaluation that takes into consideration the objectives of the Paris Agreement, each new investment thus enhancing the resilience of the Company's portfolio.

Economic criteria are analyzed in a scenario with Brent prices at $50/b and Henry Hub at $3/Mbtu, which are lower than the IEA's APS scenario prices deemed compatible with the Paris agreement goals. Even though CO_2 pricing does not currently apply in all of the countries where the Company operates, TotalEnergies includes as a base case a CO_2 price of $100/t in its investment criteria (or the prevailling price in a given country, if higher), and beyond 2030, the CO_2 price is inflated by 2% per year.

For investments in upstream oil & gas projects, TotalEnergies focuses on value creation and cash generation over volume, and the Company prioritizes projects with low technical costs (less than $20/b for operating costs plus investment costs) or low-breakeven points (less than $30/b, taxes included) and a profitability that exceeds an internally defined threshold. Carbon Capture and Storage (CCS) and Nature Based Solutions (NBS) projects are evaluated on the basis of the actual cost of one ton of CO_2 (internal threshold in $\$/tCO_2$). As for projects in renewable energies, they are evaluated on their ability to generate a return higher than 10%.

All oil and gas projects must help to lower the average intensity of greenhouse gas emissions (Scope 1+2) in their respective category. Currently, that means:

- for new oil and gas projects (greenfield and acquisitions), the intensity of Scope 1+2 greenhouse gas emissions is compared, depending on their nature, to the intensity of the average greenhouse gas emissions of the Company's upstream production assets or that of various downstream units (LNG plants, refineries).
- for additional investments in existing assets (brownfield projects), the investment must lower the Scope 1+2 emissions intensity of the asset in question.
- for projects involving other energies and technologies (biofuels, biogas...), the greenhouse-gas emissions reductions are assessed based on their contribution to reducing the Company's emissions.

Besides, as described in Note 3. C "Asset impairment", in order to ensure the resilience of its assets recognized on the balance sheet, the oil price trajectory retained by the Company for the computation of its impairments converges in the long term towards the price retained in 2050 by the IEA's NZE scenario, i.e. $\$25.8_{2024}$/b; the prices retained for gas, the transition fuel, stabilize until 2040 at lower levels than current prices, before also converging towards the IEA's NZE scenario prices in 2050.

The strategy is implemented in the long-term plan of the Company, which is forecasted for a 5-year period, updated every year, and approved by the Board of Directors.

It reflects the economic environment, the ambition of the Company on carbon neutrality together with society, the related targets by 2030 and the current dynamics of energy transition, knowing that there is still significant uncertainty on the path to energy transition that the various countries will take.

The financial statements of TotalEnergies are prepared in coherence with the main technical and economic assumptions of the long-term plan and the objectives stated above.

They are also sensitive to various environmental considerations, including oil & gas prices and refining margins, as well as technical parameters, such as the estimation of hydrocarbons reserves. In particular, the selected assumptions and estimates have an impact on hydrocarbons reserves, the useful life of assets, the impairment of assets and provisions.

Asset impairment

The energy transition is likely to have an impact on future oil and gas prices and therefore on the recoverable amount of intangible assets and property, plant and equipment in the oil and gas industry.

The principles applied in determining the recoverable amounts are as follows:

- the future cash flows were determined using the assumptions included in the 2025 budget and in the long-term plan of the Company approved by the Executive Committee and the Board of Directors. These assumptions, in particular including operational costs, estimation of oil and gas reserves, future volumes produced and marketed, represent the best estimate from the Company Management of economic and technical conditions over the remaining life of the assets;

- the oil and gas price scenarios have been established based on data on global energy demand from the IEA's World Energy Outlook, the latest edition of which was published in October 2024, and on its own supply and demand assessments; they take into account assumptions about the evolution of core indicators of the upstream activity (demand for hydrocarbons in different markets, investment forecasts, decline in production fields, changes in oil & gas reserves and supply by area and by nature of oil & gas products), of the downstream activity (changes in refining capacity and demand for petroleum products) and by integrating "climate" challenge;
- these price scenarios, first prepared within the Strategy & Markets Division, are also reviewed with the Company segments which bring their own expertise. They also integrate studies issued by international agencies, banks and independent consultants. They are then approved by the Executive Committee and the Board of Directors;
- the IEA 2024 World Energy Outlook presents three scenarios that are key references for the Company: the STEPS (Stated Policies Scenario) and APS (Announced Pledges Scenario) for the short/mid-term and the NZE (Net Zero Emissions by 2050) for the long-term;
- the STEPS scenario only includes climate actions already implemented to date around the world and those under development;
- the APS scenario takes into account all climate ambitions declared to date in the world, including the NDCs (Nationally Determined Contributions) and the carbon neutrality ambitions. According to the IEA, it is associated with a temperature increase of around 1.7°C. This scenario is compatible with the objective of the Paris Agreement to limit the temperature increase to "well below 2°C";
- the IEA's NZE scenario is understood as the set of actions to be taken for the global energy sector to achieve net-zero CO_2 emissions by 2050 and to be compatible with a +1.5°C scenario by 2100. This normative scenario is therefore not predictive of oil demand, and even less so of the price scenarios it proposes, particularly in the medium term (2030). Indeed, this scenario predicts that oil demand will peak in 2023 and decrease by 22% between 2023 and 2030, whereas, according to the latest IEA projections, oil demand in 2024 would be higher than in 2023 and continue to grow until 2029. According to projections from other energy companies or external consultants, demand would start to decline around 2030 (oil peak in 2031 according to Wood MacKenzie, in 2027 according to HIS Inflections);
- beyond 2030, the oil price trajectory retained by the Company converges in the long term, to the price retained in 2050 by the IEA's NZE scenario, i.e $\$25.8_{2024}$/b. The prices retained for gas, the transition fuel, stabilize until 2040 at lower levels than current prices before converging towards the IEA's NZE scenario prices in 2050.

The oil price trajectories adopted by the Company are based on the following assumptions:

- oil demand experienced sustained growth post-Covid crisis, accompanying the global economic recovery, which generated strong tensions on energy prices from mid-2021, exacerbated in 2022 by the war in Ukraine. In 2023, global oil demand reached a record level, surpassing that of 2019 pre-Covid crisis. This increase was stimulated by the lifting of lockdown measures in China, allowing the resumption of industrial activity, particularly in the petrochemical sector, as well as the increase in air travel. In 2024, demand is expected to continue to grow, albeit at a slower pace, due to the economic slowdown in China and the end of the post-pandemic rebound effect. By 2030, oil consumption is expected to continue to grow, supported by population growth and rising living standards, particularly in emerging countries. However, this growth is expected to gradually slow down due to moderate global economic growth and the accelerated deployment of low-carbon substitute technologies. Some recent forecasts anticipate a peak in oil product demand in China as early as 2027.

  Moreover, supply is limited by the historical production cuts decided (and effectively implemented) by the OPEC+ coalition members, the discipline on upstream oil investments since the 2015 oil crisis, and the natural decline of currently producing fields. In the United States, while 2023 production was significantly higher than in 2019 and is expected to grow slightly in 2024, the recent sector consolidation (Permian, DJ, and Bakken) should reinforce investment profitability discipline and thus contain growth in the coming years.

  Therefore, in this context of growing demand driven by emerging countries and constrained supply by OPEC+ countries and the United States, our scenario anticipates that prices will remain supported at $\$70_{2024}$/b from 2025 to 2030.
- beyond 2030, given technological developments, particularly in the transport sector, the growth in oil demand would be low or even zero, and the selected price scenario decreases linearly to reach $\$50_{2024}$/b in 2040 and then $\$25.8_{2024}$/b in 2050, in line with the NZE scenario.

  The average Brent prices over the period 2025-2050 thus stands at $\$53.0_{2024}$/b.

For natural gas, the transition fuel, the price trajectory adopted by the Company is based on the following assumptions:

- natural gas demand in 2021 has exceeded its pre-crisis level with very strong tensions on prices in Europe and, by extension, in Asia through LNG prices, as a result of the cuts in Russian pipe gas importation that began at the end of 2021 and continued in 2022 with the complete shutdown of the Nordstream. Global gas demand in 2022 was almost at the same level as in 2021. Global gas demand in 2023 was almost at the same level as in 2022 with the recourse to American LNG to replace Russian gas in Europe, still in competition with Asia. Gas prices in Asia and Europe have returned to much lower levels than the exceptionally high prices reached in the third quarter of 2022 but remain higher than before the crisis. The price of gas in the United States did not experience such a sharp increase in 2022 and has since stabilized.

  The Company anticipates in 2025 higher prices than before the crisis on the Asia, Europe and slightly on the United States hubs. Thereafter, natural gas demand would be driven by the same fundamentals as oil (decrease in Europe but resistance in Asia-Pacific), plus its substitution for coal in power generation and by its role as a flexible and controllable source to mitigate the intermittent use and seasonality of renewable energies. The abundant global gas supply and the upcoming wave of increased liquefied natural gas capacity (expected in 2027-28-29), would however limit the potential for higher gas prices. Beyond 2040, with the development of renewables including storage and hydrogen, gas demand is expected to stabilize.

In this context, the gas price level used to determine the value in use of the CGUs concerned is as follows:

- for Europe: $\$11.7_{2024}$/Mbtu in 2025, $\$9.8_{2024}$/Mbtu in 2026, then $\$8_{2024}$/Mbtu between 2027 and 2040.
- for the United States: $\$3_{2024}$/Mbtu between 2025 and 2040.
- for Asia: $\$12.6_{2024}$/Mbtu in 2025, $\$10.8_{2024}$/Mbtu in 2026, then $\$9_{2024}$/Mbtu between 2027 and 2040.

From 2040 onwards, the price trajectory converges towards the price retained in 2050 by the NZE scenario, i.e. $\$4.1_{2024}$/Mbtu for Europe, $\$2.1_{2024}$/Mbtu for the United States and $\$4.9_{2024}$/Mbtu for Asia.

The future operational costs were determined by taking into account the existing technologies, the fluctuation of prices for petroleum services in line with market developments and the internal cost reduction programs effectively implemented.

The determination of value in use also takes into account on all identified assets the impact of their CO_2 emissions. Future scope 1 and 2 emissions of the assets concerned over the life of the assets are valued at $100/t or the applicable price in a given country, if it is higher, incorporating the existing free emission rights scheme in Europe. Beyond 2030, the CO_2 price is inflated by 2% per year.

The future cash flows are estimated over a period consistent with the life of the assets of the CGUs. They are prepared post-tax and take into account specific risks related to the CGUs' assets. They are discounted using an 7% post-tax discount rate, this rate being the weighted-average cost of TotalEnergies capital estimated from historical market data. This rate was 8% in 2023 and in 2022. The value in use calculated by discounting the above post-tax cash flows using an 7% post-tax discount rate is not materially different from the value in use calculated by discounting pre-tax cash flows using a pre-tax discount rate determined by an iterative computation from the post-tax value in use. These pre-tax discount rates generally range from 7% to 14%.

Asset impairments are subject to sensitivity testing. In particular, upstream assets are tested as follows:

- decreases of -10% and -20% in the hydrocarbon's prices, over the duration of the price scenario;
- consideration of a CO_2 cost of $200/t, inflated by 2% per year beyond 2030 for all assets;
- increase or decrease of 1% in the discount rate of future cash flows.

Finally, in 2020, TotalEnergies also reviewed its upstream assets that can be qualified as "stranded", meaning with reserves beyond 20 years and high production costs, whose overall reserves may therefore not be produced by 2050. The only projects concerned were the Fort Hills and Surmont oil sands projects in Canada that TotalEnergies sold in 2023.

The Company's strategy of focusing new oil investments on low carbon intensity projects and low cost of production also led it to exit from extra heavy crude oil assets in Venezuela's Orinoco Belt in 2021.

The characteristics of TotalEnergies' portfolio mitigate the risk of having stranded assets in the future if a structural decline in demand for hydrocarbons occurs due to stricter global environmental regulations and constraints and a resulting change in consumer preferences.

The Company will continue to review price assumptions as the energy transition progresses and this may result in additional impairment charges in the future.

The effect of asset impairments on TotalEnergies' financial statements and the associated sensitivity calculations are detailed in Note 3.C "Asset impairment".

Exploration assets

The energy transition could affect the future development or economic viability of certain exploration assets.

TotalEnergies applies IFRS 6 "Exploration for and Evaluation of Mineral Resources". Oil and gas exploration and production properties and assets are accounted for in accordance with the Successful Efforts method.

Exploratory wells are capitalized and tested for impairment on an individual basis as follows:

- costs of exploratory wells which result in proved reserves are capitalized and then depreciated using the unit-of-production method based on proved developed reserves;
- costs of exploratory wells are capitalized as work in progress until proved reserves have been found, if both of the following conditions are met:
  - the well has found a sufficient quantity of reserves to justify, if appropriate, its completion as a producing well, assuming that the required capital expenditures are made,
  - TotalEnergies is making sufficient progress assessing the reserves and the economic and operating viability of the project. This progress is evaluated on the basis of indicators such as whether additional exploratory works are under way or firmly planned (wells, seismic or significant studies), whether costs are being incurred for development studies and whether TotalEnergies is waiting for governmental or other third-party authorization on a proposed project, or availability of capacity on an existing transport or processing facility.

Costs of exploratory wells not meeting these conditions are charged to exploration costs.

These assets will continue to be carefully reviewed as the energy transition progresses, in line with the resulting capital expenditure allocation policy.

The effect of exploration activities on the financial statements of TotalEnergies is detailed in Note 7.2 "Property, plant and equipment".

Intangible and tangible assets - depreciation and useful lives

The energy transition may curtail the useful life of oil and gas assets, thereby increasing the annual depreciation charges related to these assets.

The following accounting principles are applied to the hydrocarbon production assets of exploration and production activities:

- unproved mineral interests are tested for impairment based on the results of the exploratory activity or as part of the impairment tests of the cash-generating units to which they are allocated;
- unproved mineral interests are transferred to proved mineral interests at their net book value as soon as proved reserves are booked;
- proved mineral interests are depreciated using the unit-of-production method based on proved reserves. The corresponding expense is recorded as depreciation of tangible assets and mineral interests;
- development costs of oil and gas production facilities are capitalized. These costs include borrowing costs incurred during the period of construction and the present value of estimated future costs of asset retirement obligations;
- the depletion rate of development wells and of production assets is equal to the ratio of oil and gas production for the period to proved developed reserves (unit-of-production method).

In the event that, due to the price effect on reserves evaluation, the unit-of-production method does not reflect properly the useful life of the asset, an alternative depreciation method is applied based on the reserves evaluated with the price of the previous year. As of December 31, 2024, 2023 and 2022, this alternative method is not applied as, given the price used to assess the reserves, the unit-of-production method correctly reflects the useful life of the assets.

With respect to phased development projects or projects subject to progressive well production start-up, the fixed assets' depreciable amount, excluding production or service wells, is adjusted to exclude the portion of development costs attributable to the undeveloped reserves of these projects.

With respect to production sharing contracts, the unit-of-production method is based on the portion of production and reserves assigned to TotalEnergies taking into account estimates based on the contractual clauses regarding the reimbursement of exploration, development and production costs (cost oil/gas) as well as the sharing of hydrocarbon rights after deduction of cost oil (profit oil/gas).

Hydrocarbon transportation and processing assets are depreciated using the unit-of-production method based on throughput or by using the straight-line method whichever best reflects the economic life of the asset.

Given the characteristics of the Company's portfolio of oil & gas assets, its current value on the balance sheet will be almost entirely depreciated by 2040.

Consequently, TotalEnergies does not anticipate significant changes in the useful life of its existing oil and gas assets that would represent an element of significant judgment impacting its consolidated accounts in the future.

The impact of the depreciation of oil and gas assets on the financial statements of TotalEnergies is detailed in Notes 7.1 "Intangible assets" and 7.2 "Property, plant and equipment".

Asset retirement obligations

The energy transition may bring forward asset retirement obligations of certain oil and gas assets, thereby increasing the present value of the associated provisions.

Asset retirement obligations, which result from a legal or constructive obligation, are recognized based on a reasonable estimate in the period in which the obligation arises.

The associated asset retirement costs are capitalized as part of the carrying amount of the underlying asset and depreciated over the useful life of this asset.

An entity is required to measure changes in the liability for an asset retirement obligation due to the passage of time (accretion) by applying a discount rate to the amount of the liability. Given the long-term nature of expenditures related to our asset retirement obligations, the rate is determined by reference to the rates of high quality AA-rated corporate bonds on the USD area for a long-term horizon. The increase of the provision due to the passage of time is recognized as "Other financial expense".

The discount rate used for the valuation of asset retirement obligation is 5% in 2024, as in 2023, and it was 4% in 2022 (the expenses are estimated at current currency values with an inflation rate of 2% in 2024, 2023, and 2022).

In upstream activities, in application of its internal procedures, TotalEnergies regularly reviews, on an asset-by-asset basis, the estimate of its future asset retirement costs, as well as the date at which work will be performed. The assets and liabilities recognized in respect of retirement obligations under these rules as described in Note 12.1 "Provisions and other non-current liabilities" are adjusted accordingly.

The Company will continue to review its estimates of both costs and the maturity of commitments on a regular basis and will take into account any significant impact that may result from changes in these parameters in the future.

The effect of the asset retirement obligations on the financial statements of TotalEnergies and the associated sensitivity calculations are detailed in Note 12.1 "Provisions and other non-current liabilities". A maturity schedule of these obligations is presented in Note 13.1 "Off-balance sheet commitments and contractual obligations".

Income Taxes

A tax liability is recognized when in application of a tax regulation, a future payment is considered probable and can be reasonably estimated. The exercise of judgment is required to assess the impact of new events on the amount of the liability.

Deferred tax assets are recognized in the accounts to the extent that their recovery is considered probable. The amount of these assets is determined after taking into account deferred tax liabilities with comparable maturity, arising from the same entities and tax regimes. It takes into account existing taxable profits and future taxable profits which estimation is inherently uncertain and subject to change over time. The exercise of judgment is required to assess the impact of new events on the value of these assets and including changes in estimates of future taxable profits and the deadlines for their use.

In addition, these tax positions may depend on interpretations of tax laws and regulations in the countries where TotalEnergies operates. These interpretations may have uncertain nature. Depending on the circumstances, they are final only after negotiations or resolution of disputes with authorities that can last several years.

Incomes taxes and the accounting methods are described in Note 11 "Income taxes".

Employee benefits

The benefit obligations and plan assets can be subject to significant volatility due in part to changes in market values and actuarial assumptions. These assumptions vary between different pension plans and thus take into account local conditions. They are determined following a formal process involving expertise and TotalEnergies internal judgments, in financial and actuarial terms, and also in consultation with actuaries and independent experts.

The assumptions for each plan are reviewed annually and adjusted if necessary to reflect changes from the experience and actuarial advice. The discount rate is reviewed quarterly.

Payroll, staff and employee benefits obligations and the method applied are described in Note 10 "Payroll, staff and employee benefits obligations".

Russian-Ukrainian conflict

Russian assets were fully impaired in 2022, with the exception of the shares held in the Yamal LNG company. In total, the impact of impairments and provisions recorded in 2022 due to the Russo-Ukrainian conflict amounted to $(14,756) million in TotalEnergies' net result.

In November 2023, the Arctic LNG 2 company was placed under sanctions by the U.S. authorities. TotalEnergies initiated the contractual suspension procedure provided for in the Arctic LNG 2 shareholders' agreement and that of force majeure for the LNG purchase contract from Arctic LNG 2. These procedures, upon their notification, resulted in the suspension of TotalEnergies' rights and obligations under these agreements, thus implying in particular the suspension of the participation of TotalEnergies' representatives in the governance bodies of Arctic LNG 2. As a result, the 10% interest held by TotalEnergies in Arctic LNG 2 is no longer accounted for using the equity method in the Company's accounts since December 31, 2023 but is recorded under "Other investments". As mentioned above, as the shares in Arctic LNG 2 were fully impaired in 2022, this deconsolidation had no impact on the 2023 Consolidated Financial Statements.

The Company has also ensured the absence of depreciation to be accounted for on Yamal LNG, by testing the value of its equity accounted investment which amounts to $5,200 million as of December 31, 2024.

With regard to the participation in Novatek, in the absence of any new event, the assessments and judgments taken into account on December 31, 2022 and on December 31, 2023 in the accounting and valuation method remain unchanged at December 31, 2024. As the criteria for significant influence are no longer met within the meaning of IAS 28 "Investments in associates and joint-ventures", TotalEnergies' 19.4% interest in Novatek has no longer been accounted for using the equity method in the Company's financial statements since the end of the 4th quarter of 2022.

Depending on the developments of the Russian-Ukrainian conflict and the measures that the European and American authorities may take, the activities of TotalEnergies in Russia, in particular those relating to the Yamal LNG asset, could be affected in the future.

Judgments in case of transactions not addressed by any accounting standard or interpretation

Furthermore, when the accounting treatment of a specific transaction is not addressed by any accounting standard or interpretation, the management applies its judgment to define and apply accounting policies that provide information consistent with the general IFRS concepts: faithful representation, relevance and materiality.

Note 1 General accounting principles

1.1 Accounting principles

A) Principles of consolidation

Entities that are directly controlled by the parent company or indirectly controlled through other consolidated entities are fully consolidated.

Investments in joint-ventures are accounted for by the equity method. TotalEnergies accounts for joint operations by recognizing its share of assets, liabilities, income and expenses.

Investments in associates, in which TotalEnergies has significant influence, are accounted for by the equity method. Significant influence is presumed when TotalEnergies holds, directly or indirectly through subsidiaries, 20% or more of the voting rights. In the case of a percentage of less than 20%, accounting under the equity method applies only when significant influence can be demonstrated.

All internal balances, transactions and income are eliminated.

B) Business combinations

Business combinations are accounted for using the acquisition method. This method requires the recognition of the acquired identifiable assets and assumed liabilities of the companies acquired by TotalEnergies at their fair value.

The purchase accounting of the acquisition is finalized up to a maximum of one year from the acquisition date.

The acquirer shall recognize goodwill at the acquisition date, being the excess of:

- the consideration transferred, the amount of non-controlling interests and, in business combinations achieved in stages, the fair value at the acquisition date of the investment previously held in the acquired company;
- over the fair value at the acquisition date of acquired identifiable assets and assumed liabilities.

If the consideration transferred is lower than the fair value of acquired identifiable assets and assumed liabilities, an additional analysis is performed on the identification and valuation of the identifiable elements of the assets and liabilities. After having completed such additional analysis, any negative goodwill is recorded as income.

Non-controlling interests are measured either at their proportionate share in the net assets of the acquired company or at fair value.

In transactions with non-controlling interests, the difference between the price paid (received) and the book value of non-controlling interests acquired (sold) is recognized directly in equity.

C) Foreign currency translation

The presentation currency of TotalEnergies' Consolidated Financial Statements is the U.S. dollar. However, the functional currency of the parent company is the euro. The resulting currency translation adjustments are presented on the line "Currency translation adjustment generated by the parent company" of the consolidated statement of comprehensive income, within "Items not potentially reclassifiable to profit and loss". In the balance sheet, they are recorded in "Currency translation adjustment".

The financial statements of subsidiaries are prepared in the currency that most clearly reflects their business environment. It is referred to as their functional currency.

Since July 1, 2018, Argentina is considered to be hyperinflationary. IAS 29 "Financial Reporting in Hyperinflationary Economies" is applicable to entities whose functional currency is the Argentine peso. The functional currency of the Argentine Exploration & Production subsidiary is the U.S. dollar, therefore IAS 29 has no incidence on TotalEnergies accounts. Net asset of the other business segments is not significant.

(i) Monetary transactions

Transactions denominated in currencies other than the functional currency of the entity are translated at the exchange rate on the transaction date. At each balance sheet date, monetary assets and liabilities are translated at the closing rate and the resulting exchange differences are recognized in the statement of income.

(ii) Translation of financial statements

Assets and liabilities of entities denominated in currencies other than dollar are translated into dollar on the basis of the exchange rates at the end of the period. The income and cash flow statements are translated using the average exchange rates for the period. Foreign exchange differences resulting from such translations are either recorded in shareholders' equity under "Currency translation adjustments" (for TotalEnergies share) or under "Non-controlling interests" (for the share of non-controlling interests) as deemed appropriate.

1.2 Significant accounting principles applicable in the future

The application of the standards or interpretations published respectively by the International Accounting Standards Board (IASB) and the International Financial Reporting Standards Interpretations Committee (IFRS IC) which were not yet in effect at December 31, 2024, is expected to have a non material impact. Note that IFRS 18, published in April 2024 and applicable from January 1, 2027, will modify the presentation of the consolidated statement of income and the consolidated statement of cash flow.

Note 2 Changes in TotalEnergies' perimeter

2.1 Main acquisitions and divestments

In 2024, the main changes in TotalEnergies perimeter were as follows:

Exploration & Production

- In February 2024, TotalEnergies and its partner SOCAR (State Oil Company of the Republic of Azerbaijan) have completed the sale of 15% interest each in the Absheron gas field to ADNOC (Abu Dhabi National Oil Company). Following the completion of this transaction, TotalEnergies holds a 35% stake in the Absheron gas field alongside SOCAR (35%) and ADNOC (30%).

Integrated LNG

- In December 2024, TotalEnergies has finalized the acquisition of the interests of OMV (50%) and Sapura Upstream Assets (50%) in SapuraOMV Upstream (SapuraOMV), an independent gas producer and operator in Malaisia selling its production to MLNG based on LNG prices netbacks. SapuraOMV's main assets are its 40% operated interest in block SK408 and 30% operated interest in block SK310, both located offshore Sarawak in Malaysia.

Integrated Power

- In February 2024, TotalEnergies has finalized the acquisition of three gas-fired power plants with a total capacity of 1.5 GW in Texas from TexGen, a U.S.-based company for a net investment of $635 million.
- In December 2024, TotalEnergies has finalized the sale to EPUKI, the UK subsidiary of EPH, of 50% of its shares in West Burton Energy, a company wholly acquired in June 2024 with the announced intention to resale one half. West Burton Energy owns a 1.3 GW gas fired power plant and a 49 MW battery storage system in the United Kingdom. The plant will be owned by the joint-venture between TotalEnergies and EPUKI and operated with the support of EPH.
- In December 2024, TotalEnergies has finalized the sale of 50% of a portfolio consisting of three solar projects with a total capacity of 1.7 GW and a battery storage project located in Texas to the investment fund Apollo. TotalEnergies retains a 50% stake and remains the operator of the assets, which are Danish Fields, Cottonwood, and Hill Solar I.

Marketing & Services

- In January 2024, TotalEnergies has finalized the partial divestment of retail network in Belgium and Luxembourg and the full divestment in the Netherlands to Alimentation Couche-Tard for 1.4 billion dollars.

2.2 Major business combinations

Accounting principles

In accordance with IFRS 3 "Business combinations", TotalEnergies is assessing the fair value of identifiable assets acquired, liabilities assumed and contingent liabilities on the basis of available information. This assessment will be finalised within 12 months following the acquisition date.

Integrated LNG

Acquisition of the Upstream Gas Assets of SapuraOMV

In December 2024, TotalEnergies has finalized the acquisition of the interests of OMV (50%) and Sapura Upstream Assets (50%) in SapuraOMV Upstream (SapuraOMV), an independent gas producer and operator in Malaisia. In accordance with IFRS 3 "Business combinations", TotalEnergies is assessing the fair value of identifiable acquired assets, liabilities and contingent liabilities on the basis of available information. The financial statements as of December 31, 2024, reflect a preliminary purchase price allocation, which will be finalized and presented within 12 months following the acquisition date.

Integrated Power

Acquisition of 1.5 GW Power Generation Capacity in Texas

In February 2024, TotalEnergies has finalized the acquisition of three gas-fired power plants with a total capacity of 1.5 GW in Texas from TexGen. The preliminary purchase price allocation is shown below:

(M$)	At the acquisition date
Goodwill	306
Intangible assets	–
Tangible assets	484
Other assets and liabilities	(59)
Net debt of the acquired treasury	(74)
Fair value of the consideration transferred	**657**

2.3 Main divestment projects

Accounting principles

Pursuant to IFRS 5 "Non-current assets held for sale and discontinued operations", assets and liabilities of affiliates that are held for sale are presented separately on the face of the balance sheet. Depreciation of assets ceases from the date of classification in "Non-current assets held for sale".

Exploration & Production

On April 24, 2024, TotalEnergies announces that its 85%-owned affiliate, TotalEnergies EP Congo, has signed an agreement with Trident Energy combining the acquisition of an additional 10% interest in the Moho license from Trident Energy and the sale to Trident Energy of its 53.5% interest in the Nkossa and Nsoko II licenses. The closing of the operation occurred on January 14, 2025.

As of December 31, 2024, the assets and liabilities related to Nkossa and Nsoko II licenses have been respectively classified in the consolidated balance sheet as "Assets classified as held for sale" for an amount of $391 million and "Liabilities classified as held for sale" for an amount of $107 million. These assets mainly include tangible assets.

On July 17, 2024, TotalEnergies announced that its subsidiary TotalEnergies EP Nigeria signed a sale and purchase agreement (SPA) with Chappal Energies for the sale of its 10% interest in the SPDC JV licenses in Nigeria.

As of December 31, 2024, the assets and liabilities have been respectively classified in the consolidated balance sheet as "Assets classified as held for sale" for an amount of $1,213 million and "Liabilities classified as held for sale" for an amount of $945 million. These assets mainly include tangible assets.

Note 3 Business segment information

Description of the business segments

Financial information by business segment is reported in accordance with the internal reporting system and shows internal segment information that is used to manage and measure the performance of TotalEnergies and which is reviewed by the main operational decision-making body of the Company, namely the Executive Committee.

The operational profit and assets are broken down by business segment prior to the consolidation and inter-segment adjustments.

Sales prices between business segments approximate market prices.

The profitable growth in the LNG and power integrated value chains are two of the key axes of TotalEnergies's strategy.

In order to give more visibility to these businesses, the Board of Directors has decided that from the first quarter 2023, Integrated LNG and Integrated Power results, previously grouped in the Integrated Gas, Renewables & Power (iGRP) segment, would be reported separately as two segments.

A new reporting structure for the business segments' financial information has been put in place, effective January 1, 2023. It is based on the following five business segments:

- an Exploration & Production segment that encompasses the activities of exploration and production of oil and natural gas, conducted in about 50 countries;
- an Integrated LNG segment covering the integrated gas chain (including upstream and midstream LNG activities) as well as biogas, hydrogen and gas trading activities;
- an Integrated Power segment covering generation, storage, electricity trading and B2B-B2C distribution of gas and electricity;
- a Refining & Chemicals segment constituting a major industrial hub comprising the activities of refining, petrochemicals and specialty chemicals. This segment also includes the activities of oil Supply, Trading and marine Shipping;
- a Marketing & Services segment including the global activities of supply and marketing in the field of petroleum products;

In addition the Corporate segment includes holdings operating and financial activities.

This new segment reporting has been prepared in accordance with IFRS 8 and according to the same principles as the internal reporting followed by the TotalEnergies's Executive Committee.

Due to the change in the Company's internal organizational structure affecting the composition of the business segments, the segment reporting data for 2022 has been restated.

Definition of the indicators

Adjusted Net Operating Income

TotalEnergies measures performance at the segment level on the basis of adjusted net operating income. Adjusted net operating income comprises operating income of the relevant segment after deducting the amortization and the depreciation of intangible assets other than mineral interest, translation adjustments and gains or losses on the sale of assets, as well as all other income and expenses related to capital employed (dividends from nonconsolidated companies, income from equity affiliates and capitalized interest expenses) and after income taxes applicable to the above, excluding the effect of the adjustments describe below.

The income and expenses not included in net operating income adjusted that are included in net income TotalEnergies share are interest expenses related to net financial debt, after applicable income taxes (net cost of net debt), non-controlling interests, and the adjusted items. Starting 2023, details of adjustment items are presented for net operating income (with comparative period 2022).

Adjustment items include:

a) Special items

Due to their unusual nature or particular significance, certain transactions qualifying as "special items" are excluded from the business segment figures. In general, special items relate to transactions that are significant, infrequent or unusual. However, in certain instances, transactions such as restructuring costs or assets disposals, which are not considered to be representative of the normal course of business, may qualify as special items although they may have occurred in prior years or are likely to occur in following years.

b) The inventory valuation effect

In accordance with IAS 2, TotalEnergies values inventories of petroleum products in its financial statements according to the First-in, First-Out (FIFO) method and other inventories using the weighted-average cost method. Under the FIFO method, the cost of inventory is based on the historic cost of acquisition or manufacture rather than the current replacement cost. In volatile energy markets, this can have a significant distorting effect on the reported income. Accordingly, the adjusted results of the Refining & Chemicals and Marketing & Services segments are presented according to the replacement cost method. This method is used to assess the segments' performance and facilitate the comparability of the segments' performance with those of its main competitors.

In the replacement cost method, which approximates the Last-In, First-Out (LIFO) method, the variation of inventory values in the statement of income is, depending on the nature of the inventory, determined using either the month-end prices differential between one period and another or the average prices of the period rather than the historical value. The inventory valuation effect is the difference between the results under the FIFO and the replacement cost methods.

c) Effect of changes in fair value

The effect of changes in fair value presented as an adjustment item reflects for trading inventories and storage contracts, differences between internal measures of performance used by TotalEnergies' Executive Committee and the accounting for these transactions under IFRS.

IFRS requires that trading inventories be recorded at their fair value using period end spot prices. In order to best reflect the management of economic exposure through derivative transactions, internal indicators used to measure performance include valuations of trading inventories based on forward prices.

TotalEnergies, in its trading activities, enters into storage contracts, whose future effects are recorded at fair value in TotalEnergies' internal economic performance. IFRS precludes recognition of this fair value effect.

Furthermore, TotalEnergies enters into derivative instruments to risk manage certain operational contracts or assets. Under IFRS, these derivatives are recorded at fair value while the underlying operational transactions are recorded as they occur. Internal indicators defer the fair value on derivatives to match with the transaction occurrence.

A) Information by business segment

For the year ended December 31, 2024 *(M$)*	Exploration & Production	Integrated LNG	Integrated Power	Refining & Chemicals	Marketing & Services	Corporate	Intercompany	Total
External sales	5,655	9,885	22,127	93,515	83,341	27	–	214,550
Intersegment sales	38,546	10,591	2,348	31,480	819	268	(84,052)	–
Excise taxes	–	–	–	(784)	(18,156)	–	–	(18,940)
Revenues from sales	**44,201**	**20,476**	**24,475**	**124,211**	**66,004**	**295**	**(84,052)**	**195,610**
Operating expenses	(19,124)	(15,530)	(22,936)	(120,424)	(63,551)	(1,010)	84,052	(158,523)
Depreciation, depletion and impairment of tangible assets and mineral interests	(8,001)	(1,251)	(344)	(1,442)	(870)	(117)	–	(12,025)
Net income (loss) from equity affiliates and other items	325	2,051	(837)	(114)	1,457	92	–	2,974
Tax on net operating income	(8,466)	(1,073)	(255)	(414)	(526)	89	–	(10,645)
Adjustments[a]	(1,069)	(196)	(2,070)	(343)	1,154	(59)	–	(2,583)
Adjusted net operating income	**10,004**	**4,869**	**2,173**	**2,160**	**1,360**	**(592)**	**–**	**19,974**
Adjustments[a]								(2,583)
Net cost of net debt								(1,360)
Non-controlling interests								(273)
Net income - TotalEnergies share								**15,758**

(a) Adjustments include special items, inventory valuation effect and the effect of changes in fair value.

The management of balance sheet positions (including margin calls) related to centralized markets access for LNG, gas and power activities has been fully included in the Integrated LNG segment.

Effects of changes in the fair value of gas and LNG positions are allocated to the operating income of Integrated LNG segment.

Effects of changes in the fair value of power positions are allocated to the operating income of Integrated Power segment.

For the year ended December 31, 2024 *(M$)*	Exploration & Production	Integrated LNG	Integrated Power	Refining & Chemicals	Marketing & Services	Corporate	Intercompany	Total
Total expenditures	9,225	3,912	5,328	1,896	1,190	199	–	21,750
Total divestments	840	425	1,431	366	1,328	28	–	4,418
Cash flow from operating activities	**17,388**	**5,185**	**2,972**	**3,808**	**2,901**	**(1,400)**	**–**	**30,854**

For the year ended December 31, 2023 *(M$)*	Exploration & Production	Integrated LNG	Integrated Power	Refining & Chemicals	Marketing & Services	Corporate	Intercompany	Total
External sales	6,561	12,086	27,337	101,203	89,909	32	–	237,128
Intersegment sales	42,595	14,789	4,126	36,581	631	206	(98,928)	–
Excise taxes	–	–	–	(841)	(17,342)	–	–	(18,183)
Revenues from sales	**49,156**	**26,875**	**31,463**	**136,943**	**73,198**	**238**	**(98,928)**	**218,945**
Operating expenses	(20,355)	(21,569)	(28,763)	(130,899)	(70,497)	(878)	98,928	(174,033)
Depreciation, depletion and impairment of tangible assets and mineral interests	(8,493)	(1,288)	(281)	(1,685)	(905)	(110)	–	(12,762)
Net income (loss) from equity affiliates and other items	(307)	2,194	(345)	(42)	2,208	(28)	–	3,680
Tax on net operating income	(10,095)	(810)	(394)	(938)	(1,246)	271	–	(13,212)
Adjustments[a]	(1,036)	(798)	(173)	(1,275)	1,300	(84)	–	(2,066)
Adjusted net operating income	**10,942**	**6,200**	**1,853**	**4,654**	**1,458**	**(423)**	**–**	**24,684**
Adjustments[a]								(2,066)
Net cost of net debt								(1,108)
Non-controlling interests								(126)
Net income - TotalEnergies share								**21,384**

(a) Adjustments include special items, inventory valuation effect and the effect of changes in fair value.

The management of balance sheet positions (including margin calls) related to centralized markets access for LNG, gas and power activities has been fully included in the Integrated LNG segment.

Effects of changes in the fair value of gas and LNG positions are allocated to the operating income of Integrated LNG segment.

Effects of changes in the fair value of power positions are allocated to the operating income of Integrated Power segment.

For the year ended December 31, 2023 *(M$)*	Exploration & Production	Integrated LNG	Integrated Power	Refining & Chemicals	Marketing & Services	Corporate	Intercompany	Total
Total expenditures	12,378	3,410	5,497	2,149	1,273	153	–	24,860
Total divestments	5,118	290	661	196	2,132	9	–	8,406
Cash flow from operating activities	**18,531**	**8,442**	**3,573**	**7,957**	**1,957**	**219**	**–**	**40,679**

For the year ended December 31, 2022 (M$)	Exploration & Production	Integrated LNG	Integrated Power	Refining & Chemicals	Marketing & Services	Corporate	Intercompany	Total
External sales	9,942	21,300	27,453	121,618	100,661	25	–	280,999
Intersegment sales	55,190	17,075	3,353	45,857	1,433	248	(123,156)	–
Excise taxes	–	–	–	(737)	(16,952)	–	–	(17,689)
Revenues from sales	**65,132**	**38,375**	**30,806**	**166,738**	**85,142**	**273**	**(123,156)**	**263,310**
Operating expenses	(24,521)	(29,982)	(29,217)	(156,897)	(81,746)	(1,329)	123,156	(200,536)
Depreciation, depletion and impairment of tangible assets and mineral interests	(8,115)	(1,208)	(194)	(1,533)	(1,033)	(138)	–	(12,221)
Net income (loss) from equity affiliates and other items	(9,943)	978	1,788	885	(20)	288	–	(6,024)
Tax on net operating income	(17,445)	(1,574)	(138)	(2,544)	(787)	281	–	(22,207)
Adjustments[a]	(12,371)	(4,580)	2,070	(653)	6	(362)	–	(15,890)
Adjusted net operating income	**17,479**	**11,169**	**975**	**7,302**	**1,550**	**(263)**	–	**38,212**
Adjustments[a]								(15,890)
Net cost of net debt								(1,278)
Non-controlling interests								(518)
Net income - TotalEnergies share								**20,526**

(a) Adjustments include special items, inventory valuation effect and the effect of changes in fair value

The management of balance sheet positions (including margin calls) related to centralized markets access for LNG, gas and power activities has been fully included in the Integrated LNG segment.

Effects of changes in the fair value of gas and LNG positions are allocated to the operating income of Integrated LNG segment.

Effects of changes in the fair value of power positions are allocated to the operating income of Integrated Power segment.

For the year ended December 31, 2022 (M$)	Exploration & Production	Integrated LNG	Integrated Power	Refining & Chemicals	Marketing & Services	Corporate	Intercompany	Total
Total expenditures	10,646	1,249	5,226	1,391	1,186	104	–	19,802
Total divestments	807	2,301	1,126	214	222	16	–	4,686
Cash flow from operating activities	**27,654**	**9,604**	**66**	**8,663**	**3,124**	**(1,744)**	–	**47,367**

B) Additional information on adjustment items

The main adjustment items for 2024 are the following:

1. An "Inventory valuation effect" amounting to $(386) million in net operating income for the Refining & Chemicals and Marketing & Services segments;
2. An "Effect of changes in fair value" amounting to $(948) million in net operating income mainly due to the revaluation of the fair value of internal derivative instruments; the negative adjustment in 2024 should be viewed in the context of the positive adjustments recorded in 2022 and 2023, resulting in a positive sum of $202 million over these three years;
3. "Asset impairment and provisions charges" of $(1,978) million in not operating income mainly consisting of impairments related to the Company's minority stake in SunPower and Maxeon for the Integrated Power segment and those related to the exit from blocks 11B/12B and 5/6/7 in South Africa for the Exploration & Production segment (refer to Note 3.C "Asset impairment");
4. Capital gains on disposal for an amount of $1,372 million in net operating income generated in particular on the partial divestment of retail network in Belgium and Luxembourg and the full divestment in the Netherlands for the Marketing & Services segment. This amount includes the revaluation of shares held and consolidated under the equity method in Belgium and Luxembourg;
5. Other adjustment items include $(616) million in net operating income mainly consisting of the impacts of the contribution on inframarginal annuity in France and deferred tax adjustments related to rates changes.

The detail of the adjustment items is presented in the table below.

Adjustments to net operating income

For the year ended December 31, 2024 (M$)	Exploration & Production	Integrated LNG	Integrated Power	Refining & Chemicals	Marketing & Services	Corporate	Total
Inventory valuation effect	–	–	–	(276)	(110)	–	(386)
Effect of changes in fair value	–	(84)	(864)	–	–	–	(948)
Restructuring charges	–	–	(11)	(6)	(10)	–	(27)
Asset impairment and provisions charges	(982)	(10)	(965)	(4)	(17)	–	(1,978)
Gains (losses) on disposals of assets	54	–	29	(11)	1,300	–	1,372
Other items	(141)	(102)	(259)	(46)	(9)	(59)	(616)
Total	(1,069)	(196)	(2,070)	(343)	1,154	(59)	(2,583)

Adjustments to net operating income

For the year ended December 31, 2023 (M$)	Exploration & Production	Integrated LNG	Integrated Power	Refining & Chemicals	Marketing & Services	Corporate	Total
Inventory valuation effect	–	–	–	(586)	(108)	–	(694)
Effect of changes in fair value	–	(547)	559	–	–	–	12
Restructuring charges	–	–	(5)	(51)	–	–	(56)
Asset impairment and provisions charges[a]	(926)	(124)	(773)	(359)	(115)	–	(2,297)
Gains (losses) on disposals of assets[b]	431	–	–	–	1,616	–	2,047
Other items[c]	(541)	(127)	46	(279)	(93)	(84)	(1,078)
Total	(1,036)	(798)	(173)	(1,275)	1,300	(84)	(2,066)

(a) Refer to Note 3.C "Asset impairment".
(b) Refer to Note 6.1 "Other income and other expense".
(c) "Other items" include $0.4 billion of revaluation of the previously held share of Total Eren and $(1.5) billion mainly consisting of the impacts of the European solidarity contribution, the contribution on inframarginal annuity in France and the devaluation of the Argentine peso.

Adjustments to net operating income

For the year ended December 31, 2022 (M$)	Exploration & Production	Integrated LNG	Integrated Power	Refining & Chemicals	Marketing & Services	Corporate	Total
Inventory valuation effect	–	–	–	337	194	–	531
Effect of changes in fair value	–	340	798	–	–	–	1,138
Restructuring charges	–	–	(41)	–	(14)	–	(55)
Asset impairment and provisions charges[a]	(11,157)	(4,460)	(21)	–	(112)	(9)	(15,759)
Gains (losses) on disposals of assets	–	–	1,450	–	–	–	1,450
Other items[b]	(1,214)	(460)	(116)	(990)	(62)	(353)	(3,195)
Total	(12,371)	(4,580)	2,070	(653)	6	(362)	(15,890)

(a) Of which $(14,756) million relate to the impairment and provisions charges on the assets of the Company in Russia.
(b) Other items represented $(3.2) billion in 2022, consisting of $(1.7) billion related to windfall taxes levied by governments (European Solidarity Contribution, French Electricity Generation Infra-Marginal Income Contribution, effect on deferred tax of Energy Profits Levy in the United Kingdom), $(1) billion as a consequence of the conflict in Ukraine (grant of fuel discounts to French customers in the context of price increase, foreign exchange losses due to volatility in Russian ruble-U.S. dollar and euro exchange rates), and $(0.5) billion mainly related to provisions for onerous contracts."

C) Asset impairment

Accounting principles

The recoverable amounts of intangible assets and property, plant and equipment are tested for impairment as soon as any indication of impairment exists. This test is performed at least annually for goodwill.

The recoverable amount is the higher of the fair value (less costs to sell) or the value in use.

Assets are grouped into cash-generating units (or CGUs) and tested. A CGU is a homogeneous set of assets that generates cash inflows that are largely independent of the cash inflows from other groups of assets.

The value in use of a CGU is determined by reference to the discounted expected future cash flows of these assets, based upon Management's expectation of future economic and operating conditions. When this value is less than the carrying amount of the CGU, an impairment loss is recorded. This loss is allocated first to goodwill with a corresponding amount in "Other expenses".

Any further losses are then allocated to property, plant and mineral interests with a corresponding amount in "Depreciation, depletion and impairment of tangible assets and mineral interests" and to other intangible assets with a corresponding amount in "Other expenses".

Impairment losses recognized in prior periods can be reversed up to the original carrying amount, had the impairment loss not been recognized. Impairment losses recognized on goodwill cannot be reversed.

Investments in associates or joint-ventures are tested for impairment whenever indication of impairment exists. If any objective evidence of impairment exists, the carrying amount of the investment is compared with its recoverable amount, being the higher of its fair value less costs to sell and value in use. If the carrying amount exceeds the recoverable amount, an impairment loss is recorded in "Net income (loss) from equity affiliates".

For the financial year 2024, asset impairments were recorded for an amount of $(1,978) million in net operating income and $(1,977) million in net income, TotalEnergies share. These impairments were qualified as adjustment items of the net operating income and net income, TotalEnergies share.

Impairments relate to certain cash-generating units (CGUs) for which indicators of impairment have been identified, due to changes in operating conditions or the economic environment of the activities concerned.

Principles for determining value in use of a CGU

The principles applied in determining the recoverable amounts are as follows:

- the future cash flows were determined using the assumptions included in the 2025 budget and in the long-term plan of the Company approved by the Executive Committee and the Board of Directors. These assumptions, in particular including operational costs, estimation of oil and gas reserves, future volumes produced and marketed, represent the best estimate from the Company Management of economic and technical conditions over the remaining life of the assets;
- the oil and gas price scenarios have been established based on data on global energy demand from the IEA's World Energy Outlook, the latest edition of which was published in October 2024, and on its own supply and demand assessments; they take into account assumptions about the evolution of core indicators of the upstream activity (demand for hydrocarbons in different markets, investment forecasts, decline in production fields, changes in oil & gas reserves and supply by area and by nature of oil & gas products), of the downstream activity (changes in refining capacity and demand for petroleum products) and by integrating "climate" challenge;
- these price scenarios, first prepared within the Strategy & Markets Division, are also reviewed with the Company segments which bring their own expertise. They also integrate studies issued by international agencies, banks and independent consultants. They are then approved by the Executive Committee and the Board of Directors;
- the IEA 2024 World Energy Outlook presents three scenarios that are key references for the Company: the STEPS (Stated Policies Scenario) and APS (Announced Pledges Scenario) for the short/mid-term and the NZE (Net Zero Emissions by 2050) for the long-term;
- the STEPS scenario only includes climate actions already implemented to date around the world and those under development. The APS scenario takes into account all climate ambitions declared to date in the world, including the NDCs (Nationally Determined Contributions) and the carbon neutrality ambitions. According to the IEA, it is associated with a temperature increase of around 1.7°C. This scenario is compatible with the objective of the Paris Agreement to limit the temperature increase to "well below 2°C". The IEA's NZE scenario is understood as the set of actions to be taken for the global energy sector to achieve net-zero CO_2 emissions by 2050 and to be compatible with a +1.5°C scenario by 2100. This normative scenario is therefore not predictive of oil demand, and even less so of the price scenarios it proposes, particularly in the medium term (2030). Indeed, this scenario predicts that oil demand will peak in 2023 and decrease by 22% between 2023 and 2030, whereas, according to the latest IEA projections, oil demand in 2024 would be higher than in 2023 and continue to grow until 2029. According to projections from other energy companies or external consultants, demand would start to decline around 2030 (oil peak in 2031 according to Wood MacKenzie, in 2027 according to HIS Inflections);
- beyond 2030, the oil price trajectory retained by the Company converges in the long term, to the price retained in 2050 by the IEA's NZE scenario, i.e $\$25.8_{2024}$/b. The prices retained for gas, the transition fuel, stabilize until 2040 at lower levels than current prices before converging towards the IEA's NZE scenario prices in 2050.

The oil price trajectories adopted by the Company are based on the following assumptions:

- oil demand experienced sustained growth post-Covid crisis, accompanying the global economic recovery, which generated strong tensions on energy prices from mid-2021, exacerbated in 2022 by the war in Ukraine. In 2023, global oil demand reached a record level, surpassing that of 2019 pre-Covid crisis. This increase was stimulated by the lifting of lockdown measures in China, allowing the resumption of industrial activity, particularly in the petrochemical sector, as well as the increase in air travel. In 2024, demand is expected to continue to grow, albeit at a slower pace, due to the economic slowdown in China and the end of the post-pandemic rebound effect.

By 2030, oil consumption is expected to continue to grow, supported by population growth and rising living standards, particularly in emerging countries. However, this growth is expected to gradually slow down due to moderate global economic growth and the accelerated deployment of low-carbon substitute technologies. Some recent forecasts anticipate a peak in oil product demand in China as early as 2027.

Moreover, supply is limited by the historical production cuts decided (and effectively implemented) by the OPEC+ coalition members, the discipline on upstream oil investments since the 2015 oil crisis, and the natural decline of currently producing fields. In the United States, while 2023 production was significantly higher than in 2019 and is expected to grow slightly in 2024, the recent sector consolidation (Permian, DJ, and Bakken) should reinforce investment profitability discipline and thus contain growth in the coming years.

Therefore, in this context of growing demand driven by emerging countries and constrained supply by OPEC+ countries and the United States, our scenario anticipates that prices will remain supported at 70_{2024}/b from 2025 to 2030;

- beyond 2030, given technological developments, particularly in the transport sector, the growth in oil demand would be low or even zero, and the selected price scenario decreases linearly to reach 50_{2024}/b in 2040 and then 25.8_{2024}/b in 2050, in line with the NZE scenario.

The average Brent prices over the period 2025-2050 thus stands at 53.0_{2024}/b.

For natural gas, the transition fuel, the price trajectory adopted by the Company is based on the following assumptions:

- natural gas demand in 2021 has exceeded its pre-crisis level with very strong tensions on prices in Europe and, by extension, in Asia through LNG prices, as a result of the cuts in Russian pipe gas importation that began at the end of 2021 and continued in 2022 with the complete shutdown of the Nordstream. Global gas demand in 2022 was almost at the same level as in 2021. Global gas demand in 2023 was almost at the same level as in 2022 with the recourse to American LNG to replace Russian gas in Europe, still in competition with Asia. Gas prices in Asia and Europe have returned to much lower levels than the exceptionally high prices reached in the third quarter of 2022 but remain higher than before the crisis. The price of gas in the United States did not experience such a sharp increase in 2022 and has since stabilized.

  The Company anticipates in 2025 higher prices than before the crisis on the Asia, Europe and slightly on the United States hubs. Thereafter, natural gas demand would be driven by the same fundamentals as oil (decrease in Europe but resistance in Asia-Pacific), plus its substitution for coal in power generation and by its role as a flexible and controllable source to mitigate the intermittent use and seasonality of renewable energies. The abundant global gas supply and the upcoming wave of increased liquefied natural gas capacity (expected in 2027-28-29), would however limit the potential for higher gas prices. Beyond 2040, with the development of renewables including storage and hydrogen, gas demand is expected to stabilize.

In this context, the gas price level used to determine the value in use of the CGUs concerned is as follows:

- for Europe: 11.7_{2024}/Mbtu in 2025, 9.8_{2024}/Mbtu in 2026, then 8_{2024}/Mbtu between 2027 and 2040;
- for the United States: 3_{2024}/Mbtu between 2025 and 2040;
- for Asia: 12.6_{2024}/Mbtu in 2025, 10.8_{2024}/Mbtu in 2026, then 9_{2024}/Mbtu between 2027 and 2040.

From 2040 onwards, the price trajectory converges towards the price retained in 2050 by the NZE scenario, i.e. 4.1_{2024}/Mbtu for Europe, 2.1_{2024}/Mbtu for the United States and 4.9_{2024}/Mbtu for Asia.

The future operational costs were determined by taking into account the existing technologies, the fluctuation of prices for petroleum services in line with market developments and the internal cost reduction programs effectively implemented.

The determination of value in use also takes into account on all identified assets the impact of their CO_2 emissions. Future scope 1 and 2 emissions of the assets concerned over the life of the assets are valued at $100/t or the applicable price in a given country, if it is higher, incorporating the existing free emission rights scheme in Europe. Beyond 2030, the CO_2 price is inflated by 2% per year.

The future cash flows are estimated over a period consistent with the life of the assets of the CGUs. They are prepared post-tax and take into account specific risks related to the CGUs' assets. They are discounted using an 7% post-tax discount rate, this rate being the weighted-average cost of TotalEnergies capital estimated from historical market data. This rate was 8% in 2023 and in 2022. The value in use calculated by discounting the above post-tax cash flows using an 7% post-tax discount rate is not materially different from the value in use calculated by discounting pre-tax cash flows using a pre-tax discount rate determined by an iterative computation from the post-tax value in use. These pre-tax discount rates generally range from 7% to 14%.

Impairment losses recognized by segment

The CGUs of the Exploration & Production segment are defined as oil and gas fields or groups of oil and gas fields with industrial assets enabling the production, treatment and evacuation of the oil and gas. For the financial year 2024, the Company recorded impairments of assets over CGUs of the Exploration & Production segment for $(982) million in net income, TotalEnergies share.

Impairments recognized in 2024 are mainly related to the exit from blocks 11B/12B and 5/6/7 in South Africa.

As for sensitivities of the Exploration & Production segment:

- a decrease by 1 point in the discount rate would have a positive impact of $0.1 billion in net income, TotalEnergies share;
- an increase by 1 point in the discount rate would have an additional negative impact of $0.1 billion in net income, TotalEnergies share;
- a decrease of 10% of the oil and gas prices over the duration of the plan (thus an average oil price of around 48_{2024}/b) would have an additional negative impact of $0.3 billion in net income, TotalEnergies share;
- a decrease of 20% of the oil and gas prices over the duration of the plan (thus an average oil price of around 42_{2024}/b) would have an additional negative impact of $1.8 billion in net income, TotalEnergies share;
- taking into account a CO_2 cost of $200/t, inflated by 2%/year from 2030 onwards for all assets would have an additional negative impact of $0.2 on net income, TotalEnergies share.

The CGUs of the Integrated LNG segment are subsidiaries or groups of subsidiaries organized by activity or geographical area, and by fields or groups of fields for upstream LNG activities. For the financial year 2024, the Company recorded impairments on CGUs in the Integrated LNG segment for $(10) million in net income, TotalEnergies share.

As for sensitivities of the Integrated LNG:

- a decrease by 1 point in the discount rate would have no impact in net income, TotalEnergies share;
- an increase by 1 point in the discount rate would have an additional negative impact of $0.1 billion in net income, TotalEnergies share;

- a decrease of 10% of the oil and gas prices over the duration of the plan would have an additional negative impact of $2.0 billion in net income, TotalEnergies share;
- a decrease of 20% of the oil and gas prices over the duration of the plan would have an additional negative impact of $6.2 billion in net income, TotalEnergies share;
- taking into account a CO_2 cost of $200/t inflated by 2%/year from 2030 onwards for all assets would have an additional negative impact of approximately $0.5 billion in net income, TotalEnergies share.

The CGUs of the Integrated Power segment are subsidiaries or groups of subsidiaries organized by activity or geographical area. For the financial year 2024, the Company recorded impairments on CGUs in the Integrated Power segment for $(965) million in net income, TotalEnergies share.

Impairments recognized mainly relate to the Company's minority stake in SunPower and Maxeon.

As for sensitivities of the Integrated Power

- a decrease by 1 point in the discount rate would have no impact in net income, TotalEnergies share;
- an increase by 1 point in the discount rate would not have any additional negative impact in net income, TotalEnergies share.

The CGUs of the Refining & Chemicals segment are subsidiaries or groups of subsidiaries organized by activity (grouping together the operational activities of refining and petrochemicals) and by relevant geographical area. Future cash flows are based on the gross contribution margin (calculated on the basis of net sales after purchases of crude oil and refined products, the effect of inventory valuation and variable costs). The other activities of the segment are global divisions, each division gathering a set of businesses or homogeneous products for strategic, commercial and industrial plans. Future cash flows are determined from the specific margins of these activities, unrelated to the price of oil.

For the financial year 2024, the Company has recorded impairments on CGUs in the Refining & Chemicals segment for an amount of $(4) million in net income TotalEnergies share.

As for sensitivities of the Refining & Chemicals segment:

- an increase by 1 point in the discount rate would not have any additional negative impact in the net income, TotalEnergies share;
- a decrease of 20% of the refining margins (could be in link with the increase of CO_2 cost) would have an additional negative impact of $1.4 billion in net income, TotalEnergies share.

The CGUs of the Marketing & Services segment are subsidiaries or groups of subsidiaries organized by relevant geographical area.

For the financial year 2024, the Company recorded impairments on the CGUs of the Marketing & Services segment for $(17) million in net income, TotalEnergies share.

Impairments recognized in years 2023 and 2022

For the financial year 2023, the Company recorded impairments in the Exploration & Production, Integrated LNG, Integrated Power, Refining & Chemicals, and Marketing & Services segments with an impact of $(2,166) million in net income, TotalEnergies share.

Impairments recorded on the CGUs of the Exploration & Production segment amounted to $(881) million in net income, TotalEnergies share, mainly related to the Company's upstream assets in Kenya and Congo, and also Al Shaheen in Qatar related to temporary tax effects.

Those recorded on the CGUs of the Integrated Power sector amounted to $(773) million in net income, TotalEnergies share, mainly concerning the Yunlin offshore wind project in Taiwan and the goodwill and customer portfolios of gas-electricity marketing activities in Belgium, Spain and France.

Impairments recorded on the CGUs of the Refining & Chemicals sector amounted to $(273) million in net income, TotalEnergies share, mainly related to the divestment projects of Naphtachimie to INEOS and the Natref refinery in South Africa.

Finally, the impairments recorded on the CGUs of the Integrated LNG sector amounted to $(124) million in net income, TotalEnergies share, and those recorded on the CGUs of the Marketing & Services sector amounted to $(115) million in net income, TotalEnergies share.

These impairments were qualified as adjustments items of the net income, TotalEnergies share.

For the financial year 2022, the Company recorded impairments in Exploration & Production, Integrated Gas, Renewables & Power and Marketing & Services segments for an amount of $(15,743) million in net income, TotalEnergies share.

Impairments recognized in 2022 in Exploration & Production segment relate to the Company's assets in Russia for an amount of $(10,527) million in net income TotalEnergies share, mainly relating to the investment in Novatek.

They also take into account the impairment of the North Platte project assets for $(957) million in net income, TotalEnergies share, following the Company's decision announced in February not to sanction and so to withdraw from this deepwater project in the Gulf of Mexico.

The impairments recognized also include a reversal of impairment on the Company's assets in Canada. In the context of the project to spin-off the Company's upstream activities in Canada, an impairment test was carried out, and the resulting value in use led to a reversal of impairment of $728 million in net income, TotalEnergies share.

Impairments recognized in 2022 on CGUs in the Integrated Gas, Renewables & Power segment for $(4,481) million in net income, TotalEnergies share. Impairments recognized relate to the Company's assets in Russia for an amount of $(4,142) million in net income, TotalEnergies share, notably concerning Arctic LNG 2.

Impairments recognized in 2022 in CGUs Marketing & Services segment for $(112) million in net income, TotalEnergies share. Impairments recognized relate to the Company's assets in Russia for an amount $(87) million in net income, TotalEnergies share.

These impairments were qualified as adjustments items of the net income, TotalEnergies share.

Note 4 Segment Information by geographical area

(M$)	France	Rest of Europe	North America	Africa	Rest of the world	Total
For the year ended December 31, 2024						
External sales	49,269	89,077	17,915	21,901	36,388	**214,550**
Property, plant and equipment, intangible assets, net	15,486	25,969	11,938	37,375	52,565	**143,333**
For the year ended December 31, 2023						
External sales	55,610	97,662	22,219	21,709	39,928	**237,128**
Property, plant and equipment, intangible assets, net	16,863	24,486	11,228	38,658	50,764	**141,999**
For the year ended December 31, 2022						
External sales	58,411	122,641	33,188	24,582	42,177	**280,999**
Property, plant and equipment, intangible assets, net	13,080	26,382	13,292	39,410	46,867	**139,032**

Note 5 Main items related to operating activities

Items related to the statement of income

5.1 Net sales

Accounting principles

IFRS 15 requires identification of the performance obligations for the transfer of goods and services in each contract with customers. Revenue is recognized upon satisfaction of the performance obligations for the amounts that reflect the consideration to which TotalEnergies expects to be entitled in exchange for those goods and services.

Sales of goods

Revenues from sales are recognized when the control has been transferred to the buyer and the amount can be reasonably measured. Revenues from sales of crude oil and natural gas are recorded upon transfer of title, according to the terms of the sales contracts.

Revenues from the production of crude oil and natural gas properties, in which TotalEnergies has an interest with other producers, are recognized based on actual entitlement volumes sold over the period. Any difference between entitlement volumes and volumes sold, based on TotalEnergies net working interest, are recognized in the "Under-lifting" and "Over-lifting" accounts in the balance sheet and in operating expenses in the profit and loss.

Oil and gas delivered quantities that represent production royalties and taxes, when paid in cash, are included in revenues, except for the United States and Canada.

Certain transactions within the trading activities (contracts involving quantities that are purchased from third parties then resold to third parties) are shown at their net value in purchases, net of inventory variation. These transactions relate in particular to crude oil, petroleum products, gas, power and LNG.

Exchanges of crude oil and petroleum products realized within trading activities are shown at their net value in both the statement of income and the balance sheet.

Sales of services

Revenues from services are recognized when the services have been rendered.

Revenues from gas transport are recognized when services are rendered. These revenues are based on the quantities transported and measured according to procedures defined in each service contract.

Shipping revenues and expenses from time-charter activities are recognized on a pro rata basis over a period that commences upon the unloading of the previous voyage and terminates upon the unloading of the current voyage. Shipping revenue recognition starts only when a charter has been agreed to by both TotalEnergies and the customer.

Income related to the distribution of electricity and gas is not recognized in revenues in certain countries because TotalEnergies acts as an agent in this transaction. In these countries, TotalEnergies is not responsible for the delivery and does not set the price of the service, because it can only pass on to the customer the amounts invoiced to it by the distributors.

Excise taxes

Excise taxes are rights or taxes which amount is calculated based on the quantity of oil and gas products put on the market. Excise taxes are determined by the states. They are paid directly to the customs and tax authorities and then invoiced to final customers by being included in the sales price.

The analysis of the criteria set by IFRS 15 led TotalEnergies to determine that it was acting as principal in these transactions. Therefore, sales are presented on a gross basis, including excise taxes collected by TotalEnergies within the course of its oil distribution operations. In addition, the subtotal "Revenue from Sales" is presented as an additional line item in the P&L and is obtained by deducting Excise tax expenses from Sales.

5.2 Operating expenses and research and development

Accounting principles

TotalEnergies applies IFRS 6 "Exploration for and Evaluation of Mineral Resources". Oil and gas exploration and production properties and assets are accounted for in accordance with the Successful Efforts method.

Geological and geophysical costs, including seismic surveys for exploration purposes are expensed as incurred in exploration costs.

Costs of dry wells and wells that have not found proved reserves are charged to expense in exploration costs.

5.2.1 Operating expenses

For the year ended December 31, *(M$)*	2024	2023	2022
Purchases, net of inventory variation[a] [b]	(127,664)	(143,041)	(169,448)
Exploration costs	(999)	(573)	(1,299)
Other operating expenses[c]	(29,860)	(30,419)	(29,789)
of which non-current operating liabilities (allowances) reversals	*870*	*821*	*1,086*
of which current operating liabilities (allowances) reversals	*(60)*	*(92)*	*(188)*
Operating expenses	**(158,523)**	**(174,033)**	**(200,536)**

(a) Includes taxes paid on oil and gas production in the Exploration & Production segment, amongst others royalties.
(b) TotalEnergies values under/over lifting at market value.
(c) Principally composed of production and administrative costs (refer in particular to payroll costs as detailed in Note 10 to the Consolidated Financial Statements "Payroll, staff and employee benefits obligations").

5.2.2 Research and development costs

Accounting principles

Research costs are charged to expense as incurred.

Development expenses are capitalized when the criteria of IAS 38 are met.

Research and development costs incurred by TotalEnergies in 2024 and booked in operating expenses (excluding depreciations) amount to $805 million ($774 million in 2023 and $762 million in 2022), corresponding to 0.38% of the sales.

In 2024, 3,715 people are dedicated to these research and development activities (3,687 in 2023 and 3,536 in 2022).

5.3 Amortization, depreciation and impairment of tangible assets and mineral interests

The amortization, depreciation and impairment of tangible assets and mineral interests are detailed as follows:

For the year ended December 31, *(M$)*	2024	2023	2022
Depreciation and impairment of tangible assets	(10,911)	(11,902)	(11,128)
Amortization and impairment of mineral assets	(1,114)	(860)	(1,093)
Total	**(12,025)**	**(12,762)**	**(12,221)**

Items related to balance sheet

5.4 Working capital

5.4.1 Inventories

Accounting principles

Inventories are measured in the Consolidated Financial Statements at the lower of historical cost or market value. Costs for petroleum and petrochemical products are determined according to the FIFO (First-In, First-Out) method or weighted-average cost method and other inventories are measured using the weighted-average cost method.

In addition stocks held for trading are measured at fair value less cost to sell.

Refining & Chemicals

Petroleum product inventories are mainly comprised of crude oil and refined products. Refined products principally consist of gasoline, distillate and fuel produced by TotalEnergies' refineries. The turnover of petroleum products does not exceed two months on average.

Crude oil costs include raw material and receiving costs. Refining costs principally include crude oil costs, production costs (energy, labor, depreciation of producing assets) and an allocation of production overheads (taxes, maintenance, insurance, etc.).

Costs of chemical product inventories consist of raw material costs, direct labor costs and an allocation of production overheads. Start-up costs, general administrative costs and financing costs are excluded from the costs of refined and chemicals products.

Marketing & Services

The costs of products refined by TotalEnergies' entities include mainly raw materials costs, production costs (energy, labor, depreciation of producing assets), primary costs of transport and an allocation of production overheads (taxes, maintenance, insurance, etc.).

General administrative costs and financing costs are excluded from the cost price of products.

Product inventories purchased from entities external to TotalEnergies are valued at their purchase cost plus primary costs of transport.

Carbon dioxide emission rights generated as part of the EU Emission Trading scheme (EU ETS)

In the absence of a current IFRS standard or interpretation on accounting for emission rights of carbon dioxide generated as part of the EU Emission Trading scheme (EU ETS), the following principles are applied:

- emission rights are managed as a cost of production and as such are recognized in inventories:
  - emission rights allocated for free are booked in inventories with a nil carrying amount,
  - purchased emission rights are booked at acquisition cost,
  - sales or annual surrender of emission rights result in decreases in inventories valued at weighted-average cost,
  - if the carrying amount of inventories at closing date is higher than the market value, an impairment loss is recorded;
- if emission rights to be surrendered at the end of the compliance period are higher than emission rights (allocated and purchased), the shortage is accounted for as a liability at market value;
- forward transactions are recognized at their fair market value in the balance sheet. Changes in the fair value of such forward transactions are recognized in the statement of income, unless hedge accounting has been applied.

Energy savings certificates

In the absence of current IFRS standards or interpretations on accounting for energy savings certificates (ESC), the following principles are applied:

- if the obligations linked to the sales of energy are greater than the number of ESC's held then a liability is recorded. These liabilities are valued based on the price of the last transactions;
- in the event that the number of ESC's held exceeds the obligation at the balance sheet date this is accounted for as inventory. Otherwise a valuation allowance is recorded;
- ESC inventories are valued at weighted-average cost (acquisition cost for those ESC's acquired or cost incurred for those ESC's generated internally).

If the carrying value of the inventory of certificates at the balance sheet date is higher than the market value, an impairment loss is recorded.

As of December 31, 2024 (M$)	Gross value	Valuation allowance	Net value
Crude oil and natural gas	3,111	(4)	3,107
Refined products	4,714	(48)	4,666
Chemicals products	1,558	(108)	1,450
Trading inventories	7,280	–	7,280
Other inventories	3,400	(1,035)	2,365
Total	20,063	(1,195)	18,868

As of December 31, 2023 (M$)	Gross value	Valuation allowance	Net value
Crude oil and natural gas	3,334	(152)	3,182
Refined products	5,335	(141)	5,194
Chemicals products	1,668	(97)	1,571
Trading inventories	6,158	–	6,158
Other inventories	4,248	(1,036)	3,212
Total	20,743	(1,426)	19,317

As of December 31, 2022 (M$)	Gross value	Valuation allowance	Net value
Crude oil and natural gas	4,758	(47)	4,711
Refined products	6,386	(162)	6,224
Chemicals products	1,635	(93)	1,542
Trading inventories	6,672	–	6,672
Other inventories	4,797	(1,010)	3,787
Total	24,248	(1,312)	22,936

Changes in the valuation allowance on inventories are as follows:

For the year ended December 31, (M$)	Valuation allowance as of January 1,	Increase (net)	Currency translation adjustment and other variations	Valuation allowance as of December 31,
2024	(1,426)	246	(15)	(1,195)
2023	(1,312)	(92)	(22)	(1,426)
2022	(1,238)	(121)	47	(1,312)

5.4.2 Accounts receivable and other current assets

As of December 31, 2024 (M$)	Gross value	Valuation allowance	Net value
Accounts receivable	**20,183**	**(902)**	**19,281**
Recoverable taxes	4,295	(6)	4,289
Other operating receivables	17,094	(248)	16,846
Prepaid expenses	2,481	–	2,481
Other current assets	71	–	71
Other current assets	**23,941**	**(254)**	**23,687**

As of December 31, 2023 (M$)	Gross value	Valuation allowance	Net value
Accounts receivable	**24,334**	**(892)**	**23,442**
Recoverable taxes	4,085	(7)	4,078
Other operating receivables	15,218	(266)	14,952
Prepaid expenses	1,731	–	1,731
Other current assets	60	–	60
Other current assets	**21,094**	**(273)**	**20,821**

As of December 31, 2022 *(M$)*	Gross value	Valuation allowance	Net value
Accounts receivable	**25,204**	**(826)**	**24,378**
Recoverable taxes	6,295	(32)	6,263
Other operating receivables	28,582	(293)	28,289
Prepaid expenses	1,455	–	1,455
Other current assets	63	–	63
Other current assets	**36,395**	**(325)**	**36,070**

Changes in the valuation allowance on "Accounts receivable" and "Other current assets" are as follows:

For the year ended December 31, *(M$)*	Valuation allowance as of January 1,	Increase (net)	Currency translation adjustments and other variations	Valuation allowance as of December 31,
Accounts receivable				
2024	(892)	(53)	43	(902)
2023	(826)	(82)	16	(892)
2022	(793)	(98)	65	(826)
Other current assets				
2024	(273)	1	18	(254)
2023	(325)	(7)	59	(273)
2022	(268)	(83)	26	(325)

As of December 31, 2024, the net portion of the overdue receivables included in "Accounts receivable" and "Other current assets" was $4,987 million, of which $2,708 million was due less than 90 days, $443 million was due between 90 days and 6 months, $815 million was due between 6 and 12 months and $1,021 million was due after 12 months.

As of December 31, 2023, the net portion of the overdue receivables included in "Accounts receivable" and "Other current assets" was $5,903 million, of which $3,211 million was due less than 90 days, $420 million was due between 90 days and 6 months, $993 million was due between 6 and 12 months and $1,278 million was due after 12 months.

As of December 31, 2022, the net portion of the overdue receivables included in "Accounts receivable" and "Other current assets" was $5,481 million, of which $3,328 million was due less than 90 days, $672 million was due between 90 days and 6 months, $571 million was due between 6 and 12 months and $910 million was due after 12 months.

5.4.3 Other creditors and accrued liabilities

As of December 31, *(M$)*	2024	2023	2022
Accruals and deferred income	1,561	1,129	737
Payable to States (including taxes and duties)	12,561	13,974	14,780
Payroll	1,597	1,687	1,572
Other operating liabilities	20,242	19,937	35,186
Total	35,961	36,727	52,275

As of December 31, 2024, the heading "Other operating liabilities" notably includes the second quarterly interim dividend for the fiscal year 2024 for $1,845 million, which was paid in January 2025 and the third quarterly interim dividend for the fiscal year 2024 for $1,851 million, which will be paid in April 2025.

As of December 31, 2023, the heading "Other operating liabilities" notably included the second quarterly interim dividend for the fiscal year 2023 for $1,959 million, which was paid in January 2024 and the third quarterly interim dividend for the fiscal year 2023 for $1,923 million, which was paid in April 2024.

As of December 31, 2022, the heading "Other operating liabilities" notably included the second quarterly interim dividend for the fiscal year 2022 for $1,857 million, which was paid in January 2023 and the third quarterly interim dividend for the fiscal year 2022 for $1,827 million, which was paid in April 2023.

Items related to the cash flow statement

5.5 Cash flow from operating activities

Accounting principles

The cash flows incurred in currencies other than dollar has been translated into dollars using the exchange rate on the transaction date or the average exchange rate for the period. Currency translation differences arising from the translation of monetary assets and liabilities denominated in foreign currency into dollars using the closing exchange rates are shown in the consolidated statement of cash flows under "Effect of exchange rates". Therefore, the consolidated statement of cash flows will not agree with the figures derived from the consolidated balance sheet.

The following table gives additional information on cash paid or received in the cash flow from operating activities.

Detail of interest, taxes and dividends

For the year ended December 31, *(M$)*	2024	2023	2022
Interests paid	(2,934)	(2,883)	(2,292)
Interests received	1,302	1,431	655
Income tax paid[a]	(10,561)	(12,688)	(14,486)
Dividends received	1,833	2,821	3,955

(a) These amounts include taxes paid in kind under production-sharing contracts in exploration and production activities.

Detail of changes in working capital

For the year ended December 31, *(M$)*	2024	2023	2022
Inventories	(203)	3,159	(3,805)
Accounts receivable	3,884	306	(3,272)
Other current assets	(3,556)	14,860	(3,523)
Accounts payable	(889)	572	5,313
Other creditors and accrued liabilities	3,128	(12,806)	6,478
Net amount, Decrease (Increase)	**2,364**	**6,091**	**1,191**

Detail of changes in provisions and deferred taxes

As of December 31, *(M$)*	2024	2023	2022
Accruals	(373)	257	2,177
Deferred taxes	563	556	2,417
Total	**190**	**813**	**4,594**

Note 6 Other items from operating activities

6.1 Other income and other expense

For the year ended December 31, *(M$)*	2024	2023	2022
Gains on disposal of assets	1,721	3,157	2,244
Foreign exchange gains	236	–	379
Other	155	520	226
Other income	**2,112**	**3,677**	**2,849**
Losses on disposal of assets	(224)	(98)	(2,613)
Foreign exchange losses	(406)	(763)	(1,023)
Amortization of other intangible assets (excl. mineral interests)	(389)	(769)	(430)
Other	(262)	(766)	(3,278)
Other expense	**(1,281)**	**(2,396)**	**(7,344)**

Other income

In 2024, gains on disposal of assets are mainly related to the partial divestment of retail network in Belgium and Luxembourg and the full divestment in the Netherlands for the Marketing & Services segment. This amount includes the revaluation of shares held and consolidated under the equity method in Belgium and Luxembourg.

In 2023, gains on disposal of assets were mainly related to the disposal of the retail network in Germany in the Marketing & Services segment, to the sale of the 50% participation in the Surmont asset and the disposal of TotalEnergies EP Canada Ltd. shares in the segment Exploration & Production. The "Other" heading notably included a revaluation of $388 million from the previously held share of Total Eren.

In 2022, gains on disposal of assets were mainly related to the partial disposal of TotalEnergies' interest in its subsidiary which owns 50.5% of SunPower and the revaluation of its retained interest which is accounted for using the equity method for $1,461 million in the segment Integrated Power.

Other expense

In 2024, the heading "Other" mainly consists in the depreciation of a loan towards the minor participation of the company in SunPower.

In 2023, the heading "Other" mainly included impairments related to the Yunlin offshore wind project in Taiwan in the segment Integrated Power and to the divestment project of Natref refinery in South Africa in the segment Refining & Chemicals.

In 2022, losses on disposal were mainly related to the recycling in expenses of Exploration & Production, of an amount of $2,384 million representing the accumulated foreign exchange losses accumulated in equity since the acquisition of the Novatek stake and until its deconsolidation date. The heading "Other" notably included provisions relating to assets in Russia in the Integrated LNG and Exploration & Production segments.

6.2 Other financial income and expense

As of December 31, *(M$)*	2024	2023	2022
Dividend income on non-consolidated subsidiaries	196	143	159
Capitalized financial expenses	652	667	310
Other	555	475	427
Other financial income	**1,403**	**1,285**	**896**
Accretion of asset retirement obligations	(568)	(524)	(430)
Other	(267)	(207)	(103)
Other financial expense	**(835)**	**(731)**	**(533)**

6.3 Other non-current assets

As of December 31, 2024 (M$)	Gross value	Valuation allowance	Net value
Loans and advances[a]	2,433	(258)	2,175
Other non-current financial assets related to operational activities	1,677	–	1,677
Other	154	–	154
Total	4,264	(258)	4,006

As of December 31, 2023 (M$)	Gross value	Valuation allowance	Net value
Loans and advances[a]	2,516	(294)	2,222
Other non-current financial assets related to operational activities	1,761	–	1,761
Other	330	–	330
Total	4,607	(294)	4,313

As of December 31, 2022 (M$)	Gross value	Valuation allowance	Net value
Loans and advances[a]	2,092	(255)	1,837
Other non-current financial assets related to operational activities	250	–	250
Other	301	–	301
Total	2,643	(255)	2,388

(a) Excluding loans to equity affiliates.

Changes in the valuation allowance on loans and advances are detailed as follows:

For the year ended December 31, (M$)	Valuation allowance as of January 1,	Increases	Decreases	Currency translation adjustment and other variations	Valuation allowance as of December 31,
2024	(294)	(72)	19	89	(258)
2023	(255)	(11)	2	(30)	(294)
2022	(257)	(27)	11	18	(255)

Note 7 Intangible and tangible assets

7.1 Intangible assets

Accounting principles

Goodwill

Guidance for measuring goodwill is presented in Note 1.1 paragraph B to the Consolidated Financial Statements. Goodwill is not amortized but is tested for impairment at least annually and as soon as there is any indication of impairment.

Mineral interests

Unproved mineral interests are tested for impairment based on the results of the exploratory activity or as part of the impairment tests of the cash-generating units to which they are allocated.

Unproved mineral interests are transferred to proved mineral interests at their net book value as soon as proved reserves are booked.

Proved mineral interests are depreciated using the unit-of-production method based on proved reserves.

The corresponding expense is recorded as depreciation of tangible assets and mineral interests.

Other intangible assets

Other intangible assets include patents, and trademarks.

Intangible assets are carried at cost, after deducting any accumulated amortization and accumulated impairment losses.

Intangible assets (excluding mineral interests) that have a finite useful life are amortized on a straight-line basis over three to twenty years depending on the useful life of the assets. The corresponding depreciation expense is recorded under "Other expense".

As of December 31, 2024 (M$)	Cost	Amortization and impairment	Net
Goodwill	11,654	(389)	11,265
Proved mineral interests	18,218	(9,518)	8,700
Unproved mineral interests	14,124	(2,974)	11,150
Other intangible assets	7,204	(4,081)	3,123
Total intangible assets	**51,200**	**(16,962)**	**34,238**

As of December 31, 2023 (M$)	Cost	Amortization and impairment	Net
Goodwill	10,484	(533)	9,951
Proved mineral interests	17,713	(9,704)	8,009
Unproved mineral interests	14,976	(2,624)	12,352
Other intangible assets	7,354	(4,583)	2,771
Total intangible assets	**50,527**	**(17,444)**	**33,083**

As of December 31, 2022 (M$)	Cost	Amortization and impairment	Net
Goodwill	9,010	(360)	8,650
Proved mineral interests	18,025	(10,088)	7,937
Unproved mineral interests	15,962	(2,946)	13,016
Other intangible assets	6,795	(4,467)	2,328
Total intangible assets	**49,792**	**(17,861)**	**31,931**

Change in net intangible assets is analyzed in the following table:

(M$)	Net amount as of January 1,	Expenditures	Disposals	Amortization and impairment	Currency translation adjustment	Other	Net amount as of December 31,
2024	**33,083**	**1,438**	**(19)**	**(1,502)**	**(494)**	**1,732**	**34,238**
2023	31,931	1,244	(458)	(1,630)	148	1,848	33,083
2022	32,484	1,991	(75)	(1,582)	(423)	(464)	31,931

In 2024, the heading "Amortization and impairment" includes the impact of exceptional asset impairments recorded for $340 million (refer to Note 3.C "Asset impairment"), particularly related to the exit from blocks 11B/12B and 5/6/7 in South Africa.

In 2024, the heading "Other" mainly reflects changes in the consolidation scope, in particular the acquisition of upstream gas assets from SapuraOMV for $833 million.

In 2023, the heading "Amortization and impairment" included the accounting impact of exceptional asset impairments for an amount of $472 million (refer to Note 3.C "Asset impairment"), related in particular to goodwill and customer portfolios of gas and power marketing activities in Belgium, Spain and France.

In 2023, the heading "Other" mainly reflected changes in the consolidation scope, in particular the acquisition of Total Eren for $2,238 million.

In 2022, the heading "Amortization and impairment" included the accounting impact of exceptional asset impairments for an amount of $301 million, resulting in particular from the withdrawal from the North Platte project in the deep waters of the Gulf of Mexico (refer to Note 3.C "Asset impairment").

In 2022, the heading "Other" mainly reflected changes in the consolidation scope (in particular the removal of SunPower from the scope of consolidation for $167 million).

A summary of changes in the carrying amount of goodwill by business segment for the year ended December 31, 2024 is as follows:

(M$)	Net goodwill as of January 1, 2024	Increases	Impairments	Other	Net goodwill as of December 31, 2024
Exploration & Production	2,491	–	–	(9)	2,482
Integrated LNG	2,857	454	–	(7)	3,304
Integrated Power	3,666	1,209	–	(515)	4,360
Refining & Chemicals	538	128	–	(23)	643
Marketing & Services	396	81	–	(4)	473
Corporate	3	–	–	–	3
Total	**9,951**	**1,872**	**–**	**(558)**	**11,265**

7.2 Property, plant and equipment

Accounting principles

Exploration costs

TotalEnergies applies IFRS 6 "Exploration for and Evaluation of Mineral Resources". Oil and gas exploration and production properties and assets are accounted for in accordance with the Successful Efforts method.

Exploratory wells are capitalized and tested for impairment on an individual basis as follows:

- Costs of exploratory wells which result in proved reserves are capitalized and then depreciated using the unit-of-production method based on proved developed reserves;
- Costs of exploratory wells are capitalized as work in progress until proved reserves have been found, if both of the following conditions are met:
  - The well has found a sufficient quantity of reserves to justify, if appropriate, its completion as a producing well, assuming that the required capital expenditures are made;
  - TotalEnergies is making sufficient progress assessing the reserves and the economic and operating viability of the project. This progress is evaluated on the basis of indicators such as whether additional exploratory works are under way or firmly planned (wells, seismic or significant studies), whether costs are being incurred for development studies and whether TotalEnergies is waiting for governmental or other third-party authorization on a proposed project, or availability of capacity on an existing transport or processing facility.

Costs of exploratory wells not meeting these conditions are charged to "Exploration costs".

Oil and Gas production assets of exploration and production activities

Development costs of oil and gas production facilities are capitalized. These costs include borrowing costs incurred during the period of construction and the present value of estimated future costs of asset retirement obligations.

The depletion rate of development wells and of production assets is equal to the ratio of oil and gas production for the period to proved developed reserves (unit-of-production method).

In the event that, due to the price effect on reserves evaluation, the unit-of-production method does not reflect properly the useful life of the asset, an alternative depreciation method is applied based on the reserves evaluated with the price of the previous year. As of December 31, 2024, 2023 and 2022, this alternative method is not applied as, given the price used to assess the reserves, the unit-of-production method correctly reflects the useful life of the assets.

With respect to phased development projects or projects subject to progressive well production start-up, the fixed assets' depreciable amount, excluding production or service wells, is adjusted to exclude the portion of development costs attributable to the undeveloped reserves of these projects.

With respect to production sharing contracts, the unit-of-production method is based on the portion of production and reserves assigned to TotalEnergies taking into account estimates based on the contractual clauses regarding the reimbursement of exploration, development and production costs (cost oil/gas) as well as the sharing of hydrocarbon rights after deduction of cost oil (profit oil/gas).

Hydrocarbon transportation and processing assets are depreciated using the unit-of-production method based on throughput or by using the straight-line method whichever best reflects the economic life of the asset.

Other property, plant and equipment

Other property, plant and equipment are carried at cost, after deducting any accumulated depreciation and accumulated impairment losses. This cost includes borrowing costs directly attributable to the acquisition or production of a qualifying asset incurred until assets are placed in service. Borrowing costs are capitalized as follows:

- if the project benefits from a specific funding, the capitalization of borrowing costs is based on the borrowing rate;
- if the project is financed by all TotalEnergies' debt, the capitalization of borrowing costs is based on the weighted average borrowing cost for the period.

Routine maintenance and repairs are charged to expense as incurred. The costs of major turnarounds of refineries and large petrochemical units are capitalized as incurred and depreciated over the period of time between two consecutive major turnarounds.

Other property, plant and equipment are depreciated using the straight-line method over their useful lives, which are as follows:

Furniture, office equipment, machinery and tools:	3-12 years
Transportation equipment:	5-20 years
Storage tanks and related equipment:	10-15 years
Specialized complex installations and pipelines:	10-45 years
Buildings:	10-50 years

As of December 31, 2024 (M$)	Cost	Depreciation and impairment	Net
Property, plant and equipment of exploration and production activities			
Proved properties	202,731	(140,850)	61,881
Unproved properties	1,370	(160)	1,210
Work in progress	20,640	(312)	20,328
Subtotal	**224,741**	**(141,322)**	**83,419**
Other property, plant and equipment			
Land	2,598	(1,044)	1,554
Machinery, plant and equipment (including transportation equipment)	39,315	(27,116)	12,199
Buildings	9,390	(6,192)	3,198
Work in progress	4,382	(31)	4,351
Other	12,059	(7,685)	4,374
Subtotal	**67,744**	**(42,068)**	**25,676**
Total property, plant and equipment	292,485	(183,390)	109,095

As of December 31, 2023 (M$)	Cost	Depreciation and impairment	Net
Property, plant and equipment of exploration and production activities			
Proved properties	201,961	(144,082)	57,879
Unproved properties	1,455	(268)	1,187
Work in progress	23,729	(443)	23,286
Subtotal	**227,145**	**(144,793)**	**82,352**
Other property, plant and equipment			
Land	2,837	(1,008)	1,829
Machinery, plant and equipment (including transportation equipment)	38,769	(27,222)	11,547
Buildings	9,529	(6,105)	3,424
Work in progress	5,262	(23)	5,239
Other	12,344	(7,819)	4,525
Subtotal	**68,741**	**(42,177)**	**26,564**
Total property, plant and equipment	295,886	(186,970)	108,916

As of December 31, 2022 (M$)	Cost	Depreciation and impairment	Net
Property, plant and equipment of exploration and production activities			
Proved properties	210,079	(146,571)	63,508
Unproved properties	1,023	(268)	755
Work in progress	20,294	(688)	19,606
Subtotal	**231,396**	**(147,527)**	**83,869**
Other property, plant and equipment			
Land	3,089	(1,039)	2,050
Machinery, plant and equipment (including transportation equipment)	37,002	(26,079)	10,923
Buildings	10,230	(6,627)	3,603
Work in progress	3,960	(23)	3,937
Other	10,401	(7,682)	2,719
Subtotal	**64,682**	**(41,450)**	**23,232**
Total property, plant and equipment	296,078	(188,977)	107,101

Change in net property, plant and equipment is analyzed in the following table:

(M$)	Net amount as of January 1,	Expenditures	Disposals	Depreciation and impairment	Currency translation adjustment	Other	Net amount as of December 31,
2024	**108,916**	**13,471**	**(573)**	**(12,076)**	**(1,806)**	**1,163**	**109,095**
2023	107,101	16,478	(3,781)	(12,448)	415	1,151	108,916
2022	106,559	13,699	(951)	(12,275)	(2,236)	2,305	107,101

In 2024, the heading "Disposals" mainly includes the impact of the sale of a 15% stake in the Absheron gas field to ADNOC (Abu Dhabi National Oil Company).

In 2024, the heading "Depreciation and impairment" includes the impact of exceptional asset impairments and capitalized exploration charges recorded for $479 million (refer to Note 3.C "Asset impairment").

In 2024, the heading "Other" includes in particular the impact of changes in the consolidation scope for $(1,077) million (mainly the acquisition of upstream gas assets from SapuraOMV for $1,085 million and the sale of a 50% stake in three solar projects in the United States to the Apollo investment fund for $(1,745) million), the impact of new IFRS 16 contracts for the year (mainly FPSO and ships) for $2,725 million, and the effect of the revaluation of site restoration provisions on property, plant, and equipment for $363 million.

In 2023, the heading "Disposals" mainly included the impact of the sale of assets in Canada to ConocoPhillips of $3,220 million.

In 2023, the heading "Depreciation and impairment" included the impact of impairments of assets recognized for an amount of $653 million (refer to Note 3.C "Asset impairment") including notably upstream assets in Kenya and Congo and impairments related to the project of selling Naphtachimie to INEOS.

In 2023, the heading "Other" included in particular the impact of changes in the consolidation scope for $298 million (mainly the acquisition of Total Eren for $2,193 million, the sale of TotalEnergies EP Canada Ltd. to Suncor for $(1,134) million and the exit of network activities in Germany for $(826) million), the impact of new IFRS 16 contracts during the year (mainly FPSO and ships) for $2,526 million and the impact of the revaluation of provisions for sites restitution on tangible assets for $(1,262) million.

In 2022, the heading "Disposals" mainly included the impact of the transfer of assets from TotalEnergies East Africa Midstream to the equity-accounted company EACOP for $508 million.

In 2022, the heading "Depreciation and impairment" included the impact of impairments of assets recognized for an amount of $888 million, including the withdrawal from the North Platte project in the deep waters of the Gulf of Mexico, and an impairment reversal of $1,196 million on the Company's assets in Canada (refer to Note 3.C "Asset impairment").

In 2022, the heading "Other" included the impact of changes in the consolidation scope, and the impact of new IFRS 16 contracts during the year (mainly FPSOs and vessels) for an amount of $1,969 million.

Following the application of IFRS 16 "Leases", property, plant and equipment as at December 31, 2024, 2023 and 2022 presented above include the following amounts for rights of use of assets:

As of December 31, 2024 (M$)	Cost	Depreciation and impairment	Net
Property, plant and equipment of exploration and production activities	5,918	(2,611)	3,307
Other property, plant and equipment			
Land	1,183	(453)	730
Machinery, plant and equipment (including transportation equipment)	5,371	(2,760)	2,611
Buildings	1,365	(703)	662
Other	898	(534)	364
Subtotal	**8,817**	**(4,450)**	**4,367**
Total property, plant and equipment	14,735	(7,061)	7,674

As of December 31, 2023 (M$)	Cost	Depreciation and impairment	Net
Property, plant and equipment of exploration and production activities	4,770	(1,927)	2,843
Other property, plant and equipment			
Land	1,383	(415)	968
Machinery, plant and equipment (including transportation equipment)	4,751	(2,235)	2,516
Buildings	1,332	(614)	718
Other	908	(529)	379
Subtotal	**8,374**	**(3,793)**	**4,581**
Total property, plant and equipment	13,144	(5,720)	7,424

As of December 31, 2022 (M$)	Cost	Depreciation and impairment	Net
Property, plant and equipment of exploration and production activities	4,497	(2,121)	2,376
Other property, plant and equipment			
Land	1,396	(397)	999
Machinery, plant and equipment (including transportation equipment)	4,691	(2,100)	2,591
Buildings	1,750	(615)	1,135
Other	745	(483)	262
Subtotal	**8,582**	**(3,595)**	**4,987**
Total property, plant and equipment	13,079	(5,716)	7,363

Note 8 Equity affiliates, other investments and related parties

8.1 Equity affiliates: investments and loans

Accounting principles

Under the equity method, the investment in the associate or joint-venture is initially recognized at acquisition cost and subsequently adjusted to recognize TotalEnergies' share of the net income and other comprehensive income of the associate or joint-venture.

Unrealized gains on transactions between TotalEnergies and its equity-accounted entities are eliminated to the extent of TotalEnergies' interest in the equity accounted entity.

In equity affiliates, goodwill is included in investment book value.

In cases where TotalEnergies holds less than 20% of the voting rights in another entity, the determination of whether TotalEnergies exercises significant influence is also based on other facts and circumstances: representation on the Board of Directors or an equivalent governing body of the entity, participation in policy-making processes, including participation in decisions relating to dividends or other distributions, significant transactions between the investor and the entity, exchange of management personnel, or provision of essential technical information.

The contribution of equity affiliates in the consolidated balance sheet, consolidated statement of income and consolidated statement of comprehensive income is presented below:

Equity value As of December 31, (M$)	2024	2023	2022
Total Associates	10,387	9,484	9,533
Total Joint-ventures	17,485	16,411	14,623
Total	**27,872**	**25,895**	**24,156**
Loans	6,533	4,562	3,733
Total	34,405	30,457	27,889

Profit/(loss) (M$)	2024	2023	2022
Total Associates	1,213	1,132	(4,567)
Total Joint-ventures	362	713	2,675
Total	1,575	1,845	(1,892)

Other comprehensive income (M$)	2024	2023	2022
Total Associates	112	(57)	3,368
Total Joint-ventures	(358)	(151)	129
Total	(246)	(208)	3,497

A) Information related to associates

Information (100% basis) related to significant associates is as follows:

	Liquefaction entities			Novatek[a]
Exploration & Production activities *(M$)*	2024	2023	2022	2022
Non-current assets	31,698	43,875	41,995	–
Current assets	7,531	5,850	8,333	–
Total assets	**39,229**	**49,725**	**50,328**	–
Shareholder's equity	23,078	35,755	19,565	–
Non-current liabilities	10,024	8,692	23,019	–
Current liabilities	6,127	5,278	7,744	–
Total liabilities	**39,229**	**49,725**	**50,328**	–
Revenues from sales	23,407	26,288	35,888	–
Net income	**6,732**	**6,896**	**10,257**	–
Other comprehensive income	–	–	–	–
% owned				19.40%
Equity value	4,017	4,070	3,312	–
including goodwill and identifiable assets	*35*	*38*	*40*	–
Profit/(loss)	762	825	(338)	(5,747)
Share of other comprehensive income, net amount	34	(22)	(70)	3,118
Dividends paid to TotalEnergies	820	1,052	1,224	883

(a) Information includes the best Company's estimates of results at the date of TotalEnergies' financial statements.

As of 31 December 2024, 31 December 2023 and 31 December 2022, Novatek is no longer consolidated as an equity accounted affiliate in the Company's Consolidated Financial Statements. This stake is recognized in "Other investments" and is measured in accordance with IFRS 9 at fair value through profit or loss. In the context of the Russian-Ukrainian conflict, the Company considers that the market value of Novatek is not representative of its fair value. As of 31 December 2024, 31 December 2023 and 31 December 2022, the Company retained a zero fair value given the very significant uncertainties on any valuation assumption for the stake in Novatek.

TotalEnergies' interests in associates operating liquefaction plants are combined. The amounts include investments in Nigeria LNG (15.00%), Angola LNG Limited (13.60%), Yemen LNG Co. (39.62%), Qatar Liquefied Gas Company Limited (Qatargas) (10.00%), Qatar Liquefied Gas Company Limited II (16.70%), Oman LNG LLC (5.54%), Abu Dhabi Gas Liquefaction Company Limited (5.00%), Qatar Liquified Gas Company Limited 5 (North Field East project) (25.00%) Qatar Liquified Gas Company Limited 10 (North Field South project) (25.00%) and Energia Costa Azul LNG (16.60%).

	Adani Green Energy Limited		
Renewables and Electricity activities *(M$)*	2024	2023	2022
Non-current assets	10,936	7,887	6,961
Current assets	1,264	1,091	769
Total assets	**12,200**	**8,978**	**7,730**
Shareholder's equity	1,137	965	807
Non-current liabilities	8,175	5,712	5,805
Current liabilities	2,888	2,301	1,118
Total liabilities	**12,200**	**8,978**	**7,730**
Revenues from sales	1,049	1,061	1,073
Net income	**184**	**162**	**104**
Other comprehensive income	**(13)**	**5**	**(112)**
% owned	19.74%	19.74%	19.74%
Equity value	1,863	1,877	1,856
including goodwill and identifiable assets	*1,639*	*1,687*	*1,697*
Profit/(loss)	36	32	21
Share of other comprehensive income, net amount	9	3	23
Dividends paid to TotalEnergies	–	–	–

	Saudi Aramco Total Refining & Petrochemicals			Qatar		
Refining & Chemicals activities *(M$)*	2024	2023	2022	2024	2023	2022
Non-current assets	12,023	9,780	10,003	2,562	2,882	3,905
Current assets	3,446	2,584	3,615	1,971	2,000	2,491
Total assets	**15,469**	**12,364**	**13,618**	**4,533**	**4,882**	**6,396**
Shareholder's equity	4,062	3,527	3,858	2,781	2,748	2,737
Non-current liabilities	6,899	5,850	6,365	654	835	2,062
Current liabilities	4,508	2,987	3,395	1,098	1,299	1,597
Total liabilities	**15,469**	**12,364**	**13,618**	**4,533**	**4,882**	**6,396**
Revenues from sales	14,601	12,994	20,492	9,422	9,506	13,193
Net income	**66**	**584**	**2,409**	**338**	**203**	**629**
Other comprehensive income	**(32)**	**(59)**	**284**	**13**	**(7)**	**(5)**
% owned	37.50%	37.50%	37.50%			
Equity value	1,523	1,323	1,447	670	665	703
including goodwill and identifiable assets	–	–	–	–	–	–
Profit/(loss)	25	219	903	88	78	161
Share of other comprehensive income, net amount	34	(46)	147	10	(7)	10
Dividends paid to TotalEnergies	150	321	–	83	145	138

Saudi Aramco Total Refining & Petrochemicals is an entity including a refinery in Jubail, Saudi Arabia, with a capacity of 460,000 barrels/day with integrated petrochemical units.

The TotalEnergies' interests in associates of the Refining & Chemicals segment, operating steam crackers and polyethylene lines in Qatar have been combined: Qatar Petrochemical Company Ltd. (20.00%), Qatofin (49.08%), Laffan Refinery (10.00%).

B) Information related to joint-ventures

The information (100% gross) related to significant joint-ventures is as follows:

	Liquefaction entities (Integrated LNG)			GIP III Zephyr (Integrated Power)			Hanwha TotalEnergies Petrochemical Co. Ltd (Refining & Chemicals)		
(M$)	2024	2023	2022	2024	2023	2022	2024	2023	2022
Non-current assets	59,764	62,461	65,293	14,258	13,111	12,406	3,373	3,959	4,113
Current assets excluding cash and cash equivalents	5,390	2,832	2,630	366	375	370	1,530	2,089	2,326
Cash and cash equivalents	5,184	4,690	4,375	813	1,313	1,116	348	113	82
Total assets	**70,338**	**69,983**	**72,298**	**15,437**	**14,799**	**13,892**	**5,251**	**6,161**	**6,521**
Shareholder's equity - Group share	25,231	20,438	17,455	539	604	296	2,467	2,963	3,146
Shareholder's equity - Non-controlling interests	–	–	–	2,756	1,912	2,548	–	–	–
Other non-current liabilities	11,822	10,399	10,785	1,645	1,460	1,285	148	174	180
Non-current financial debts	29,565	36,144	41,452	9,538	9,598	8,808	1,017	858	1,220
Other current liabilities	1,707	3,002	2,606	380	414	496	873	1,137	1,117
Current financial debts	2,013	–	–	579	811	459	746	1,029	858
Total liabilities	**70,338**	**69,983**	**72,298**	**15,437**	**14,799**	**13,892**	**5,251**	**6,161**	**6,521**
Revenues from sales	17,212	17,605	24,701	1,609	1,452	351	8,616	8,754	10,824
Depreciation and depletion of tangible assets and mineral interests	(2,899)	(2,700)	(2,814)	(490)	(460)	(129)	(278)	(281)	(289)
Interest income	55	32	17	37	40	5	–	–	–
Interest expense	(2,901)	(3,146)	(2,453)	(357)	(315)	(95)	(80)	(67)	(47)
Income taxes	(2,656)	(1,798)	(2,804)	(15)	–	–	(8)	10	(65)
Net income	**4,986**	**5,122**	**12,791**	**135**	**83**	**(36)**	**(136)**	**(28)**	**123**
Non-controlling interests	–	–	–	180	(126)	219	–	–	–
Other comprehensive income	**(76)**	**(52)**	**526**	**–**	**(2)**	**–**	**(361)**	**(105)**	**(189)**
% owned				50.00%	50.00%	50.00%	50.00%	50.00%	50.00%
Equity value	5,996	4,941	4,315	2,241	2,283	2,356	1,234	1,482	1,573
including goodwill and identifiable assets	*392*	*430*	*465*	*1,971*[a]	*1,981*	*2,208*	–	–	–
Profit/(loss)	1,061	1,058	2,616	58	29	(18)	(68)	(14)	62
Share of other comprehensive income, net amount	(20)	(14)	137	–	(1)	–	(176)	(69)	(59)
Dividends paid to TotalEnergies	37	418	1,166	100	100	46	–	25	162

(a) Goodwill represents the valuation of this entity's ability to generate future projects in the field of renewable energy and amounts to M$ 1,755 as of December 31, 2024.

TotalEnergies' interests in joint-ventures operating liquefaction plants have been combined. The amounts include investments in Yamal LNG in Russia (20.02% direct holding), Ichthys LNG in Australia (26.00%) and Marsa LNG LLC (80.00%).

GIP III Zephyr Holdings, LLC holds the shares of Clearway Energy Group (CEG), a developer of renewables projects, owning 42% of economic interest of its listed subsidiary, Clearway Energy LLC. (CWEN).

Hanwha TotalEnergies Petrochemical Co., Ltd is a South Korean company that operates a petrochemical complex in Daesan (condensate separator, steam cracker, styrene, paraxylene, polyolefins).

Off-balance sheet commitments relating to joint-ventures are disclosed in Note 13 of the Consolidated Financial Statements.

C) Other equity affiliates

In TotalEnergies share, the main aggregated financial items in equity affiliates including assets held for sale, which have not been presented individually are as follows:

	2024		2023		2022	
As of December 31, *(M$)*	Associates	Joint-ventures	Associates	Joint-ventures	Associates	Joint-ventures
Non-current assets	5,198	15,929	4,692	13,224	5,818	11,281
Current assets	1,349	2,524	1,214	2,988	1,582	2,742
Total assets	**6,547**	**18,453**	**5,906**	**16,212**	**7,400**	**14,023**
Shareholder's equity - TotalEnergies share	1,107	6,604	814	4,625	1,354	3,894
Shareholder's equity - Non-controlling interests	–	(2)	–	75	–	140
Non-current liabilities	4,618	9,605	4,388	8,798	5,180	7,375
Current liabilities	822	2,246	704	2,714	866	2,614
Total liabilities	**6,547**	**18,453**	**5,906**	**16,212**	**7,400**	**14,023**

	2024		2023		2022	
For the year ended December 31, *(M$)*	Associates	Joint-ventures	Associates	Joint-ventures	Associates	Joint-ventures
Revenues from sales	2,981	6,476	2,026	7,451	2,338	7,026
Net income	**330**	**(666)**	**4**	**(279)**	**486**	**454**
Non-controlling interests	–	1	–	(64)	–	–
Share of other comprehensive income items	25	(162)	14	(67)	139	52
Equity value	2,314	8,016	1,549	7,705	2,216	6,379
Profit/(Loss)	302	(689)	(22)	(359)	434	15
Dividends paid to TotalEnergies	296	106	323	120	469	63

8.2 Other investments

Accounting principles

Other investments are equity instruments and are measured according to IFRS 9 at fair value through profit or loss (default option). On initial recognition, the standard allows to make an election to record the changes of fair value in other comprehensive income. For these equity instruments, only dividends can be recognized in profit or loss.

TotalEnergies recognizes changes in fair value in equity or in profit or loss according to the option chosen on an instrument by instrument basis.

For quoted shares on active markets, this fair value is based on the market price.

As of December 31, 2024 *(M$)*	As of January 1, 2024	Increase-Decrease	Change in fair value	As of December 31, 2024
Next Decade Corporation	214	–	132	346
Other shares at fair value through other comprehensive income (unit value < $50M)	141	12	12	165
Equity instruments recorded at fair value through other comprehensive income	**355**	**12**	**144**	**511**
BTC Limited	5	–	–	5
OGCI Climate Investments Holdings LLP	50	7	(1)	56
Nordian CPO (renamed TotalEnergies Charging Services España SL)[a]	70	(70)	–	–
Other shares at fair value through profit or loss (unit value < $50M)	1,063	6	24	1,093
Equity instruments recorded at fair value through profit or loss	**1,188**	**(57)**	**23**	**1,154**
Total equity instruments	**1,543**	**(45)**	**167**	**1,665**

(a) Nordian CPO has been consolidated in 2024.

As of December 31, 2023 (M$)	As of January 1, 2023	Increase-Decrease	Change in fair value	As of December 31, 2023
Next Decade Corporation	–	219	(5)	214
Other shares at fair value through other comprehensive income (unit value < $50M)	119	28	(6)	141
Equity instruments recorded at fair value through other comprehensive income	**119**	**247**	**(11)**	**355**
BTC Limited	5	–	–	5
Hubei Cathay Smart Energy Fund	54	(54)	–	–
OGCI Climate Investments Holdings LLP	34	14	2	50
Nordian CPO (renamed TotalEnergies Charging Services España SL)	–	70	–	70
Other shares at fair value through profit or loss (unit value < $50M)	839	250	(26)	1,063
Equity instruments recorded at fair value through profit or loss	**932**	**280**	**(24)**	**1,188**
Total equity instruments	1,051	527	(35)	1,543

As of December 31, 2022 (M$)	As of January 1, 2022	Increase-Decrease	Change in fair value	As of December 31, 2021
Enphase Energy Inc.	457	(579)	122	–
Other shares at fair value through other comprehensive income (unit value < $50M)	116	13	(10)	119
Equity instruments recorded at fair value through other comprehensive income	**573**	**(566)**	**112**	**119**
BTC Limited	14	–	(9)	5
Hubei Cathay Smart Energy Fund	36	7	11	54
OGCI Climate Investments Holdings LLP	–	35	(1)	34
Other shares at fair value through profit or loss (unit value < $50M)	1,002	(89)	(74)	839
Equity instruments recorded at fair value through profit or loss	**1,052**	**(47)**	**(73)**	**932**
Total equity instruments	1,625	(613)	39	1,051

8.3 Related parties

The main transactions as well as receivable and payable balances with related parties (principally non-consolidated subsidiaries and equity affiliates) are detailed as follows:

As of December 31, (M$)	2024	2023	2022
Balance sheet			
Receivables			
Debtors and other debtors	876	1,144	1,231
Loans (excl. loans to equity accounted for affiliates)	428	232	184
Payables			
Creditors and other creditors	1,324	1,068	1,610
Debts	1	1	5

For the year ended December 31, (M$)	2024	2023	2022
Statement of income			
Sales	5,408	7,222	6,806
Purchases	(13,424)	(15,574)	(25,656)
Financial income	13	3	3
Financial expense	(6)	(5)	(9)

8.4 Compensation for the administration and management bodies

The aggregated amount of direct and indirect compensation accounted by the French and foreign affiliates of the Company, for all executive officers of TotalEnergies SE as of December 31 and for the members of the Board of Directors who are employees of TotalEnergies SE, is detailed below.

As of December 31, 2024, TotalEnergies SE Executive Officers are the members of the Executive Committee, i.e. nine people and there are three employees as members of the Board of Directors. As of December 31, 2023, and December 31, 2022, TotalEnergies SE Executive Officers were the members of the Executive Committee, i.e. eight people and there were three employees as members of the Board of Directors.

For the year ended December 31, (M$)	2024	2023	2022
Number of people	12	11	11
Direct or indirect compensation	16.1	13.9	12.4
Pension expenses[a]	1.1	3.5	1.9
Share-based payments expense (IFRS 2)[b]	13.1	8.7	7.7

(a) The benefits provided for Executive Officers of the Company and the members of the Board of Directors who are employees of the Company include severance to be paid upon retirement, supplementary pension schemes and insurance plans, which represent a commitment of $72.6 million as of December 31, 2024 (against $82.9 million as of December 31, 2023 and $64.3 million as of December 31, 2022). Converted into Euros, this commitment amounts to €69.9 million as of December 31, 2024 (against €75 million as of December 31, 2023 and €60.3 million as of December 31, 2022). The decrease of the commitment is mainly due to the increase in the discount rate despite the changes among the number of executives (two new entries and one retirement).

(b) Share-based payments expense computed for the Executive Officers and the members of the Board of Directors who are employees of TotalEnergies and based on the principles of IFRS 2 "Share-based payments" described in Note 9.

The compensation allocated to members of the Board of Directors as directors' fees totaled $2.11 million in 2024 ($2 million in 2023 and $1.84 million in 2022).

Note 9 Shareholders' equity and share-based payments

9.1 Shareholders' equity

Number of TotalEnergies shares and rights attached

As of December 31, 2024, the share capital of TotalEnergies SE amounts to €5,994,199,152.50, divided into 2,397,679,661 shares, with a par value of €2.50. There is only one category of shares. The shares may be held in either registered or bearer form.

The authorized share capital amounts to 3,421,656,457 shares as of December 31, 2024, compared to 3,436,374,353 shares as of December 31, 2023 and 3,664,966,081 shares as of December 31, 2022.

As of December 31, 2024, no double voting rights are attached to the Company's shares (this right having been abolished at the Shareholders' Meeting of May 26, 2023).

Pursuant to the Corporation's bylaws (Statutes), no shareholder may cast a vote at a Shareholders' Meeting, either by himself or through an agent, representing more than 10% of the total voting rights for the Corporation's shares. This limit applies to the aggregated amount of voting rights held directly, indirectly or through voting proxies.

These restrictions no longer apply if any individual or entity, acting alone or in concert, acquires at least two-thirds of the total share capital of the Corporation.

Share cancellation

Pursuant to the authorization granted by the Extraordinary Shareholders' Meeting on May 26, 2017 and May 25, 2022, the Board of Directors is authorized to cancel, on one or more occasions, the shares of the Company within the limit of 10% of the existing capital on the date of the operation per period of 24 months, in accordance with the provisions of Articles L. 225-209 (became L. 22-10-62) and L. 225-213 of the French Commercial Code.

The Board of Directors has proceeded with the following cancellation of TotalEnergies shares:

Fiscal year	Board of Directors' decision date	Number of shares bought back and cancelled for the purpose of the shareholder policy	Percentage of the share capital cancelled[a]
2024	February 6, 2024[b]	25,405,361 shares bought back between August 25 and October 26, 2023	1.05%
2023	September 21, 2023[c]	86,012,344 shares bought back between January 2 and August 24, 2023	3.44%
2023	February 7, 2023	128,869,261 shares bought back between February 11 and December 15, 2022	4.92%
2022	February 9, 2022	30,665,526 shares bought back between November 8 and December 22, 2021	1.16%

(a) Percentage of the share capital that the cancelled shares represented on the operations' date.
(b) With effect as at February 12, 2024.
(c) With effect as at September 25, 2023.

Variation of the number of shares composing the share capital

As of December 31, 2021[a]		**2,640,429,329**
	Capital reduction by cancellation of treasury shares	(30,665,526)
	Deferred contribution pursuant to the 2017 capital increase reserved for employees	9,471
	2022 Capital increase reserved for employees	9,358,011
As of December 31, 2022[b]		**2,619,131,285**
	Capital reduction by cancellation of treasury shares	(214,881,605)
	2023 Capital increase reserved for employees	8,002,155
As of December 31, 2023[c]		**2,412,251,835**
	Capital reduction by cancellation of treasury shares	(25,405,361)
	2024 Capital increase reserved for employees	10,833,187
As of December 31, 2024[d]		**2,397,679,661**

(a) Including 33,841,104 treasury shares deducted from consolidated shareholders' equity.
(b) Including 137,187,667 treasury shares deducted from consolidated shareholders' equity.
(c) Including 60,543,213 treasury shares deducted from consolidated shareholders' equity.
(d) Including 149,529,818 treasury shares deducted from consolidated shareholders' equity.

Capital increase reserved for employees

The Extraordinary Shareholders' Meeting ("ESM") of May 24, 2024, in its twenty-second resolution, granted the authority to the Board of Directors to carry out, a capital increase, in one or more occasions within a maximum period of twenty-six months, reserved to members (employees and retirees) of a company or group savings plan ("ESOP").

In fiscal year 2024, the Board of Directors of October 30, 2024, by virtue of the twenty-second resolution above-mentioned, decided to proceed with a capital increase reserved for employees and retirees within the limit of 18 million shares with immediate dividend rights and has granted all powers to the Chairman and Chief Executive Officer to determine the opening and closing dates of the subscription period and the subscription price. This capital increase is expected to be completed after the Shareholders' Meeting of May 23, 2025.

During the fiscal years 2024, 2023 and 2022, the Corporation completed the following ESOP, which terms are set out below:

Fiscal year	2024	2023	2022
Date of the ESOP	June 6, 2024	June 7, 2023	June 8, 2022
By virtue of	16th resolution of the ESM of May 26, 2023	22nd resolution of the ESM of May 25, 2022	17th resolution of the ESM of May 28, 2021
Subscriptions			
Number of shares subscribed	10,251,337	7,760,062	9,130,380
Subscription price	46.90 euros	45.60 euros	37.00 euros
Free shares			
Number of shares granted	581,850	242,093	227,631

Treasury shares

Accounting principles

Treasury shares held by TotalEnergies SE,or by its subsidiaries are deducted from consolidated shareholders' equity. Gains or losses on sales of treasury shares are excluded from the determination of net income and are recognized in shareholders' equity.

Number of treasury shares held by TotalEnergies SE

As of December 31,	2024	2023	2022
Number of treasury shares held by TotalEnergies SE	149,529,818	60,543,213	137,187,667
Percentage of share capital	6.24%	2.51%	5.24%

Paid-in surplus

In accordance with French law, the paid-in surplus corresponds to premiums related to shares issuances, contributions or mergers of the parent company which can be capitalized or used to offset losses if the legal reserve has reached its minimum required level. The amount of the paid-in surplus may also be distributed subject to taxation except when it qualifies as a refund of shareholder contributions.

As of December 31, 2024, paid-in surplus relating to TotalEnergies SE amounted to €23,345 million (€24,385 million as of December 31, 2023 and €35,099 million as of December 31, 2022).

Reserves

Under French law, 5% of net income must be transferred to the legal reserve until the legal reserve reaches 10% of the nominal value of the share capital. This reserve cannot be distributed to the shareholders other than upon liquidation but can be used to offset losses.

If wholly distributed, the unrestricted reserves of TotalEnergies SE would be taxed for an approximate amount of $234 million as of December 31, 2024 ($234 million as of December 31, 2023 and $227 million as of December 31, 2022) due to additional corporation tax applied on regulatory reserves so that they become distributable.

Earnings per share

Accounting principles

Earnings per share is calculated by dividing net income (TotalEnergies share) by the weighted-average number of common shares outstanding during the period, excluding TotalEnergies shares held by TotalEnergies SE (Treasury shares) which are deducted from consolidated shareholders' equity.

Diluted earnings per share is calculated by dividing net income (TotalEnergies share) by the fully-diluted weighted-average number of common shares outstanding during the period. Treasury shares held by the parent company, TotalEnergies SE are deducted from consolidated shareholders' equity. This calculation also takes into account the dilutive effect of share grants and capital increases with a subscription period closing after the end of the fiscal year.

The weighted-average number of fully-diluted shares is calculated in accordance with the treasury stock method provided for by IAS 33. The proceeds, which would be recovered in the event of an exercise of rights related to dilutive instruments, are presumed to be a share buyback at the average market price over the period. The number of shares thereby obtained leads to a reduction in the total number of shares that would result from the exercise of rights.

In compliance with IAS 33, earnings per share and diluted earnings per share are based on the net income after deduction of the remuneration due to the holders of deeply subordinated notes.

The variation of both weighted-average number of shares and weighted-average number of diluted shares, as of December 31, respectively used in the calculation of earnings per share and fully-diluted earnings per share is detailed as follows:

	2024	2023	2022
Number of shares as of January 1,	**2,412,251,835**	**2,619,131,285**	**2,640,429,329**
TotalEnergies shares held by TotalEnergies SE or by its subsidiaries and deducted from shareholders' equity	(60,543,213)	(137,187,667)	(33,841,104)
Evolution of the number of shares during the financial year pro-rated			
Final grant of TotalEnergies performance shares	4,041,839	5,378,956	5,152,336
Capital increase reserved for employees[a]	6,322,466	4,671,946	5,465,154
Capital increase as payment of the scrip dividend	–	–	–
Buyback of TotalEnergies treasury shares including:	(64,051,218)	(74,633,216)	(62,498,318)
Shares repurchased during the fiscal year to cancel the dilution caused by the scrip dividend payment and within the framework of the share buyback program	*(56,849,392)*	*(72,985,133)*	*(58,621,530)*
Shares repurchased during the fiscal year to cover for the performance share plans	*(7,201,826)*	*(1,648,083)*	*(3,876,788)*
Weighted-average number of shares	**2,298,021,710**	**2,417,361,304**	**2,554,707,397**
Dilutive effect			
Grant of TotalEnergies performance shares	14,553,688	14,354,523	15,890,560
Capital increase reserved for employees[a]	1,985,324	2,051,751	1,584,068
Weighted-average number of diluted shares as of December 31,	**2,314,560,722**	**2,433,767,578**	**2,572,182,025**

(a) Including the shares granted in consideration to the deferred contribution pursuant to the capital increase reserved for employees.

Earnings per share in euros

The earnings per share in euros, converted from the earnings per share in dollars, by using the average exchange rate euro/dollar, is €6.23 per share for 2024 closing (€8.06 for 2023 closing). The fully-diluted earnings per share calculated by using the same method is €6.18 per share for 2024 closing (€8.02 for 2023 closing).

Dividend

On February 4, 2025, the Board of Directors after approving the financial statements for fiscal year 2024, decided to propose to the Shareholders' Meeting on May 23, 2025 the distribution of an ordinary €3.22 dividend per share for fiscal year 2024. Subject to the Shareholders' decision, considering the first three interim dividends already decided by the Board of Directors, the final ordinary dividend for the fiscal year 2024 will be €0.85 per share.

2024 Dividend	First interim	Second interim	Third interim	Final
Amount	€0.79	€0.79	€0.79	€0.85
Set date	April 25, 2024	July 24, 2024	October 30, 2024	February 4, 2025
Ex-dividend date	September 25, 2024	January 2, 2025	March 26, 2025	June 19, 2025
Payment date	October 1, 2024	January 6, 2025	April 1, 2025	July 1, 2025

Issuances and reimbursement of perpetual subordinated notes

As of December 31, 2024, the amount of perpetual subordinated notes booked in TotalEnergies shareholders' equity is $12,210 million. The coupons attributable to the holders of these securities are recognized as a deduction from TotalEnergies shareholders' equity for an amount of $272 million for fiscal year 2024. The tax deduction due to these coupons is booked in the statement of income.

Based on their characteristics (mainly no mandatory repayment and no obligation to pay a coupon except under certain circumstances specified into the documentation of the notes) and in compliance with IAS 32 standard "Financial instruments - Presentation", these notes were recorded in equity.

Summary of the perpetual deeply subordinated notes of TotalEnergies SE:

Over the year 2024, TotalEnergies SE has fully redeemed on April 4, 2024 the nominal amount of €1,500 million of perpetual deeply subordinated notes carrying a coupon of 1.750%, issued in April 2019, at first call date.

On November 19, 2024, TotalEnergies SE issued €2,500 million of perpetual deeply subordinated notes in two tranches. On 22 November 2024, TotalEnergies SE partially redeemed €1,418 million out of a nominal amount of €2,500 million of perpetual deeply subordinated notes carrying a coupon of 2.625% issued in February 2015, with a first call date on February 26, 2025.

Perpetual deeply subordinated notes issues by TotalEnergies SE

				Outstanding amount in M€ as of		
Date	Amount issued (M€)	Coupon (%)	First call date	December 31, 2024	December 31, 2023	December 31, 2022
November 19, 2024	1,250	4.120%	February 19, 2030	1,250	–	–
	1,250	4.500%	November 19, 2034	1,250	–	–
January 17, 2022	750	3.250%	January 17, 2037	750	750	750
	1,000	2.000%	April 17, 2027	1,000	1,000	1,000
January 25, 2021	1,500	2.125%	January 25, 2033	1,500	1,500	1,500
	1,500	1.625%	January 25, 2028	1,500	1,500	1,500
September 4, 2020	1,000	2.000%	September 4, 2030	1,000	1,000	1,000
April 4, 2019	1,500	1.750%	April 4, 2024	–	1,500	1,500
October 6, 2016	1,500	3.369%	October 6, 2026	1,500	1,500	1,500
	1,000	2.708%	May 5, 2023	–	–	1,000
February 26, 2015	2,500	2.625%	February 26, 2025	1,082	2,500	2,500
Total				10,832	11,250	12,250

Other comprehensive income

Detail of other comprehensive income showing both items potentially reclassifiable and those not potentially reclassifiable from equity to net income is presented in the table below:

For the year ended December 31, *(M$)*	2024	2023	2022
Actuarial gains and losses	20	(114)	574
Change in fair value of investments in equity instruments	144	(11)	112
Tax effect	46	(11)	(96)
Currency translation adjustment generated by the parent company	(4,163)	2,573	(4,976)
Sub-total items not potentially reclassifiable to profit & loss	**(3,953)**	**2,437**	**(4,386)**
Currency translation adjustment	**2,759**	(3,277)	**1,734**
– Unrealized gain/(loss) of the period	2,879	(2,524)	1,974
– Less gain/(loss) included in net income	120	753	240
Cash flow hedge	**3,119**	**2,898**	**(5,452)**
– Unrealized gain/(loss) of the period	188	3,155	(4,190)
– Less gain/(loss) included in net income	(2,931)	257	1,262
Variation of foreign currency basis spread	**(32)**	**(11)**	**65**
– Unrealized gain/(loss) of the period	(50)	(37)	26
– Less gain/(loss) included in net income	(18)	(26)	(39)
Share of other comprehensive income of equity affiliates, net amount	**(246)**	**(208)**	**3,497**
– Unrealized gain/(loss) of the period	(294)	(194)	1,071
– Less gain/(loss) included in net income	(48)	14	(2,426)
Other	**(1)**	**(2)**	**(16)**
Tax effect	**(814)**	**(730)**	**1,449**
Sub-total items potentially reclassifiable to profit & loss	**4,787**	**(1,330)**	**1,277**
Total other comprehensive income, net amount	834	1,107	(3,109)

The currency translation adjustment by currency is detailed in the following table:

As of December 31, 2024 *(M$)*	Total	Euro	Pound sterling	Ruble	Other currencies
Parent company	**(4,163)**	(4,163)	–	–	–
Affiliates	**2,759**	3,238	(86)	–	(383)
Equity affiliates	**(205)**	211	(1)	–	(415)
Total currency translation adjustment recognized in comprehensive income	**(1,609)**	**(714)**	**(87)**	**–**	**(798)**

As of December 31, 2023 *(M$)*	Total	Euro	Pound sterling	Ruble	Other currencies
Parent company	**2,573**	2,573	–	–	–
Affiliates	**(3,277)**	(3,174)	186	–	(289)
Equity affiliates	**(179)**	(107)	(9)	–	(63)
Total currency translation adjustment recognized in comprehensive income	**(883)**	**(708)**	**177**	**–**	**(352)**

As of December 31, 2022 *(M$)*	Total	Euro	Pound sterling	Ruble	Other currencies
Parent company	**(4,976)**	(4,976)	–	–	–
Affiliates	**1,734**	3,120	(592)	4	(798)
Equity affiliates	**3,002**	(1,076)	31	4,247	(200)
Total currency translation adjustment recognized in comprehensive income	**(240)**	**(2,932)**	**(561)**	**4,251**	**(998)**

Tax effects relating to each component of other comprehensive income are as follows:

	2024			2023			2022		
For the year ended December 31, *(M$)*	Pre-tax amount	Tax effect	Net amount	Pre-tax amount	Tax effect	Net amount	Pre-tax amount	Tax effect	Net amount
Actuarial gains and losses	20	76	96	(114)	(10)	(124)	574	(106)	468
Change in fair value of investments in equity instruments	144	(30)	114	(11)	(1)	(12)	112	10	122
Currency translation adjustment generated by the parent company	(4,163)	–	(4,163)	2,573	–	2,573	(4,976)	–	(4,976)
Sub-total items not potentially reclassifiable to profit & loss	**(3,999)**	**46**	**(3,953)**	**2,448**	**(11)**	**2,437**	**(4,290)**	**(96)**	**(4,386)**
Currency translation adjustment	2,759	–	2,759	(3,277)	–	(3,277)	1,734	–	1,734
Cash flow hedge	3,119	(822)	2,297	2,898	(733)	2,165	(5,452)	1,466	(3,986)
Variation of foreign currency basis spread	(32)	8	(24)	(11)	3	(8)	65	(17)	48
Share of other comprehensive income of equity affiliates, net amount	(246)	–	(246)	(208)	–	(208)	3,497	–	3,497
Other	1	–	1	(2)	–	(2)	(16)	–	(16)
Sub-total items potentially reclassifiable to profit & loss	**5,601**	**(814)**	**4,787**	**(600)**	**(730)**	**(1,330)**	**(172)**	**1,449**	**1,277**
Total other comprehensive income	1,602	(768)	834	1,848	(741)	1,107	(4,462)	1,353	(3,109)

Non-controlling interests

As of December 31, 2024, the subsidiaries with the most significant non-controlling interests are TotalEnergies Australia Unit Trust, TotalEnergies Gabon and TotalEnergies E&P Congo.

9.2 Share-based payments

Accounting principles

TotalEnergies SE may grant employees performance shares plans and offer its employees the opportunity to subscribe to reserved capital increases. These employee benefits are recognized as expenses with a corresponding credit to shareholders' equity.

The expense is equal to the fair value of the instruments granted. The expense is recognized on a straight-line basis over the period in which the advantages are acquired.

For performance shares plans, the fair value is calculated using the market price at the grant date after deducting the expected distribution rate during the vesting period.

The number of allocated equity instruments can be revised during the vesting period in cases of non-compliance with performance conditions, with the exception of those related to the market, or according to the rate of turnover of the beneficiaries.

The cost of employee-reserved capital increases is immediately expensed.

The cost of the capital increase reserved for employees consists of the cost related to the discount on the shares subscribed using the classic and/or the leveraged schemes, the cost of the free shares and the opportunity gain for the shares subscribed using the leveraged scheme, as applicable. This opportunity gain corresponds to the benefit of subscribing to the leveraged offer, rather than reproducing the same economic profile through the purchase of options in the market for individual investors.

A) TotalEnergies's performance share plans

	2019	2020	2021	2022	2023[a]	2024	Total
Date of the Shareholders' Meeting	6/1/2018	6/1/2018	6/1/2018	5/28/2021	5/26/2023	5/24/2024	
Award date	3/13/2019	3/18/2020	5/28/2021	3/16/2022	5/26/2023	5/24/2024	
Date of the final award (end of the vesting period)	3/14/2022	3/20/2023	5/29/2024	3/17/2025	5/27/2026	5/24/2027	
Transfer authorized as from	3/15/2024	3/21/2025	5/30/2026	3/17/2025	5/27/2026	5/24/2027	
Grant date IFRS 2 fair value	40.11€	12.40€	27.40€	37.22€	46.24€	55.83€	
Number of performance shares							
Outstanding as of January 1, 2022	**6,289,076**	**6,653,202**	**6,732,740**	–	–	–	**19,675,018**
Notified	–	–	–	7,353,271	–	–	7,353,271
Cancelled	(127,852)	(65,561)	(57,410)	(25,090)	–	–	(275,913)
Finally granted	(6,161,224)	(12,680)	(13,750)	(8,000)	–	–	(6,195,654)
Outstanding as of January 1, 2023	–	**6,574,961**	**6,661,580**	**7,320,181**	–	–	**20,556,722**
Notified	–	–	–	–	7,985,203	–	**7,985,203**
Cancelled	–	(128,577)	(98,291)	(86,348)	(42,040)	–	**(355,256)**
Finally granted	–	(6,446,384)	(5,250)	(5,568)	(190)	–	**(6,457,392)**
Outstanding as of January 1, 2024	–	–	**6,558,039**	**7,228,265**	**7,942,973**	–	**21,729,277**
Notified	–	–	–	–	–	7,775,722	**7,775,722**
Cancelled	–	–	(498,045)	(77,209)	(61,731)	(12,871)	**(649,856)**
Finally granted	–	–	(6,059,994)	(2,811)	(3,134)	–	**(6,065,939)**
Outstanding as of December 31, 2024	–	–	–	**7,148,245**	**7,878,108**	**7,762,851**	**22,789,204**

(a) Includes 37,000 performance shares granted on December 13, 2023 to 4 executives recruited in 2023 in accordance with the decision of the Board of Directors on December 13, 2023 and the Shareholders' Meeting on May 26, 2023. For these performance shares, the vesting period begins on December 13, 2023 and the final grant date is December 14, 2026, subject to the conditions set (end of the vesting period). The IFRS 2 fair value on the grant date was €51.56.

The performance shares, which are bought back by TotalEnergies SE on the market, are finally granted to their beneficiaries after a 3-year vesting period, from the date of the grant. The final grant is subject to a continued employment condition as well as:

- three performance conditions for the 2019 Plan;
- four performance conditions for the 2020 Plan and
- five performance conditions for the 2021, 2022, 2023 and 2024 Plans.

Moreover, the transfer of the performance shares finally granted under the 2018 to 2021 Plans will not be permitted until the end of a 2-year holding period from the date of the final grant.

2024 Plan

The Board of Directors granted performance shares, on May 24, 2024, to certain employees and executive directors of TotalEnergies SE or its subsidiaries, subject to the fulfilment of the continued employment condition of three years and five performance conditions.

The performance conditions apply differently depending on the capacity of the beneficiaries. If all shares granted to senior executives are subject to performance conditions, the grant of the first 150 shares to non-senior executives are not subject to the performance condition abovementioned, which will, nonetheless, apply to any shares granted above this threshold.

The applicable performance conditions are as follows:

- for 25% of the shares, the Corporation will be ranked against its peers (ExxonMobil, Shell, BP and Chevron) based on the Total Shareholder Return ("TSR") during the three vesting years (2024, 2025 and 2026). The TSR criterion considered is that of the last quarter of the year, the dividend being considered reinvested based on the closing price on the ex-dividend date;
- for 25% of the shares, the Corporation will be ranked against its peers (ExxonMobil, Shell, BP and Chevron) based on the annual variation in net cash flow per share criterion expressed in dollars during the three vesting years (2024, 2025 and 2026);
- for 20% of the shares, the level reached by the pre-dividend organic cash breakeven in view of the objective set for the three vesting years (2024, 2025 and 2026). The pre-dividend organic cash breakeven is defined as the Brent price for which the operating cash flow before working capital changes (MBA) covers the organic investments[1]. The ability of the Company to resist to the variations of the Brent barrel price is measured by this parameter;
- for 15% of the shares, the change in methane emissions on operated facilities in relation to the achievement of the target to reduce methane emissions set for 2026;
- for 15% of the shares, the criterion of the lifecycle carbon intensity of energy products sold to the Company's customers in relation to the achievement of the target to reduce this intensity set for 2026.

(1) Organic investments: net investments excluding acquisitions, asset sales and other operations with non-controlling interests.

B) Other TotalEnergies share plan

Worldwide Plan 2024

	2024
Date of the Shareholders' Meeting	5/26/2023
Award date	5/23/2024
Date of the final award (end of the vesting period)	5/24/2029
Transfer authorized as from	5/24/2029
Grant date IFRS 2 fair value	47.94€
Number of performance shares	
Outstanding as of January 1, 2024	–
Notified	10,666,900
Cancelled	(337,500)
Finally granted[a]	–
Outstanding as of December 31, 2024	**10,329,400**

(a) Final grant following the death or disability of the beneficiary of the shares.

At its meeting on May 23, 2024, the Board of Directors decided to grant 100 shares of the Company to each employee and executive director (excluding the Chairman and CEO) of TotalEnergies SE or its subsidiaries, subject to the fulfilment of the continued employment condition of five years.

C) Share-based payment expense

Share-based payment expense before tax was broken down as follows:

As of December 31, *(M$)*	2024	2023	2022
TotalEnergies performance shares plans	287	217	200
TotalEnergies world shares plans	54	–	–
SunPower plans[a]	–	–	23
Capital increase reserved for employees	215	74	28
Total	556	291	251

(a) Since September 30, 2022, TotalEnergies' 50.5% subsidiary in SunPower is accounted for using the equity method in the Company's consolidated accounts (refer to Note 18 to the consolidated accounts).

The main assumptions used for the valuation of the cost of the capital increase reserved for employees in 2024 were the following:

For the year ended December 31,	2024
Date of the Board of Directors meeting that decided the issue	September 21, 2023
Reference price (€)[a]	66.89
Subscription price (€)[b]	46.90
Number of shares issued (in millions)[c]	10.83

(a) Average of the closing prices of the TotalEnergies shares over the twenty trading sessions preceding April 25, 2024, being the date of the Chairman and CEO's decision setting the opening date of the subscription period and the subscription price.
(b) Reference price, reduced by a 30% discount and rounded off to the highest tenth of a euro.
(c) Including the free shares issued.

Note 10 Payroll, staff and employee benefits obligations

10.1 Employee benefits obligations

Accounting principles

In accordance with the laws and practices of each country, TotalEnergies participates in employee benefit plans offering retirement, death and disability, healthcare and special termination benefits. These plans provide benefits based on various factors such as length of service, salaries, and contributions made to the governmental bodies responsible for the payment of benefits.

These plans can be either defined contribution or defined benefit pension plans and may be entirely or partially funded with investments made in various non-consolidated instruments such as mutual funds, insurance contracts, and other instruments.

For defined contribution plans, expenses correspond to the contributions paid.

Defined benefit obligations are determined according to the Projected Unit Method. Actuarial gains and losses may arise from differences between actuarial valuation and projected commitments (depending on new calculations or assumptions) and between projected and actual return of plan assets. Such gains and losses are recognized in the statement of comprehensive income, with no possibility to subsequently recycle them to the income statement.

The past service cost is recorded immediately in the statement of income, whether vested or unvested.

The net periodic pension cost is recognized under "Other operating expenses".

Liabilities for employee benefits obligations consist of the following:

As of December 31, (M$)	2024	2023	2022
Pension benefits liabilities	1,290	1,453	1,308
Other benefits liabilities	411	468	467
Restructuring reserves (early retirement plans)	52	72	54
Total	1,753	1,993	1,829
Net liabilities relating to assets held for sale	–	–	–

Description of plans and risk management

TotalEnergies operates, for the benefit of its current and former employees, both defined benefit plans and defined contribution plans.

TotalEnergies recognized a charge of $175 million for defined contribution plans in 2024 ($167 million in 2023 and $152 million in 2022).

TotalEnergies' main defined benefit pension plans are located in France, the United Kingdom, the United States, Belgium and Germany. Their main characteristics, depending on the country-specific regulatory environment, are the following:

- the benefits are usually based on the final salary and seniority;
- they are usually funded (pension fund or insurer);
- they are usually closed to new employees who benefit from defined contribution pension plans;
- they are paid in annuity or in lump sum.

The pension benefits include also termination indemnities and early retirement benefits. The other benefits are employer contributions to post-employment medical care.

In order to manage the inherent risks, TotalEnergies has implemented a dedicated governance framework to ensure the supervision of the different plans. These governance rules provide for:

- TotalEnergies' representation in key governance bodies or monitoring committees;
- the principles of the funding policy;
- the general investment policy, including for most plans:
  - the establishment of a monitoring committee to define and follow the investment strategy and performance,
  - the principles to be respected in term of investment allocation.
- a procedure to approve the establishment of new plans or the amendment of existing plans;
- the principles of administration, communication and reporting.

Change in benefit obligations and plan assets

The fair value of the defined benefit obligation and plan assets in the Consolidated Financial Statements is detailed as follows:

	Pension benefits			Other benefits		
As of December 31, *(M$)*	2024	2023	2022	2024	2023	2022
Change in benefit obligation						
– Benefit obligation at beginning of year	8,847	8,267	11,777	468	467	633
– Current service cost	191	178	202	8	12	15
– Interest cost	328	355	195	19	20	12
– Past service cost	60	47	27	(0)	–	9
– Settlements	(55)	2	5	–	–	–
– Plan participants' contributions	26	23	17	–	–	1
– Benefits paid	(538)	(563)	(661)	(26)	(24)	(22)
– Actuarial losses / (gains)	(277)	393	(2,502)	(30)	(6)	(155)
– Foreign currency translation and other	(406)	146	(793)	(28)	(1)	(25)
Benefit obligation at year-end	**8,176**	**8,847**	**8,267**	**411**	**468**	**467**
of which plans entirely or partially funded	*7,689*	*8,392*	*7,806*	–	–	–
of which plans not funded	*487*	*455*	*461*	*411*	*468*	*467*
Change in fair value of plan assets						
– Fair value of plan assets at beginning of year	(7,768)	(7,306)	(10,231)	–	–	–
– Interest income	(313)	(332)	(190)	–	–	–
– Actuarial losses / (gains)[a]	288	(272)	2,083	–	–	–
– Settlements	57	–	2	–	–	–
– Plan participants' contributions	(26)	(23)	(17)	–	–	–
– Employer contributions	(163)	(254)	(260)	–	–	–
– Benefits paid	497	523	607	–	–	–
– Foreign currency translation and other	355	(104)	700	–	–	–
Fair value of plan assets at year-end	**(7,073)**	**(7,768)**	**(7,306)**	–	–	–
(Funded) Unfunded status	**1,103**	**1,079**	**961**	**411**	**468**	**467**
– Asset ceiling	33	44	46	–	–	–
(Assets) Liabilities net recognized amount	**1,136**	**1,123**	**1,007**	**411**	**468**	**467**
– Pension benefits and other benefits liabilities	1,290	1,453	1,308	411	468	467
– Other non-current assets	(154)	(330)	(301)	–	–	–
– Net benefit liabilities relating to assets held for sale	–	–	–	–	–	–

(a) The amount for 2024 includes an adjustment of $16 million related to asset ceiling, which impacts the net position (liabilities - assets).

As of December 31, 2024, the contribution from the main geographical areas for the net pension liability in the balance sheet is: 79% for the Euro area, 2% for the United Kingdom and 12% for the United States.

In 2024, a buy-in transaction was carried out in the United Kingdom to cover the benefit obligations of beneficiaries not included in the buy-in concluded in 2014. This investment resulted in an actuarial loss of $147 million recognized in other comprehensive income.

The amounts recognized in the consolidated income statement and the consolidated statement of comprehensive income for defined benefit plans are detailed as follows:

	Pension benefits			Other benefits		
For the year ended December 31, *(M$)*	2024	2023	2022	2024	2023	2022
Current service cost	191	178	202	8	12	15
Past service cost	60	47	27	(0)	–	9
Settlements	2	2	7	–	–	–
Net interest cost	21	28	5	19	20	12
Benefit amounts recognized on profit and loss	**274**	**255**	**241**	**27**	**32**	**36**
Actuarial (gains) / losses						
– Effect of changes in demographic assumptions	(69)	4	1	(4)	(8)	(9)
– Effect of changes in financial assumptions	(425)	188	(2,617)	(24)	(7)	(138)
– Effect of experience adjustments	217	204	111	(2)	8	(8)
– Actual return on plan assets	303	(272)	2,083	–	–	–
Effect of asset ceiling	(16)	(3)	3	–	–	–
Benefit amounts recognized on other of consolidated statement of comprehensive income	**11**	**121**	**(419)**	**(30)**	**(6)**	**(155)**
Total benefit amounts recognized on comprehensive income	284	376	(178)	(3)	25	(119)

Expected future cash outflows

The average duration of accrued benefits is approximately 11 years for defined pension benefits and 14 years for other benefits. TotalEnergies expects to pay contributions of $161 million in respect of funded pension plans in 2025.

Estimated future benefits either financed from plan assets or directly paid by the employer are detailed as follows:

Estimated future payments *(M$)*	Pension benefits	Other benefits
2025	509	24
2026	502	23
2027	556	22
2028	583	21
2029	574	20
2030-2034	3,023	105

Type of assets

	Pension benefits		
Asset allocation as of December 31,	2024	2023	2022
Equity securities	17%	27%	26%
Debt securities	44%	47%	46%
Monetary	2%	2%	3%
Annuity contracts	32%	17%	17%
Real estate	5%	7%	8%

Investments on equity and debt markets are quoted on active markets.

Main actuarial assumptions and sensitivity analysis

Assumptions used to determine benefits obligations:

	Pension benefits			Other benefits		
As of December 31,	2024	2023	2022	2024	2023	2022
Discount rate (weighted average for all regions)	**4.30%**	**3.89%**	**4.39%**	**4.17%**	**4.26%**	**4.45%**
of which Euro zone	*3.49%*	*3.27%*	*3.70%*	*3.41%*	*3.30%*	*3.48%*
of which United States	*5.00%*	*4.50%*	*4.50%*	*5.00%*	*4.50%*	*4.50%*
of which United Kingdom	*5.50%*	*4.50%*	*4.75%*	–	–	–
Inflation rate (weighted average for all regions)	**2.54%**	**2.49%**	**2.91%**	–	–	–
of which Euro zone	*1.98%*	*2.24%*	*2.49%*	–	–	–
of which United States	*2.50%*	*2.50%*	*2.50%*	–	–	–
of which United Kingdom	*3.25%*	*3.00%*	*3.25%*	–	–	–

The discount rate retained is determined by reference to the high quality rates for AA-rated corporate bonds for a duration equivalent to that of the obligations. It derives from a benchmark per monetary area of different market data at the closing date.

Sensitivity to inflation in respect of defined benefit pension plans is not material in the United States.

A 0.5 point increase or decrease in discount rates – all other things being equal – would have the following approximate impact on the benefit obligation:

(M$)	0.5 pt Increase	0.5 pt Decrease
Benefit obligation as of December 31, 2024	(423)	462

A 0.5 point increase or decrease in inflation rates – all other things being equal – would have the following approximate impact on the benefit obligation:

(M$)	0.5 pt Increase	0.5 pt Decrease
Benefit obligation as of December 31, 2024	244	(227)

10.2 Payroll and staff

For the year ended December 31,	2024	2023	2022
Personnel expenses *(M$)*			
Wages and salaries (including social charges)	9,460	9,210	9,002
TotalEnergies employees at December 31,			
France (DROM COM includ.)			
– Management	15,101	14,675	14,130
– Other	20,779	20,831	20,829
International			
– Management	20,318	19,470	18,183
– Other	46,689	47,603	48,137
Total	102,887	102,579	101,279

The number of employees includes only employees of fully consolidated subsidiaries.

Note 11 Income taxes

Accounting principles

Income taxes disclosed in the statement of income include current tax expense (or income) and deferred tax expense (or income).

Current tax expenses (or income) are the estimated amount of the tax due for the taxable income of the period.

Deferred income taxes are recorded based on the temporary differences between the carrying amounts of assets and liabilities recorded in the balance sheet and their tax bases, and on carry-forwards of unused tax losses and other tax credits.

Deferred tax assets and liabilities are measured using the tax rates that have been enacted or substantially enacted at the balance sheet date. The tax rates used depend on the timing of reversals of temporary differences, tax losses and other tax credits. The effect of a change in tax rate is recognized either in the Consolidated Statement of Income or in shareholders' equity depending on the item it relates to.

Deferred tax resulting from temporary differences between the carrying amounts of equity-method investments and their tax bases are recognized. The deferred tax calculation is based on the expected future tax effect (dividend distribution rate or tax rate on capital gains).

Income taxes are detailed as follows:

For the year ended December 31, *(M$)*	2024	2023	2022
Current income taxes	(10,212)	(12,745)	(19,825)
Deferred income taxes	(563)	(556)	(2,417)
Total income taxes	(10,775)	(13,301)	(22,242)

Before netting deferred tax assets and liabilities by fiscal entity, the components of deferred tax balances are as follows:

As of December 31, *(M$)*	2024	2023	2022
Net operating losses and tax carry forwards	3,324	3,098	3,600
Employee benefits	436	415	409
Other temporary non-deductible provisions	6,886	7,569	8,813
Differences in depreciations	(15,003)	(15,443)	(14,692)
Other temporary tax deductions	(4,555)	(3,909)	(4,102)
Net deferred tax liability	(8,912)	(8,270)	(5,972)

The reserves of TotalEnergies subsidiaries that would be taxable if distributed but for which no distribution is planned, and for which no deferred tax liability has therefore been recognized, totaled $1,837 million as of December 31, 2024.

Deferred tax assets not recognized as of December 31, 2024, amount to $3,085 million as their future recovery was not regarded as probable given the expected results of the entities, particularly in the Exploration & Production segment, when the affiliate or the field concerned is in its exploration phase, the net operating losses created during this phase will be useable only if a final investment and development decision is made. Accordingly, the time limit for the utilization of those net operating losses is not known.

Deferred tax assets not recognized relate notably to France for an amount of $1,112 million and to Australia for an amount of $201 million.

After netting deferred tax assets and liabilities by fiscal entity, deferred taxes are presented on the balance sheet as follows:

As of December 31, *(M$)*	2024	2023	2022
Deferred tax assets	3,202	3,418	5,049
Deferred tax liabilities	(12,114)	(11,688)	(11,021)
Net amount	(8,912)	(8,270)	(5,972)

The net deferred tax variation in the balance sheet is analyzed as follows:

As of December 31, (M$)	2024	2023	2022
Opening balance	**(8,270)**	**(5,972)**	**(5,504)**
Deferred tax on income	(563)	(556)	(2,417)
Deferred tax on shareholders' equity[a]	(768)	(741)	1,353
Changes in scope of consolidation and others	388	(1,102)	218
Currency translation adjustment	301	101	378
Closing balance	**(8,912)**	**(8,270)**	**(5,972)**

(a) This amount includes mainly deferred taxes on actuarial gains and losses, current income taxes and deferred taxes for changes in fair value of investments in equity instruments, as well as deferred taxes related to the cash flow hedge (refer to Note 9 to the Consolidated Financial Statements).

Reconciliation between provision for income taxes and pre-tax income

For the year ended December 31, (M$)	2024	2023	2022
Consolidated net income	16,031	21,510	21,044
Income taxes	10,775	13,301	22,242
Pre-tax income	**26,806**	**34,811**	**43,286**
French statutory tax rate	25.83%	25.83%	25.83%
Theoretical tax charge	**(6,924)**	**(8,992)**	**(11,181)**
Difference between French and foreign income tax rates	(5,554)	(5,925)	(9,625)
Tax effect of equity in income (loss) of affiliates	408	477	(489)
Permanent differences	890	800	(676)
Adjustments on prior years income taxes	109	54	64
Adjustments on deferred tax related to changes in tax rates	(35)	216	(610)
Variation of deferred tax assets not recognized	331	69	275
Income taxes in the statement of income	**(10,775)**	**(13,301)**	**(22,242)**

The French statutory tax rate includes the standard corporate tax rate (25%), increased by the additional contribution that bring the overall tax rate to 25.83% in 2024 (as in 2023 and 2022).

Permanent differences are mainly due to impairment of goodwill and to dividends from non-consolidated companies as well as the specific taxation rules applicable to certain activities.

Schedule of losses and tax credits carried forward

TotalEnergies has deferred tax assets related to losses and carried forward tax credits which expire according to the following years:

As of December 31, (M$)	2024	2023	2022
2023			4
2024		2	2
2025	2	2	4
2026	5	8	8
2027[a]	4	3	1,220
2028[b]	5	1,201	
2029 and after	216		
Unlimited	3,092	1,882	2,362
Total	**3,324**	**3,098**	**3,600**

(a) 2027 and after for 2022.
(b) 2028 and after for 2023.

As of December 31, 2024 the schedule of deferred tax assets related to carried forward tax credits on net operating losses for the main countries is as follows:

	Tax			
As of December 31, 2024 *(M$)*	Kazakhstan	France	Australia	United States
2025				
2026				
2027				
2028				
2029 and after	2			150
Unlimited	524	798	571	627
Total	526	798	571	777

Note 12 Provisions and other non-current liabilities

12.1 Provisions and other non-current liabilities

Accounting principles

A provision is recognized when TotalEnergies has a present obligation, legal or constructive, as a result of a past event for which it is probable that an outflow of resources will be required and when a reliable estimate can be made regarding the amount of the obligation. The amount of the liability corresponds to the best possible estimate.

Provisions and non-current liabilities are comprised of liabilities for which the amount and the timing are uncertain. They arise from environmental risks, legal and tax risks, litigation and other risks.

As of December 31, *(M$)*	2024	2023	2022
Litigations and accrued penalty claims	384	476	529
Provisions for environmental contingencies	611	750	751
Asset retirement obligations	11,359	11,585	13,110
Other non-current provisions	3,032	3,588	3,633
of which restructuring activities	*124*	*228*	*282*
of which financial risks related to non-consolidated and equity accounted for affiliates	*1,694*	*1,708*	*1,582*
Other non-current liabilities	4,486	4,858	3,379
Total	19,872	21,257	21,402

In 2024, litigation reserves amount to $384 million of which $187 million in the Exploration & Production, notably in Brazil, Bolivia and Angola, and $93 million in Integrated Power.

In 2023, litigation reserves amounted to $476 million of which $276 million in the Exploration & Production, notably in Brazil, Bolivia and Angola, and $91 million in Refining & Chemicals.

In 2022, litigation reserves amounted to $529 million of which $257 million in the Exploration & Production, notably in Brazil, Bolivia and Angola, and $159 million in Refining & Chemicals.

Other non-current liabilities mainly include debts whose maturity is more than one year related to fixed assets acquisitions.

Changes in provisions and other non-current liabilities

Changes in provisions and other non-current liabilities are as follows:

(M$)	As of January, 1	Allowances	Reversals	Currency translation adjustment	Other	As of December, 31
2024	**21,257**	**1,056**	**(1,538)**	**(419)**	**(484)**	**19,872**
of which provisions for financial risks		*20*	*(16)*			
of which asset retirement obligations		*568*	*(464)*			
of which provisions for environmental contingencies		*65*	*(183)*			
of which provisions for restructuring of activities		*15*	*(103)*			
2023	**21,402**	**1,269**	**(1,315)**	**212**	**(311)**	**21,257**
of which provisions for financial risks		*18*	*(29)*			
of which asset retirement obligations		*524*	*(339)*			
of which provisions for environmental contingencies		*117*	*(158)*			
of *which provisions for restructuring of activities*		*69*	*(138)*			
2022	**20,269**	**2,724**	**(1,397)**	**(834)**	**640**	**21,402**
of which provisions for financial risks		*1,363*	*(15)*			
of which asset retirement obligations		*430*	*(418)*			
of which provisions for environmental contingencies		*97*	*(133)*			
of which provisions for restructuring of activities		*31*	*(230)*			

Asset retirement obligations

Accounting principles

Asset retirement obligations, which result from a legal or constructive obligation, are recognized based on a reasonable estimate in the period in which the obligation arises.

The associated asset retirement costs are capitalized as part of the carrying amount of the underlying asset and depreciated over the useful life of this asset.

An entity is required to measure changes in the liability for an asset retirement obligation due to the passage of time (accretion) by applying a discount rate to the amount of the liability. Given the long-term nature of expenditures related to our asset retirement obligations, the rate is determined by reference to the rates of high quality AA-rated corporate bonds on the USD area for a long-term horizon. The increase of the provision due to the passage of time is recognized as "Other financial expense".

The discount rate used for the valuation of asset retirement obligation is 5% in 2024, 5% in 2023 and 4% in 2022 (the expenses are estimated at current currency values with an inflation rate of 2% in 2024 as in 2023 and 2022).

A decrease of 0.5 point of this rate would increase the asset retirement obligation by $877 million, with a corresponding impact in tangible assets, and with a negative impact of approximately $87 million on the following years net income. Conversely, an increase of 0.5 point would have a nearly symmetrical impact compared to the effect of the decrease of 0.5 point.

Changes in the asset retirement obligation are as follows:

(M$)	As of January 1,	Accretion	Revision in estimates	New obligations	Spending on existing obligations	Currency translation adjustment	Other	As of December 31,
2024	**11,585**	**568**	**155**	**200**	**(464)**	**(249)**	**(436)**	**11,359**
2023	13,110	524	(1,499)	108	(339)	101	(420)	11,585
2022	14,976	430	(1,172)	198	(418)	(663)	(241)	13,110

12.2 Other risks and contingent liabilities

TotalEnergies is not currently aware of any exceptional event, dispute, risks or contingent liabilities that could have a material impact on the assets and liabilities, results, financial position or operations of the TotalEnergies company, other than those mentioned below.

Yemen

In Yemen, the deterioration of security conditions in the vicinity of the Balhaf site caused the company Yemen LNG, in which the TotalEnergies company holds a stake of 39.62%, to stop its commercial production and export of LNG and to declare force majeure to its various stakeholders in 2015. The plant has been put in preservation mode.

Mozambique

Considering the evolution of the security situation in the north of the Cabo Delgado province in Mozambique, the TotalEnergies company has confirmed on April 26, 2021, the withdrawal of all Mozambique LNG project personnel from the Afungi site. This situation led the Company, as operator of Mozambique LNG project, to declare force majeure.

Legal and arbitration proceedings

– FERC

The Office of Enforcement of the US Federal Energy Regulatory Commission (FERC) began in 2015 an investigation in connection with the natural gas trading activities in the United States of TotalEnergies Gas & Power North America, Inc. (TGPNA), a US subsidiary of TotalEnergies. The investigation covered transactions made by TGPNA between June 2009 and June 2012 on the natural gas market. TGPNA received a Notice of Alleged Violations from FERC on September 21, 2015. On April 28, 2016, FERC issued an order to show cause to TGPNA and two of its former employees, and to the Corporation and TotalEnergies Gas & Power Ltd., regarding the same facts. The case was remanded on July 15, 2021 to the FERC Administrative Judge for hearing and consideration on the merits. TGPNA brought a claim to the U.S. District Court for the District of Texas in December 2022 disputing the constitutionality of FERC's administrative procedure; the U.S. District Court for the District of Texas ordered a stay of the case in the course of 2023, pending decisions by the U.S. Supreme Court other cases involving similar constitutional issues. On June 27, 2024, the U.S. Supreme Court confirmed that the constitution guarantees respondents with the right to a jury trial in this type of administrative procedure and the competence of the U.S. District Court. FERC terminated in September 2024 its administrative procedure (*Hearing Order*) started in 2021 and mentioned that no penalties would be imposed on the Company's entities on the basis of the 2016 question (*Order to show cause)* although it is not terminating the whole case. TGPNA has always contested the claims brought against it and FERC approved on January 8, 2025, a settlement agreement with TGPNA for an amount of USD 5 million finally resolving this claim amongst all parties with prejudice and without admission of liability.

– Disputes relating to Climate

In France, the Corporation was summoned in January 2020 before Nanterre's Civil Court of Justice by certain associations and local communities in order to oblige the Company to complete its Vigilance Plan, by identifying in detail risks relating to a global warming above 1.5 °C, as well as indicating the expected amount of future greenhouse gas emissions related to the Company's activities and its product utilization by third parties and in order to obtain an injunction ordering the Corporation to cease exploration and exploitation of new oil or gas fields, to reduce its oil and gas production by 2030 and 2050, and to reduce its net direct and indirect CO_2 emissions by 40% in 2040 compared with 2019. This action was declared inadmissible on July 6, 2023, by the Paris Civil Court of Justice to which the case was transferred following a new procedural law. Following the appeal filed by the claimants, the Paris Court of Appeal, in a judgment of June 18, 2024, considered the action initiated admissible in particular on the basis of the law on the duty of vigilance transferring the case for trial on the merits before the Paris Civil Court of Justice, while strucking out 17 of the 22 applicants as well as declining to awards any provisional measures. TotalEnergies SE considers that it has fulfilled its obligations under the French law on the vigilance duty. A new action against the Corporation, with similar requests for injunction, has started in March 2024 before the commercial court of Tournai in Belgium.

Some associations in France brought civil and criminal actions against TotalEnergies SE, with the purpose of proving that since May 2021 – after the change of name of TotalEnergies – the Corporation's corporate communication and its publicity campaign contain environmental claims that are either false or misleading for the consumer. TotalEnergies considers that these accusations are unfounded.

In France, on July 4, 2023, nine shareholders (two companies and 7 individuals holding a small number of the Corporation's shares) brought an action against the Corporation before the Nanterre Commercial Court, seeking the annulment of resolution no. 3 passed by the Corporation's Annual Shareholders' Meeting on May 26, 2023, recording the results for fiscal year 2022 and setting the amount of the dividend to be distributed for fiscal year 2022. The plaintiffs essentially allege an insufficient provision for impairment of TotalEnergies' assets in the financial statements for the fiscal year 2022, due to the insufficient consideration of future risks and costs related to the consequences of greenhouse gas emissions emitted by its customers (scope 3) and carbon cost assumptions presented as too low. The Corporation considers this action to be unfounded.

In the United States, several US subsidiaries of TotalEnergies were summoned, amongst many companies and professional associations, in several "climate litigation" cases, seeking to establish legal liability for past greenhouse gas emissions, and to compensate plaintiff public authorities, in particular for resulting adaptation costs. The Corporation was summoned, in some of these claims along with these subsidiaries considers that the courts lack jurisdiction, that it has many arguments to put forward, and considers also that the past and present behavior of the Company does not constitute a fault susceptible to give rise to liability.

– Mozambique

In France, victims and heirs of deceased persons filed a complaint against the Company in October 2023 with the Nanterre Prosecutor, following the events perpetrated by terrorists in the city of Palma in March 2021. This complaint would allege that the Corporation is liable for "unvoluntary manslaughter" and, "failure to assist people in danger". The Corporation considers these accusations as unfounded in both law and fact[1].

– Kazakhstan

On April 1st, 2024, the Republic of Kazakhstan filed a Statement of Claims in the context of an arbitration involving TotalEnergies EP Kazakhstan and its partners under the production sharing contract related to the North Caspian Sea. TotalEnergies EP Kazakhstan and its partners consider this action to be unfounded. Therefore, it is not possible at this date to reliably assess the potential consequences of this claim, particularly financial ones, nor the date of their implementation.

(1) Refer to the press release published by the Company on October 11, 2023 contesting the accusations.

Note 13 Off-balance sheet commitments and lease contracts

13.1 Off-balance sheet commitments and contractual obligations

As of December 31, 2024 *(M$)*	Total	Maturity and installments: Less than 1 year	Between 1 and 5 years	More than 5 years
Non-current debt obligations net of hedging instruments *(Note 15)*	34,684	–	13,950	20,734
Current portion of non-current debt obligations net of hedging instruments *(Note 15)*	3,863	3,863	–	–
Lease obligations *(Note 13.2)*	9,917	2,095	3,893	3,929
Asset retirement obligations *(Note 12)*	11,359	524	1,588	9,247
Contractual obligations recorded in the balance sheet	**59,823**	**6,482**	**19,431**	**33,910**
Lease obligations for low value assets, short term contracts or not yet commenced *(Note 13.2)*	3,429	772	1,746	911
Purchase obligations	188,827	12,307	47,855	128,665
Contractual obligations not recorded in the balance sheet	**192,256**	**13,079**	**49,601**	**129,576**
Total of contractual obligations	252,079	19,561	69,032	163,486
Guarantees given to customs authorities	1,908	1,839	9	60
Guarantees given on borrowings	22,317	419	12,887	9,011
Guarantees related to sales of businesses	306	154	152	–
Guarantees of current liabilities	167	167	–	–
Guarantees to customers / suppliers	27,510	11,618	1,599	14,293
Letters of credit	3,974	3,767	189	18
Other operating commitments	19,093	6,198	818	12,077
Total of other commitments given	75,275	24,162	15,654	35,459
Assets received as collateral (security interests)	40	17	12	11
Sales obligations	116,850	10,743	55,870	50,237
Other commitments received	25,736	19,822	2,838	3,076
Total of commitments received	142,626	30,582	58,720	53,324
of which commitments given relating to joint-ventures	*35,755*	*87*	*12,267*	*23,401*
of which commitments given relating to associates	*90,221*	*674*	*21,074*	*68,473*

As of December 31, 2023 *(M$)*	Total	Maturity and installments: Less than 1 year	Between 1 and 5 years	More than 5 years
Non-current debt obligations net of hedging instruments *(Note 15)*	31,493	–	13,068	18,425
Current portion of non-current debt obligations net of hedging instruments *(Note 15)*	5,669	5,669	–	–
Lease obligations *(Note 13.2)*	9,477	1,721	3,652	4,104
Asset retirement obligations *(Note 12)*	11,585	453	1,452	9,680
Contractual obligations recorded in the balance sheet	**58,224**	**7,843**	**18,172**	**32,209**
Lease obligations for low value assets, short term contracts or not yet commenced *(Note 13.2)*	2,221	643	1,049	529
Purchase obligations	178,772	14,536	40,850	123,386
Contractual obligations not recorded in the balance sheet	**180,993**	**15,179**	**41,899**	**123,915**
Total of contractual obligations	239,217	23,022	60,071	156,124
Guarantees given on borrowings	19,219	582	9,506	9,131
Guarantees related to sales of businesses	312	160	–	152
Guarantees of current liabilities	67	67	–	–
Guarantees to customers / suppliers	23,382	6,768	3,946	12,668
Letters of credit	3,294	3,002	270	22
Other operating commitments	20,409	8,698	1,083	10,628
Total of other commitments given	68,684	21,190	14,852	32,642
Assets received as collateral (security interests)	42	22	8	12
Sales obligations	97,436	8,470	47,178	41,788
Other commitments received	25,365	18,025	3,355	3,985
Total of commitments received	122,843	26,517	50,541	45,785
of which commitments given relating to joint-ventures	*32,846*	*906*	*10,643*	*21,297*
of which commitments given relating to associates	*97,130*	*850*	*14,676*	*81,604*

As of December 31, 2022 *(M$)*	Maturity and installments			
	Total	Less than 1 year	Between 1 and 5 years	More than 5 years
Non-current debt obligations net of hedging instruments *(Note 15)*	35,684	–	14,229	21,455
Current portion of non-current debt obligations net of hedging instruments *(Note 15)*	5,328	5,328	–	–
Lease obligations *(Note 13.2)*	9,714	1,437	3,872	4,405
Asset retirement obligations *(Note 12)*	13,110	521	1,497	11,092
Contractual obligations recorded in the balance sheet	**63,836**	**7,286**	**19,598**	**36,952**
Lease obligations for low value assets, short term contracts or not yet commenced	1,830	783	610	437
Purchase obligations	139,050	11,286	40,516	87,248
Contractual obligations not recorded in the balance sheet	**140,880**	**12,069**	**41,126**	**87,685**
Total of contractual obligations	204,716	19,355	60,724	124,637
Guarantees given to customs authorities	2,003	1,904	53	46
Guarantees given on borrowings	20,218	2,519	5,814	11,885
Guarantees related to sales of businesses	310	157	–	153
Guarantees of current liabilities	62	61	1	–
Guarantees to customers / suppliers	23,757	3,539	2,275	17,943
Letters of credit	2,430	2,241	172	17
Other operating commitments	23,039	5,198	900	16,941
Total of other commitments given	71,819	15,619	9,215	46,985
Assets received as collateral (security interests)	45	14	10	21
Sales obligations	94,977	6,267	36,341	52,369
Other commitments received	25,650	19,261	2,817	3,572
Total of commitments received	120,672	25,542	39,168	55,962
of which commitments given relating to joint-ventures	*32,054*	*2,006*	*5,666*	*24,382*
of which commitments given relating to associates	*52,270*	*839*	*11,638*	*39,793*

A) Contractual obligations

Debt obligations

"Non-current debt obligations" are included in the items "Non-current financial debt" and "Non-current financial assets" of the Consolidated Balance Sheet. It includes the non-current portion of swaps hedging bonds and excludes non-current lease obligations of $7,822 million.

The current portion of non-current debt is included in the items "Current borrowings", "Current financial assets" and "Other current financial liabilities" of the Consolidated Balance Sheet. It includes the current portion of swaps hedging bonds and excludes the current portion of lease obligations of $2,095 million.

The information regarding contractual obligations linked to indebtedness is presented in Note 15 to the Consolidated Financial Statements.

Lease contracts

The information regarding leases is presented in Note 13.2 to the Consolidated Financial Statements.

Asset retirement obligations

This item represents the discounted present value of Exploration & Production and Integrated LNG asset retirement obligations, primarily asset removal costs at the completion date. The information regarding contractual obligations linked to asset retirement obligations is presented in Note 12 to the Consolidated Financial Statements.

Purchase obligations

Purchase obligations are obligations under contractual agreements to purchase goods or services, including capital projects. These obligations are enforceable and legally binding on the company and specify all significant terms, including the amount and the timing of the payments.

These obligations mainly include: unconditional hydrocarbon purchase contracts (except where an active, highly-liquid market exists and when the hydrocarbons are expected to be re-sold shortly after purchase) in the Integrated LNG segment, reservation of transport capacities in pipelines, unconditional exploration works and development works in the Exploration & Production and Integrated LNG segment, and contracts for capital investment projects in the Refining & Chemicals segment.

B) Other commitments given

Guarantees given to customs authorities

These consist of guarantees given by TotalEnergies to customs authorities in order to guarantee the payments of taxes and excise duties on the importation of oil and gas products, mostly in France.

Guarantees given on borrowings

TotalEnergies guarantees bank debt and lease obligations of certain non-consolidated subsidiaries and equity affiliates. Maturity dates vary, and guarantees will terminate on payment and/or cancellation of the obligation. A payment would be triggered by failure of the guaranteed party to fulfill its obligation covered by the guarantee, and no assets are held as collateral for these guarantees. As of December 31, 2024, the maturities of these guarantees are up to 2047.

As of December 31, 2024, the guarantees provided by TotalEnergies SE in connection with the financing of the Mozambique LNG project amount to $4,600 million as in 2023.

As of December 31, 2024, the guarantees provided by TotalEnergies SE in connection with the financing of the Ichthys LNG project amount to $4,022 million. As of December 31, 2023, the guarantees amounted to $4,136 million.

As of December 31, 2024, the guarantees provided by TotalEnergies SE in connection with the financing of the Yamal LNG project amount to $3,243 million. As of December 31, 2023, the guarantees amounted to $3,270 million.

As of December 31, 2024, the guarantees provided by TotalEnergies SE in connection with the financing of the Amiral project amount to $2,584 million.

As of December 31, 2024, the guarantees provided by TotalEnergies SE in connection with the financing of the Bayport Polymers LLC project, amount to $1,400 million as in 2023.

As of December 31, 2024, the guarantees provided by TotalEnergies Holdings in connection with the financing of the Oranje Wind (HKW) project, amount to $1,299 million.

As of December 31, 2024, TotalEnergies SE has confirmed guarantees for TotalEnergies Refining Saudi Arabia SAS shareholders' advances for an amount of $1,025 million as in 2023.

As of December 31, 2024, the guarantees provided by TotalEnergies SE in connection with the financing of the Arctic LNG2 project amount to $ 987 million. As of December 31, 2023, the guarantees amounted to $1,050 million.

As of December 31, 2024, the guarantees provided by TotalEnergies Holdings in connection with the financing of the Rio Grande LNG project amount to $800 million as in 2023.

As of December 31, 2024, the guarantees provided by TotalEnergies Holdings in connection with the financing of the Seagreen project, amount to $627 million. As of December 31, 2023, the guarantees amounted to $1,273 million.

Indemnities related to sales of businesses

In the ordinary course of business, TotalEnergies executes contracts involving standard indemnities for the oil industry and indemnities specific to transactions such as sales of businesses. These indemnities might include claims against any of the following: environmental, tax and shareholder matters, intellectual property rights, governmental regulations and employment-related matters, and commercial contractual relationships. Performance under these indemnities would generally be triggered by a breach of terms of the contract or by a third party claim. TotalEnergies regularly evaluates the probability of having to incur costs associated with these indemnities.

Other guarantees given

Non-consolidated subsidiaries

TotalEnergies also guarantees the current liabilities of certain non-consolidated subsidiaries. Performance under these guarantees would be triggered by a financial default of the entity.

Operating agreements

As part of normal ongoing business operations and consistent with generally accepted industry practices, TotalEnergies enters into numerous agreements with other parties. These commitments are often entered into for commercial purposes, for regulatory purposes or for other operating agreements.

C) Commitments received

Sales obligations

These amounts represent binding obligations to sell goods, including in particular hydrocarbon sales contracts (except where an active, highly-liquid market exists and when the volumes are expected to be re-sold shortly after purchase).

13.2 Lease contracts

Accounting principles

A lease contract is a contract that grants lessee the right to use an identified asset for a specified period of time in exchange for consideration. At lease inception, an asset corresponding to right of use and a debt are recognized in the lessee's balance sheet. Carrying value of right of use corresponds to present value of future lease payments plus any direct costs incurred for concluding the contract. Lease debt is recorded as a liability in the balance sheet under financial debts. Rights of use are depreciated over the useful lives applied by TotalEnergies.

Leases that are of short duration or that relate to low value assets are not recorded in the balance sheet, in accordance with the exemptions in the standard. They are presented as off-balance sheet commitments.

TotalEnergies mainly leases real estate, service stations, ships, and other equipment (refer to Note 7 to the Consolidated Financial Statements).

The future minimum lease payments on leases to which TotalEnergies is committed are as follows:

For the year ended December 31, 2024 *(M$)*	Exempted contracts	Leases recorded in balance sheet
2025	772	2,713
2026	494	1,916
2027	497	1,414
2028	418	1,202
2029	337	1,086
2030 and beyond	911	6,215
Total minimum payments	**3,429**	**14,546**
Less financial expenses	–	(4,629)
Nominal value of contracts	–	**9,917**
Less current portion of lease contracts *(Note 15)*	–	(2,095)
Non-current lease liabilities	–	7,822

For the year ended December 31, 2023 *(M$)*	Exempted contracts	Leases recorded in balance sheet
2024	643	2,473
2025	406	1,607
2026	249	1,384
2027	231	1,142
2028	163	1,007
2029 and beyond	529	6,188
Total minimum payments	**2,221**	**13,801**
Less financial expenses	–	(4,324)
Nominal value of contracts	–	**9,477**
Less current portion of lease contracts *(Note 15)*	–	(1,721)
Non-current lease liabilities	–	7,756

For the year ended December 31, 2022 *(M$)*	Exempted contracts	Leases recorded in balance sheet
2023	783	2,189
2024	190	1,646
2025	154	1,255
2026	137	1,140
2027	129	993
2028 and beyond	437	6,053
Total minimum payments	**1,830**	**13,276**
Less financial expenses	–	(3,562)
Nominal value of contracts	–	**9,714**
Less current portion of lease contracts *(Note 15)*	–	(1,437)
Non-current lease liabilities	–	8,277

For the year ended December 31, 2024, rental expense recorded in the income statement and incurred under short term leases or low value assets leases and under variable lease payments is $641 million and $103 million, respectively.

For the year ended December 31, 2023, rental expense recorded in the income statement and incurred under short term leases or low value assets leases and under variable lease payments is $1,007 million and $183 million, respectively.

For the year ended December 31, 2022, rental expense recorded in the income statement and incurred under short term leases or low value assets leases and under variable lease payments was $701 million and $151 million, respectively.

Other information required on lease debts, notably their maturity, is presented in Note 15 to the Consolidated Financial Statements.

Note 14 Financial assets and liabilities analysis per instrument class and strategy

The financial assets and liabilities disclosed in the balance sheet are detailed as follows:

As of December 31, 2024 *(M$)* ASSETS/(LIABILITIES)	Amortized cost	Fair value through P&L	Other comprehensive income	Fair value of bonds hedging instruments	Total	Fair value
Equity affiliates: loans	6,240	293	–	–	6,533	**6,533**
Other investments	–	1,154	511	–	1,665	**1,665**
Non-current financial assets	1,278	348	133	546	2,305	**2,305**
Other non-current assets	3,852	–	–	–	3,852	**3,852**
Accounts receivable, net[(b)]	19,281	–	–	–	19,281	**19,281**
Other operating receivables	7,774	9,033	39	–	16,846	**16,846**
Current financial assets	5,206	1,679	–	29	6,914	**6,914**
Cash and cash equivalents	25,844	–	–	–	25,844	**25,844**
Total financial assets	**69,475**	**12,507**	**683**	**575**	**83,240**	**83,240**
Total non-financial assets					**202,247**	
Total assets					**285,487**	
Non-current financial debt[(a)]	(40,939)	(281)	–	(2,313)	(43,533)	**(43,905)**
Accounts payable[(b)]	(39,932)	–	–	–	(39,932)	**(39,932)**
Other operating liabilities	(12,562)	(7,665)	(15)	–	(20,242)	**(20,242)**
Current borrowings[(a)]	(10,024)	–	–	–	(10,024)	**(10,012)**
Other current financial liabilities	–	(239)	–	(425)	(664)	**(664)**
Total financial liabilities	**(103,457)**	**(8,185)**	**(15)**	**(2,738)**	**(114,395)**	**(114,755)**
Total non-financial liabilities					**(171,092)**	
Total liabilities					**(285,487)**	

(a) The financial debt is adjusted to the hedged risks value (currency and interest rate) as part of hedge accounting (refer to Note 15 to the Consolidated Financial Statements).
(b) Receivables and payables are offset by an amount of $5,718 million, corresponding to the netting, mainly in trading activities, between receivables and payables with the same counterparty that can legally be settled on a net basis.

As of December 31, 2023 *(M$)* ASSETS/(LIABILITIES)	Amortized cost	Fair value through P&L	Other comprehensive income	Fair value of bonds hedging instruments	Total	Fair value
Equity affiliates: loans	4,260	302	–	–	4,562	**4,562**
Other investments	–	1,188	355	–	1,543	**1,543**
Non-current financial assets	1,166	414	142	673	2,395	**2,395**
Other non-current assets	3,983	–	–	–	3,983	**3,983**
Accounts receivable, net[b]	23,442	–	–	–	23,442	**23,442**
Other operating receivables	7,940	6,775	237	–	14,952	**14,952**
Current financial assets	5,046	1,448	–	91	6,585	**6,585**
Cash and cash equivalents	27,263	–	–	–	27,263	**27,263**
Total financial assets	**73,100**	**10,127**	**734**	**764**	**84,725**	**84,725**
Total non-financial assets					**198,929**	
Total assets					283,654	
Non-current financial debt[a]	(38,040)	(240)	–	(2,198)	(40,478)	**(41,329)**
Accounts payable[b]	(41,335)	–	–	–	(41,335)	**(41,335)**
Other operating liabilities	(12,287)	(7,573)	(77)	–	(19,937)	**(19,937)**
Current borrowings[a]	(9,590)	–	–	–	(9,590)	**(9,601)**
Other current financial liabilities	–	(178)	–	(268)	(446)	**(446)**
Total financial liabilities	**(101,252)**	**(7,991)**	**(77)**	**(2,466)**	**(111,786)**	**(112,648)**
Total non-financial liabilities					**(171,868)**	
Total liabilities					(283,654)	

(a) The financial debt is adjusted to the hedged risks value (currency and interest rate) as part of hedge accounting (refer to Note 15 to the Consolidated Financial Statements).
(b) Receivables and payables are offset by an amount of $5,897 million, corresponding to the netting, mainly in trading activities, between receivables and payables with the same counterparty that can legally be settled on a net basis.

As of December 31, 2022 *(M$)* ASSETS/(LIABILITIES)	Amortized cost	Fair value through P&L	Other comprehensive income	Fair value of bonds hedging instruments	Total	Fair value
Equity affiliates: loans	3,733	–	–	–	3,733	3,733
Other investments	–	932	119	–	1,051	1,051
Non-current financial assets	1,428	490	–	813	2,731	2,731
Other non-current assets	2,087	–	–	–	2,087	2,087
Accounts receivable, net[b]	24,378	–	–	–	24,378	24,378
Other operating receivables	8,069	19,529	691	–	28,289	28,289
Current financial assets	7,536	1,071	137	2	8,746	8,746
Cash and cash equivalents	33,026	–	–	–	33,026	33,026
Total financial assets	**80,257**	**22,022**	**947**	**815**	**104,041**	**104,041**
Total non-financial assets					**199,823**	
Total assets					303,864	
Non-current financial debt[a]	(41,235)	(283)	–	(3,746)	(45,264)	(43,471)
Accounts payable[b]	(41,346)	–	–	–	(41,346)	(41,346)
Other operating liabilities	(16,412)	(17,994)	(780)	–	(35,186)	(35,186)
Current borrowings[a]	(15,502)	–	–	–	(15,502)	(15,518)
Other current financial liabilities	–	(226)	–	(262)	(488)	(488)
Total financial liabilities	**(114,495)**	**(18,503)**	**(780)**	**(4,008)**	**(137,786)**	**(136,009)**
Total non-financial liabilities					**(166,078)**	
Total liabilities					(303,864)	

(a) The financial debt is adjusted to the hedged risks value (currency and interest rate) as part of hedge accounting (refer to Note 15 to the Consolidated Financial Statements).
(b) Receivables and payables are offset by an amount of $10,156 million, corresponding to the netting, mainly in trading activities, between receivables and payables with the same counterparty that can legally be settled on a net basis.

Note 15 Financial structure and financial costs

15.1 Financial debt and related financial instruments

A) Non-current financial debt and related financial instruments

As of December 31, 2024 *(M$)*

(ASSETS)/LIABILITIES	Secured	Unsecured	Total
Non-current financial debt	8,518	35,015	43,533
of which hedging instruments of non-current financial debt (liabilities)	–	*2,313*	*2,313*
Non-current financial assets	(1,278)	(1,027)	(2,305)
of which hedging instruments of non-current financial debt (assets)	–	*(546)*	*(546)*
Non-current net financial debt and related financial instruments	**7,240**	**33,988**	**41,228**
Variable rate bonds or bonds after fair value hedge	43	9,712	9,755
Fixed rate bonds or bonds after cash flow hedge	–	23,446	23,446
Other floating rate debt	305	304	609
Other fixed rate debt	348	726	1,074
Lease obligations	7,822	–	7,822
Non-current financial assets excluding derivative financial instruments	(1,278)	(134)	(1,412)
Non-current instruments held for trading	–	(66)	(66)
Non-current net financial debt and related financial instruments	**7,240**	**33,988**	**41,228**

As of December 31, 2023 *(M$)*

(ASSETS)/LIABILITIES	Secured	Unsecured	Total
Non-current financial debt	8,427	32,051	40,478
of which hedging instruments of non-current financial debt (liabilities)	–	*2,198*	*2,198*
Non-current financial assets	(1,166)	(1,229)	(2,395)
of which hedging instruments of non-current financial debt (assets)	–	*(673)*	*(673)*
Non-current net financial debt and related financial instruments	**7,261**	**30,822**	**38,083**
Variable rate bonds or bonds after fair value hedge	–	7,051	7,051
Fixed rate bonds or bonds after cash flow hedge	–	22,839	22,839
Other floating rate debt	430	408	838
Other fixed rate debt	241	840	1,081
Lease obligations	7,756	–	7,756
Non-current financial assets excluding derivative financial instruments	(1,166)	(142)	(1,308)
Non-current instruments held for trading	–	(174)	(174)
Non-current net financial debt and related financial instruments	**7,261**	**30,822**	**38,083**

As of December 31, 2022 *(M$)*

(ASSETS)/LIABILITIES	Secured	Unsecured	Total
Non-current financial debt	8,329	36,935	45,264
of which hedging instruments of non-current financial debt (liabilities)	–	*3,746*	*3,746*
Non-current financial assets	(1,428)	(1,303)	(2,731)
of which hedging instruments of non-current financial debt (assets)	–	*(813)*	*(813)*
Non-current net financial debt and related financial instruments	**6,901**	**35,632**	**42,533**
Variable rate bonds or bonds after fair value hedge	–	8,958	8,958
Fixed rate bonds or bonds after cash flow hedge	–	26,159	26,159
Other floating rate debt	13	227	240
Other fixed rate debt	39	496	535
Lease obligations	8,277	–	8,277
Non-current financial assets excluding derivative financial instruments	(1,428)	–	(1,428)
Non-current instruments held for trading	–	(208)	(208)
Non-current net financial debt and related financial instruments	**6,901**	**35,632**	**42,533**

The bonds, as of December 31, 2024, after taking into account currency and interest rates swaps fair value, are detailed as follows:

Bonds after fair value hedge or variable rate bonds (M$)	Currency of issuance	Amount after December 31, 2024	Amount after December 31, 2023[a]	Amount after December 31, 2022
Bond	USD	6,332	3,542	5,042
Bond	EUR	2,636	3,209	5,574
Bond	Others	1,542	1,539	1,532
Current portion (less than one year)		(1,648)	(2,118)	(3,890)
Principal financing entities[b]		**8,862**	**6,172**	**8,258**
Other consolidated subsidiaries		893	879	700
Total variable rate bonds or bonds after fair value hedge		**9,755**	**7,051**	**8,958**

Bonds after cash flow hedge or fixed rate bonds (M$)	Currency of issuance	Amount after December 31, 2024	Amount after December 31, 2023	Amount after December 31, 2022
Bond	EUR	13,768	15,448	15,628
Bond	USD	10,523	8,301	8,783
Bond	Others	1,048	2,254	2,246
Current portion (less than one year)		(1,909)	(3,175)	(500)
Principal financing entities[b]		**23,430**	**22,828**	**26,157**
Other consolidated subsidiaries		16	11	2
Total fixed rate bonds or bonds after cash flow hedge		**23,446**	**22,839**	**26,159**

(a) The IBOR rate reform mainly impacted the bonds after fair value hedge, on principal financing entities and TotalEnergies SE, indexed on the USD LIBOR rate. At December 31, 2023, the amount of the bonds after fair value hedge (both non-current and current portions) on principal financing entities and TotalEnergies SE was $8,290 million.

(b) All debt securities issued through the following subsidiaries are fully and unconditionally guaranteed by TotalEnergies SE as to payment of principal, premium, if any, interest and any other amounts due:

- TotalEnergies Capital is a wholly and directly owned subsidiary of TotalEnergies SE (except for one share held by each director). It acts as a financing vehicle for TotalEnergies. The repayment of its financial debt (capital, premium and interest) is fully and unconditionally guaranteed by TotalEnergies SE;
- TotalEnergies Capital Canada Ltd. is a wholly and directly owned subsidiary of TotalEnergies SE. It acted as a financing vehicle for the activities of TotalEnergies in Canada. The repayment of its financial debt (capital, premium and interest) is fully and unconditionally guaranteed by TotalEnergies SE;
- TotalEnergies Capital International is a wholly and directly owned subsidiary of TotalEnergies SE (except for one share held by each director). It acts as a financing vehicle for TotalEnergies. The repayment of its financial debt (capital, premium and interest) is fully and unconditionally guaranteed by TotalEnergies SE.

Loan repayment schedule (excluding current portion)

As of December 31, 2024 (M$)	Non-current financial debt	*of which hedging instruments of non-current financial debt (liabilities)*	Non-current financial assets	*of which hedging instruments of non-current financial debt (assets)*	Non-current net financial debt and related financial instruments	%
2026	4,498	*411*	(572)	*(71)*	3,926	10%
2027	3,906	*173*	(292)	*(14)*	3,614	9%
2028	4,596	*391*	(267)	*(135)*	4,329	11%
2029	5,755	*723*	(348)	*(233)*	5,407	13%
2030 and beyond	24,778	*615*	(826)	*(93)*	23,952	57%
Total	43,533	*2,313*	(2,305)	*(546)*	41,228	100%

As of December 31, 2023 (M$)	Non-current financial debt	*of which hedging instruments of non-current financial debt (liabilities)*	Non-current financial assets	*of which hedging instruments of non-current financial debt (assets)*	Non-current net financial debt and related financial instruments	%
2025	5,381	*369*	(434)	*(110)*	4,947	13%
2026	4,013	*323*	(304)	*(102)*	3,709	10%
2027	3,720	*85*	(349)	*(55)*	3,371	9%
2028	4,502	*304*	(246)	*(142)*	4,256	11%
2029 and beyond	22,862	*1,117*	(1,062)	*(264)*	21,800	57%
Total	40,478	*2,198*	(2,395)	*(673)*	38,083	100%

As of December 31, 2022 (M$)	Non-current financial debt	*of which hedging instruments of non-current financial debt (liabilities)*	Non-current financial assets	*of which hedging instruments of non-current financial debt (assets)*	Non-current net financial debt and related financial instruments	%
2024	7,251	*399*	(899)	*(56)*	6,352	15%
2025	4,701	*552*	(259)	*(168)*	4,442	10%
2026	3,465	*467*	(194)	*(107)*	3,271	8%
2027	3,522	*217*	(104)	*(17)*	3,418	8%
2028 and beyond	26,325	*2,111*	(1,275)	*(465)*	25,050	59%
Total	45,264	*3,746*	(2,731)	*(613)*	42,533	100%

Analysis by currency and interest rate

These analyses take into account interest rate and foreign currency swaps to hedge non-current financial net debt.

As of December 31, (M$)	2024	%	2023	%	2022	%
U.S. dollar	38,002	92%	34,789	91%	38,896	91%
Euro	2,206	5%	2,322	6%	2,083	5%
Norwegian krone	43	0%	40	0%	47	0%
Other currencies	977	3%	932	3%	1,507	4%
Total	41,228	100%	38,083	100%	42,533	100%

As of December 31, (M$)	2024	%	2023	%	2022	%
Fixed rate	30,922	75%	30,311	80%	33,533	79%
Floating rate	10,306	25%	7,772	20%	9,000	21%
Total	41,228	100%	38,083	100%	42,533	100%

B) Current financial assets and liabilities

Current borrowings consist mainly of drawings on commercial papers or treasury bills and of bank loans. Current deposits beyond three months include initial margins held as part of the Company's activities on organized markets.

As of December 31, *(M$)*

(ASSETS)/LIABILITIES	2024	2023	2022
Current financial debt[a]	4,462	2,377	8,997
Current lease obligations	2,095	1,721	1,437
Current portion of non-current financial debt	3,467	5,492	5,068
Current borrowings *(Note 14)*	**10,024**	**9,590**	**15,502**
Current portion of hedging instruments of debt (liabilities)	425	268	262
Other current financial instruments (liabilities)	239	178	226
Other current financial liabilities *(Note 14)*	**664**	**446**	**488**
Current deposits beyond three months	(5,476)	(5,450)	(8,127)
Marketable securities	(683)	(519)	(218)
Financial receivables on sub-lease, current	(378)	(329)	(190)
Current portion of hedging instruments of debt (assets)	(29)	(91)	(2)
Other current financial instruments (assets)	(348)	(196)	(209)
Current financial assets *(Note 14)*	**(6,914)**	**(6,585)**	**(8,746)**
Net current borrowings	**3,774**	**3,451**	**7,244**

(a) As of December 31, 2024, December 31, 2023 and December 31, 2022, current financial debt includes notably short-term negotiable debt security issued through programs fully and unconditionally secured by TotalEnergies SE.

C) Cash flow from (used in) financing activities

The variations of financial debt are detailed as follows:

		Non-cash changes						
(M$)	As of January 1, 2024	Cash changes	Change in scope, including IFRS 5 reclassification	Foreign currency	Changes in fair value	Reclassification Non-current/ Current	Other	As of December 31, 2024
Non-current financial instruments - assets[a] and non-current financial assets	(2,395)	–	37	37	132	340	(456)	(2,305)
Non-current financial debt	40,478	7,532	(299)	(241)	(453)	(6,080)	2,596	43,533
Non-current financial debt and related financial instruments	**38,083**	**7,532**	**(262)**	**(204)**	**(321)**	**(5,740)**	**2,140**	**41,228**
Current financial instruments - assets[a]	(616)	609	(2)	20	(107)	(340)	(319)	(755)
Current borrowings	9,590	(5,751)	321	(760)	(138)	6,080	682	10,024
Current financial instruments - liabilities[a]	446	–	(3)	(17)	238	–	–	664
Current financial debt and related financial instruments	**9,420**	**(5,142)**	**316**	**(757)**	**(7)**	**5,740**	**363**	**9,933**
Financial debt and financial assets classified as held for sale	310	–	(261)	(5)	–	–	–	44
Net financial debt	**47,813**	**2,390**	**(207)**	**(966)**	**(328)**	**–**	**2,503**	**51,205**

(a) Fair value or cash flow hedge instruments and other non-hedge debt-related derivative instruments.

(M$)	As of January 1, 2023	Cash changes	Non-cash changes: Change in scope, including IFRS 5 reclassification	Non-cash changes: Foreign currency	Non-cash changes: Changes in fair value	Non-cash changes: Reclassification Non-current/ Current	Non-cash changes: Other	As of December 31, 2023
Non-current financial instruments - assets[a] and non-current financial assets	(2,731)	–	(96)	(21)	353	387	(287)	(2,395)
Non-current financial debt	45,264	130	667	65	(343)	(7,573)	2,268	40,478
Non-current financial debt and related financial instruments	**42,533**	**130**	**571**	**44**	**10**	**(7,186)**	**1,981**	**38,083**
Current financial instruments - assets[a]	(401)	383	(1)	(8)	(68)	(387)	(134)	(616)
Current borrowings	15,502	(14,660)	181	389	121	7,573	484	9,590
Current financial instruments - liabilities[a]	488	–	6	11	(59)	–	–	446
Current financial debt and related financial instruments	**15,589**	**(14,277)**	**186**	**392**	**(6)**	**7,186**	**350**	**9,420**
Financial debt and financial assets classified as held for sale	(38)	–	341	7	–	–	–	310
Net financial debt	**58,084**	**(14,147)**	**1,098**	**443**	**4**	**–**	**2,331**	**47,813**

(a) Fair value or cash flow hedge instruments and other non-hedge debt-related derivative instruments.

(M$)	As of January 1, 2022	Cash changes	Non-cash changes: Change in scope, including IFRS 5 reclassification	Non-cash changes: Foreign currency	Non-cash changes: Changes in fair value	Non-cash changes: Reclassification Non-current/ Current	Non-cash changes: Other	As of December 31, 2022
Non-current financial instruments - assets[a] and non-current financial assets	(2,404)	–	24	52	(448)	198	(153)	(2,731)
Non-current financial debt	49,512	1,108	(696)	(225)	175	(6,981)	2,371	45,264
Non-current financial debt and related financial instruments	**47,108**	**1,108**	**(672)**	**(173)**	**(273)**	**(6,783)**	**2,218**	**42,533**
Current financial instruments - assets[a]	(252)	264	–	6	(97)	(198)	(124)	(401)
Current borrowings	15,035	(6,337)	(316)	(106)	(69)	6,981	314	15,502
Current financial instruments - liabilities[a]	372	–	–	(9)	125	–	–	488
Current financial debt and related financial instruments	**15,155**	**(6,073)**	**(316)**	**(109)**	**(41)**	**6,783**	**190**	**15,589**
Financial debt and financial assets classified as held for sale	(4)	–	(34)	–	–	–	–	(38)
Net financial debt	**62,259**	**(4,965)**	**(1,022)**	**(282)**	**(314)**	**–**	**2,408**	**58,084**

(a) Fair value or cash flow hedge instruments and other non-hedge debt-related derivative instruments.

Monetary changes in non-current financial debt are detailed as follows:

For the year ended December 31, (M$)	2024	2023	2022
Issuance of non-current debt	7,563	189	1,148
Repayment of non-current debt	(31)	(59)	(40)
Net amount	7,532	130	1,108

D) Cash and cash equivalents

Accounting principles

Cash and cash equivalents are composed of cash on hand and highly liquid short-term investments that are easily convertible into known amounts of cash and are subject to insignificant risks of changes in value.

Investments with maturity greater than three months and less than twelve months are shown under "Current financial assets".

Changes in current financial assets and liabilities are included in the financing activities section of the consolidated statement of cash flows.

Cash and cash equivalents are detailed as follows:

For the year ended December 31, (M$)	2024	2023	2022
Cash	17,475	16,956	14,873
Cash equivalents	8,369	10,307	18,153
Total	25,844	27,263	33,026

Cash equivalents are mainly composed of deposits with a maturity of less than three months, deposited in government institutions or deposit banks selected in accordance with strict criteria.

As of December 31, 2024, the cash and cash equivalents include $1,804 million subject to restrictions, notably due to regulatory framework or to the fact they are owned by affiliates located in countries with exchange controls.

E) Net-debt-to-capital ratio

For its internal and external communication needs, TotalEnergies calculates a debt ratio by dividing its net financial debt excluding leases by its capital.

The ratio is calculated as follows: *Net debt excluding leases / (Equity + Net debt excluding leases)*

As of December 31, (M$) (ASSETS)/LIABILITIES	2024	2023	2022
Current borrowings[a]	7,929	7,869	14,065
Other current financial liabilities	664	446	488
Current financial assets[a]	(6,536)	(6,256)	(8,556)
Net financial assets and liabilities held for sale or exchange[a]	33	17	(38)
Non-current financial debt[a]	35,711	32,722	36,987
Non-current financial assets[a]	(1,027)	(1,229)	(1,303)
Cash and cash equivalents	(25,844)	(27,263)	(33,026)
Net financial debt excluding leases	**10,930**	**6,306**	**8,617**
Shareholders' equity - TotalEnergies share	117,858	116,753	111,724
Distribution of the income based on existing shares at the closing date	2,397	2,700	2,846
Shareholders' equity	**120,255**	**119,453**	**114,570**
Net-debt-to-capital ratio excluding leases	**8.3%**	**5.0%**	**7.0%**

(a) Excluding lease receivables & lease debts.

15.2 Fair value of financial instruments (excluding commodity contracts)

Accounting principles

TotalEnergies uses derivative instruments to manage its exposure to risks of changes in interest rates, foreign exchange rates and commodity prices. These financial instruments are accounted for in accordance with IFRS 9, changes in fair value of derivative instruments are recognized in the income statement or in other comprehensive income and are recognized in the balance sheet in the accounts corresponding to their nature, according to the risk management strategy. The derivative instruments used by TotalEnergies are the following:

Cash management

Financial instruments used for cash management purposes are part of a hedging strategy of currency and interest rate risks within global limits set by TotalEnergies and are considered to be held for trading. Changes in fair value are systematically recorded in the income statement. The balance sheet value of those instruments is included in "Current financial assets" or "Other current financial liabilities".

Long-term financing

When an external long-term financing is set up, specifically to finance subsidiaries, and when this financing involves currency and interest rate derivatives, these instruments are qualified as:

1. Fair value hedge of the interest rate and currency risks on the external debt financing the loans to subsidiaries. Changes in fair value of derivatives are recognized in the income statement, as are changes in fair value of underlying financial debts and loans to subsidiaries.

   The fair value of those hedging instruments of long-term financing is included in assets under "Non-current financial assets" or in liabilities under "Non-current financial debt" for the non-current portion. The current portion (less than one year) is accounted for in "Current financial assets" or "Other current financial liabilities".

   In case of the anticipated termination of derivative instruments accounted for as fair value hedges, the amount paid or received is recognized in the income statement and:

   - If this termination is due to an early cancellation of the hedged items, the adjustment previously recorded as revaluation of those hedged items is also recognized in the income statement;
   - If the hedged items remain in the balance sheet, the adjustment previously recorded as a revaluation of those hedged items is amortized over the remaining life of those items.

In case of a change in the strategy of the hedge (fair value hedge to cash flow hedge), if the components of the initial aggregated exposure had already been designated in a hedging relationship (FVH), TotalEnergies designates the new instrument as a hedging instrument of an aggregated position (CFH) without having to end the initial hedging relationship.

2. Cash flow hedge when TotalEnergies implements a strategy of fixing interest rate and/or currency rate on the external debt. Changes in fair value are recorded in other comprehensive income for the effective portion of the hedging and in the income statement for the ineffective portion of the hedging. When the hedged transaction affects profit or loss, the fair value variations of the hedging instrument recorded in equity are also symmetrically recycled to the income statement.

   The fair value of those hedging instruments of long-term financing is included in assets under "Non-current financial assets" or in liabilities under "Non-current financial debt" for the non-current portion. The current portion (less than one year) is accounted for in "Current financial assets" or "Other current financial liabilities".

   If the hedging instrument expires, is sold or terminated by anticipation, gains or losses previously recognized in equity remain in equity. Amounts are recycled to the income statement only when the hedged transaction affects profit or loss.

3. In compliance with IFRS 9, TotalEnergies has decided to recognize in a separate component of the comprehensive income the variation of foreign currency basis spread (Cross Currency Swaps) identified in the hedging relationships qualified as fair value hedges and cash flow hedges.

Foreign subsidiaries' equity hedge

Certain financial instruments hedge against risks related to the equity of foreign subsidiaries whose functional currency is not the euro (mainly the dollar). These instruments qualify as "net investment hedges" and changes in fair value are recorded in other comprehensive income under "Currency translation" for the effective portion of the hedging and in the income statement for the ineffective portion of the hedging. Gains or losses on hedging instruments previously recorded in equity, are reclassified to the income statement in the same period as the total or partial disposal of the foreign activity.

The fair value of these instruments is recorded under "Current financial assets" and "Other current financial liabilities".

Commitments to purchase shares held by non-controlling interests (put options written on minority interests)

Put options granted to non-controlling-interest shareholders are initially recognized as financial liabilities at the present value of the exercise price of the options with a corresponding reduction in shareholders' equity – TotalEnergies share. The financial liability is subsequently measured at fair value at each balance sheet date in accordance with contractual clauses and any variation is recorded in the income statement (cost of debt).

A) Impact on the income statement per nature of financial instruments

Assets and liabilities from financing activities

The impact on the income statement of financing assets and liabilities mainly includes:

- financial income on cash, cash equivalents, and current financial assets (notably current deposits beyond three months) classified as "Loans and receivables";
- financial expense of long-term subsidiaries financing, associated hedging instruments (excluding ineffective portion of the hedge detailed below) and financial expense of short-term financing classified as "Financing liabilities and associated hedging instruments";
- ineffective portion of bond hedging;
- financial income and financial expense on lease contracts and,
- financial income, financial expense and fair value of derivative instruments used for cash management purposes classified as "Assets and liabilities held for trading".

Financial derivative instruments used for cash management purposes (interest rate and foreign exchange) are considered to be held for trading. Based on practical documentation issues, TotalEnergies did not elect to set up hedge accounting for such instruments. The impact on income statement of the derivatives is offset by the impact of loans and current liabilities they are related to. Therefore these transactions taken as a whole do not have a significant impact on the Consolidated Financial Statements.

For the year ended December 31, *(M$)*	2024	2023	2022
Loans and receivables	1,335	1,420	562
Financing liabilities and associated hedging instruments	(2,321)	(2,190)	(1,812)
Fair value hedge (ineffective portion)	1	2	(5)
Lease assets and obligations	(552)	(499)	(458)
Assets and liabilities held for trading	307	248	470
Impact on the cost of net debt	(1,230)	(1,019)	(1,243)

B) Impact of the hedging strategies

Fair value hedge instruments

The impact on the income statement of the bond hedging instruments which is recorded in the item "Financial interest on debt" in the Consolidated Statement of Income is detailed as follows:

For the year ended December 31, *(M$)*	2024	2023	2022
Revaluation impact at market value of bonds	(568)	(765)	3,817
Swaps hedging bonds	569	767	(3,822)
Ineffective portion of the fair value hedge	1	2	(5)

The ineffective portion is not representative of TotalEnergies' performance considering its objective to hold swaps to maturity. The current portion of the swaps valuation is not subject to active management.

Net investment hedge

As of December 31, 2024, 2023 and 2022 TotalEnergies had no open forward contracts held in respect of net investment hedge strategies.

Cash flow hedge

The impact on the income statement and other comprehensive income of the bonds hedging instruments qualified as cash flow hedges is detailed as follows:

For the year ended December 31, *(M$)*	2024	2023	2022
Profit (Loss) recorded in other comprehensive income of the period	448	128	72
Recycled amount from other comprehensive income to the income statement of the period	(260)	140	(55)

As of December 31, 2024, 2023 and 2022, the ineffective portion of these financial instruments is nil.

Hedging instruments and hedged items by strategy

Fair Value Hedge

The following charts regarding Fair Value Hedge, disclose by nature of hedging instruments (Interest Rate Swaps and Cross Currency Swaps):

- the nominal amounts and carrying amounts of hedging instruments;
- the carrying amounts of hedged items and cumulative FVH adjustments included in the carrying amounts of the hedged items;
- the hedged items that have ceased to be adjusted for hedging gains and losses.

For the year ended December 31, 2024 *(M$)* Hedged items	Hedging instruments	Nominal amount of hedging instruments	Carrying amount of hedging instruments		Carrying amount of hedged items		Cumulative FVH adjustments included in the carrying amount of the hedged items		Line items in the statement of financial position
			Assets	Liabilities	Assets	Liabilities	Assets	Liabilities	
Bonds	Interest Rate Swaps	6,250	–	(230)	–	(6,103)	–	147	*Financial debt/ Financial assets*
Bonds	Cross Currency Swaps	4,084	27	(618)	–	(3,588)	–	496	*Financial debt/ Financial assets*
End of hedging (before 2018)		–	–	–	–	–	–	21	

For the year ended December 31, 2023 *(M$)* Hedged items	Hedging instruments	Nominal amount of hedging instruments	Carrying amount of hedging instruments		Carrying amount of hedged items		Cumulative FVH adjustments included in the carrying amount of the hedged items		Line items in the statement of financial position
			Assets	Liabilities	Assets	Liabilities	Assets	Liabilities	
Bonds	Interest Rate Swaps	3,500	–	(86)	–	(3,457)	–	43	*Financial debt/ Financial assets*
Bonds	Cross Currency Swaps	4,671	45	(559)	–	(4,232)	–	439	*Financial debt/ Financial assets*
End of hedging (before 2018)		–	–	–	–	–	–	10	

For the year ended December 31, 2022 *(M$)* Hedged items	Hedging instruments	Nominal amount of hedging instruments	Carrying amount of hedging instruments		Carrying amount of hedged items		Cumulative FVH adjustments included in the carrying amount of the hedged items		Line items in the statement of financial position
			Assets	Liabilities	Assets	Liabilities	Assets	Liabilities	
Bonds	Interest Rate Swaps	5,000	–	(151)	–	(4,892)	–	108	*Financial debt/ Financial assets*
Bonds	Cross Currency Swaps	7,029	–	(1,124)	–	(5,982)	–	1,047	*Financial debt/ Financial assets*
End of hedging (before 2018)		–	–	–	–	–	–	(8)	

Cash flow hedge

The following charts regarding cash flow hedge disclose the nominal amounts and carrying amounts by nature of hedging instruments (interest rate swaps and cross currency swaps).

According to IFRS 9, there is no accounting entry related to cash flow hedge on hedged items.

For the year ended December 31, 2024 *(M$)*	Nature of hedging instruments	Nominal amount of hedging instruments	Carrying amount of hedging instruments		Line items in the statement of financial position
			Assets	Liabilities	
Bonds	Interest Rate Swaps	12,577	543	–	*Financial debt / Financial assets*
Bonds	Cross Currency swaps	15,055	5	(1,890)	*Financial debt / Financial assets*

For the year ended December 31, 2023 *(M$)*	Nature of hedging instruments	Nominal amount of hedging instruments	Carrying amount of hedging instruments		Line items in the statement of financial position
			Assets	Liabilities	
Bonds	Interest Rate Swaps	12,023	611	–	*Financial debt / Financial assets*
Bonds	Cross Currency swaps	17,511	108	(1,821)	*Financial debt / Financial assets*

For the year ended December 31, 2022 *(M$)*	Nature of hedging instruments	Nominal amount of hedging instruments	Carrying amount of hedging instruments		Line items in the statement of financial position
			Assets	Liabilities	
Bonds	Interest Rate Swaps	12,782	815	(2)	*Financial debt / Financial assets*
Bonds	Cross Currency swaps	17,511	–	(2,731)	*Financial debt / Financial assets*

C) Maturity of derivative instruments

The maturity of the notional amounts of derivative instruments, excluding the commodity contracts, is detailed in the following table:

For the year ended December 31, 2024 *(M$)*		Notional value		Notional value schedule					
ASSETS/(LIABILITIES)	Fair value	2025	Fair value	2026 and beyond	2026	2027	2028	2029	2030 and beyond
Fair value hedge									
Swaps hedging bonds (assets)	–	–	27	403					
Swaps hedging bonds (liabilities)	(45)	1,630	(803)	8,301					
Total swaps hedging bonds - fair value hedge	**(45)**	**1,630**	**(776)**	**8,704**	**202**	**820**	**1,000**	**789**	**5,893**
Cash flow hedge									
Swaps hedging bonds (assets)	29	2,428	519	11,317					
Swaps hedging bonds (liabilities)	(380)	2,059	(1,510)	11,828					
Total swaps hedging bonds - cash flow hedge	**(351)**	**4,487**	**(991)**	**23,145**	**4,116**	**2,143**	**4,740**	**5,667**	**6,479**
Forward exchange contracts related to operating activities (assets)	–	94	–	–					
Forward exchange contracts related to operating activities (liabilities)	(13)	271	(23)	634					
Total forward exchange contracts related to operating activities	**(13)**	**365**	**(23)**	**634**	**307**	**327**	**–**	**–**	**–**
Held for trading									
Other interest rate swaps (assets)	154	50,861	342	36,851					
Other interest rate swaps (liabilities)	(124)	59,075	(281)	36,220					
Total other interest rate swaps	**30**	**109,936**	**61**	**73,071**	**52,496**	**8,714**	**2,739**	**2,821**	**6,300**
Currency swaps and forward exchange contracts (assets)	196	17,698	5	322					
Currency swaps and forward exchange contracts (liabilities)	(115)	5,212	–	(45)					
Total currency swaps and forward exchange contracts	**81**	**22,910**	**5**	**277**	**116**	**161**	**–**	**–**	**–**

Notional amounts set the levels of commitment and are indicative nor of a contingent gain or loss neither of a related debt.

For the year ended December 31, 2023 (M$) ASSETS/(LIABILITIES)	Fair value	Notional value 2024	Fair value	Notional value schedule 2025 and beyond	2025	2026	2027	2028	2029 and beyond
Fair value hedge									
Swaps hedging bonds (assets)	–	250	45	403					
Swaps hedging bonds (liabilities)	(75)	1,837	(570)	5,681					
Total swaps hedging bonds - fair value hedge	**(75)**	**2,087**	**(525)**	**6,084**	**1,630**	**202**	**820**	**1,000**	**2,432**
Cash flow hedge									
Swaps hedging bonds (assets)	91	2,114	628	14,830					
Swaps hedging bonds (liabilities)	(193)	1,574	(1,628)	11,016					
Total swaps hedging bonds - cash flow hedge	**(102)**	**3,688**	**(1,000)**	**25,846**	**4,509**	**4,153**	**2,135**	**4,686**	**10,363**
Forward exchange contracts related to operating activities (assets)	2	83	8	311					
Forward exchange contracts related to operating activities (liabilities)	(14)	234	(2)	240					
Total forward exchange contracts related to operating activities	**(12)**	**317**	**6**	**551**	**285**	**266**	**–**	**–**	**–**
Held for trading									
Other interest rate swaps (assets)	149	38,415	393	7,690					
Other interest rate swaps (liabilities)	(94)	37,170	(208)	7,407					
Total other interest rate swaps	**55**	**75,585**	**185**	**15,097**	**8,692**	**1,580**	**1,500**	**1,908**	**1,417**
Currency swaps and forward exchange contracts (assets)	66	10,325	21	1,071					
Currency swaps and forward exchange contracts (liabilities)	(84)	8,513	(32)	773					
Total currency swaps and forward exchange contracts	**(18)**	**18,838**	**(11)**	**1,844**	**1,840**	**(2)**	**6**	**–**	**–**

Notional amounts set the levels of commitment and are indicative nor of a contingent gain or loss neither of a related debt.

For the year ended December 31, 2022 (M$) ASSETS/(LIABILITIES)	Fair value	Notional value 2023	Fair value	Notional value schedule 2024 and beyond	2024	2025	2026	2027	2028 and beyond
Fair value hedge									
Swaps hedging bonds (assets)	–	1,000	–	–					
Swaps hedging bonds (liabilities)	(260)	2,858	(1,015)	8,171					
Total swaps hedging bonds - fair value hedge	**(260)**	**3,858**	**(1,015)**	**8,171**	**2,087**	**1,630**	**202**	**820**	**3,432**
Cash flow hedge									
Swaps hedging bonds (assets)	2	250	813	11,782					
Swaps hedging bonds (liabilities)	(2)	750	(2,731)	17,511					
Total swaps hedging bonds - cash flow hedge	**–**	**1,000**	**(1,918)**	**29,293**	**3,659**	**4,459**	**4,069**	**2,071**	**15,035**
Forward exchange contracts related to operating activities (assets)	4	70	3	91					
Forward exchange contracts related to operating activities (liabilities)	(19)	187	(19)	433					
Total forward exchange contracts related to operating activities	**(15)**	**257**	**(16)**	**524**	**524**	**–**	**–**	**–**	**–**
Held for trading									
Other interest rate swaps (assets)	154	14,955	447	7,470					
Other interest rate swaps (liabilities)	(94)	13,236	(226)	4,128					
Total other interest rate swaps	**60**	**28,191**	**221**	**11,598**	**5,233**	**3,716**	**1,174**	**1,022**	**453**
Currency swaps and forward exchange contracts (assets)	55	7,076	44	1,289					
Currency swaps and forward exchange contracts (liabilities)	(110)	15,964	(57)	839					
Total currency swaps and forward exchange contracts	**(55)**	**23,040**	**(13)**	**2,128**	**391**	**1,737**	**–**	**–**	**–**

Notional amounts set the levels of commitment and are indicative nor of a contingent gain or loss neither of a related debt.

D) Fair value hierarchy

Accounting principles

According to IFRS 13, fair values are estimated for the majority of TotalEnergies' financial instruments, with the exception of publicly traded equity securities and marketable securities for which the market price is used.

Estimations of fair value, which are based on principles such as discounting future cash flows to present value, must be weighted by the fact that the value of a financial instrument at a given time may be influenced by the market environment (liquidity especially), and also the fact that subsequent changes in interest rates and exchange rates are not taken into account.

As a consequence, the use of different estimates, methodologies and assumptions could have a material effect on the estimated fair value amounts.

The methods used are as follows:

Financial debts, swaps

The market value of swaps and of bonds that are hedged by those swaps has been determined on an individual basis by discounting future cash flows with the market curves existing at year-end.

Other financial instruments

The fair value of interest rate swaps and of FRA's (Forward Rate Agreements) is calculated by discounting future cash flows on the basis of market curves existing at year-end after adjustment for interest accrued but unpaid. Forward exchange contracts and currency swaps are valued on the basis of a comparison of the negotiated forward rates with the rates in effect on the financial markets at year-end for similar maturities.

Exchange options are valued based on models commonly used by the market.

The fair value hierarchy for financial instruments, excluding commodity contracts, is as follows:

As of December 31, 2024 *(M$)*	Quoted prices in active markets for identical assets (level 1)	Prices based on observable data (level 2)	Prices based on non observable data (level 3)	Total
Fair value hedge instruments	–	(821)	–	(821)
Cash flow hedge instruments	–	(1,375)	–	(1,375)
Assets and liabilities held for trading	–	174	–	174
Equity instruments	391	–	–	391
Total	391	(2,022)	–	(1,631)

As of December 31, 2023 *(M$)*	Quoted prices in active markets for identical assets (level 1)	Prices based on observable data (level 2)	Prices based on non observable data (level 3)	Total
Fair value hedge instruments	–	(600)	–	(600)
Cash flow hedge instruments	–	(1,104)	–	(1,104)
Assets and liabilities held for trading	–	207	–	207
Equity instruments	255	–	–	255
Total	255	(1,497)	–	(1,242)

As of December 31, 2022 *(M$)*	Quoted prices in active markets for identical assets (level 1)	Prices based on observable data (level 2)	Prices based on non observable data (level 3)	Total
Fair value hedge instruments	–	(1,275)	–	(1,275)
Cash flow hedge instruments	–	(1,950)	–	(1,950)
Assets and liabilities held for trading	–	214	–	214
Equity instruments	33	–	–	33
Total	33	(3,011)	–	(2,978)

15.3 Financial risks management

Financial markets related risks

As part of its financing and cash management activities, TotalEnergies uses derivative instruments to manage its exposure to changes in interest rates and foreign exchange rates. These instruments are mainly interest rate and currency swaps. TotalEnergies may also occasionally use futures contracts and options. These operations and their accounting treatment are detailed in Notes 14, 15.1 and 15.2 to the Consolidated Financial Statements.

Risks relative to cash management operations and to interest rate and foreign exchange financial instruments are managed according to rules set by TotalEnergies' General Management, which provide for regular pooling of available cash balances, open positions and management of the financial instruments by the Treasury Department. Excess cash of TotalEnergies is deposited mainly in government institutions, banking institutions, or major companies through deposits, reverse repurchase agreements and purchase of commercial paper. Liquidity positions and the management of financial instruments are centralized by the Treasury Department, where they are managed by a team specialized in foreign exchange and interest rate market transactions.

The Cash Monitoring-Management Unit within the Treasury Department monitors limits and positions per bank on a daily basis and results of the Front Office. This unit also prepares marked-to-market valuations of used financial instruments and, when necessary, performs sensitivity analyses.

Counterparty risk

TotalEnergies has established standards for market transactions under which any banking counterparty must be approved in advance, based on an assessment of the counterparty's financial solidity (multi-criteria analysis including notably a review of its Credit Default Swap (CDS) level, financial credit ratings, which must be of high standing, and general financial situation).

An overall credit limit is set for each authorised financial counterparty and is allocated amongst the affiliates and TotalEnergies' central treasury entities, according to TotalEnergies' financial needs.

Reform of benchmarks risk

The transition to IBOR indices did not have a significant impact on the financial instruments managed by the Treasury Department of TotalEnergies. The USD LIBOR maturities ceased to be published end of June 2023 and was replaced by the SOFR. Furthermore, in Europe, the Eonia rate ceased to be published on January 3, 2022 and was replaced by the ESTR rate.

Bonds and associated derivatives impacted by the IBOR reform are presented in Note 15.1 "Financial debt and related financial instruments".

Short-term interest rate exposure and cash

Cash balances, primarily composed of euros and dollars, are managed according to the guidelines established by TotalEnergies' General Management (to maintain an adequate level of liquidity, optimize revenue from investments considering existing interest rate yield curves, and minimize the cost of borrowing) based on a daily interest rate benchmark, primarily through short-term interest rate swaps and short-term currency swaps.

Interest rate risk on non-current debt

TotalEnergies' policy consists in incurring long-term debt at a floating or fixed rate, depending on TotalEnergies' general corporate needs and the interest rate environment at the time of issuance, mainly in dollars or euros. Long-term interest rate and currency swaps may be entered into for the purpose of hedging bonds at the time of issuance, synthetically resulting in the incurrence of variable or fixed rate debt. In order to partially alter the interest rate exposure of its long-term indebtedness, TotalEnergies may also enter into long-term interest rate swaps on an *ad-hoc* basis.

Currency exposure

TotalEnergies generally seeks to minimize the currency exposure of each entity to its functional currency (primarily the dollar, the euro, the pound sterling and the Norwegian krone).

For currency exposure generated by commercial activity, the hedging of revenues and costs in foreign currencies is typically performed using currency operations on the spot market and, in some cases, on the forward market. TotalEnergies rarely hedges future cash flows, although it may use options to do so.

With respect to currency exposure linked to non-current assets, TotalEnergies has a hedging policy of financing these assets in their functional currency.

Net short-term currency exposure is periodically monitored against limits set by TotalEnergies' General Management.

The non-current debt described in Note 15.1 to the Consolidated Financial Statements is generally raised by the corporate treasury entities either directly in dollars or in euros, or in other currencies which are then exchanged for dollars or euros through swap issuances to appropriately match general corporate needs. The proceeds from these debt issuances are loaned to affiliates whose accounts are kept in dollars or in euros. Thus, the net sensitivity of these positions to currency exposure is not significant.

TotalEnergies' short-term currency swaps, the notional value of which appears in Note 15.2 to the Consolidated Financial Statements, are used to attempt to optimize the centralized cash management of TotalEnergies. Thus, the sensitivity to currency fluctuations which may be induced is likewise considered negligible.

Sensitivity analysis on interest rate and foreign exchange risk

The tables below present the potential impact of an increase or decrease of 10 basis points on the interest rate yield curves for each of the currencies on the fair value of the current financial instruments as of December 31, 2024, 2023 and 2022.

ASSETS/(LIABILITIES) (M$)	Carrying amount	Estimated fair value	Change in fair value due to a change in interest rate by + 10 basis points	Change in fair value due to a change in interest rate by - 10 basis points
As of December 31, 2024				
Bonds (non-current portion, before swaps)	(31,434)	(31,806)	291	(291)
Swaps hedging bonds (liabilities)	*(2,313)*	*(2,313)*	–	–
Swaps hedging bonds (assets)	*546*	*546*	–	–
Total swaps hedging bonds (assets and liabilities)	(1,767)	(1,767)	(54)	54
Current portion of non-current debt after swaps (excluding lease obligations)	(3,863)	(3,851)	3	(3)
Other interest rates swaps	91	91	3	(3)
Currency swaps and forward exchange contracts	86	86	–	–
As of December 31, 2023				
Bonds (non-current portion, before swaps)	(28,365)	(29,216)	162	(162)
Swaps hedging bonds (liabilities)	*(2,198)*	*(2,198)*	–	–
Swaps hedging bonds (assets)	*673*	*673*	–	–
Total swaps hedging bonds (assets and liabilities)	(1,525)	(1,525)	(12)	12
Current portion of non-current debt after swaps (excluding lease obligations)	(5,669)	(5,680)	(1)	(7)
Other interest rates swaps	240	240	17	(17)
Currency swaps and forward exchange contracts	(29)	(29)	–	–
As of December 31, 2022				
Bonds (non-current portion, before swaps)	(32,184)	(30,391)	210	(210)
Swaps hedging bonds (liabilities)	*(3,746)*	*(3,746)*	–	–
Swaps hedging bonds (assets)	*813*	*813*	–	–
Total swaps hedging bonds (assets and liabilities)	(2,933)	(2,933)	(9)	9
Current portion of non-current debt after swaps (excluding lease obligations)	(5,328)	(5,344)	3	(3)
Other interest rates swaps	281	281	10	(10)
Currency swaps and forward exchange contracts	(68)	(68)	–	–

The impact of changes in interest rates on the cost of net debt before tax is as follows:

For the year ended December 31, (M$)	2024	2023	2022
Cost of net debt	(1,230)	(1,019)	(1,243)
Interest rate translation of:			
+ 10 basis points	15	10	18
- 10 basis points	(15)	(10)	(18)

As a result of the policy for the management of currency exposure previously described, TotalEnergies' sensitivity to currency exposure is primarily influenced by the net equity of the subsidiaries whose functional currency is the euro and to a lesser extent, the pound sterling and the Norwegian krone.

This sensitivity is reflected in the historical evolution of the currency translation adjustment recorded in the statement of changes in consolidated shareholders' equity which, over the course of the last three years, is essentially related to the fluctuation of the euro, the ruble and the pound sterling and is set forth in the table below:

Closing rate	Dollar/Euro exchange rates	Dollar/Pound sterling exchange rates	Dollar/Ruble exchange rates
December 31, 2024	0.96	0.80	113.11
December 31, 2023	0.90	0.79	89.14
December 31, 2022	0.94	0.83	74.01

As of December 31, 2024 *(M$)*	Total	Euro	Dollar	Pound sterling	Ruble	Other currencies
Shareholders' equity at historical exchange rate	**133,117**	20,336	93,078	4,439	–	15,264
Currency translation adjustment before net investment hedge	**(15,254)**	(8,584)	–	(2,372)	–	(4,298)
Net investment hedge - open instruments	**(5)**	(5)	–	–	–	–
Shareholders' equity at exchange rate as of December 31, 2024	**117,858**	11,747	93,078	2,067	–	10,966

As of December 31, 2023 *(M$)*	Total	Euro	Dollar	Pound sterling	Ruble	Other currencies
Shareholders' equity at historical exchange rate	**130,454**	19,198	92,202	4,732	–	14,322
Currency translation adjustment before net investment hedge	**(13,696)**	(7,881)	–	(2,285)	–	(3,530)
Net investment hedge - open instruments	**(5)**	(5)	–	–	–	–
Shareholders' equity at exchange rate as of December 31, 2023	**116,753**	11,312	92,202	2,447	–	10,792

As of December 31, 2022 *(M$)*	Total	Euro	Dollar	Pound sterling	Ruble	Other currencies
Shareholders' equity at historical exchange rate	**124,560**	15,835	88,902	6,258	45	13,520
Currency translation adjustment before net investment hedge	**(12,831)**	(7,170)	–	(2,463)	(30)	(3,168)
Net investment hedge - open instruments	**(5)**	(5)	–	–	–	–
Shareholders' equity at exchange rate as of December 31, 2022	**111,724**	8,660	88,902	3,795	15	10,352

Based on the 2024 financial statements, a conversion using rates different from + or - 10% for each of the currencies below would have the following impact on shareholders equity and net income (TotalEnergies share):

As of December 31, 2024 *(M$)*	Euro	Pound sterling	Ruble
Impact of an increase of 10% of exchange rates on:			
– Shareholders' equity	1,175	207	–
– net income (TotalEnergies share)	183	54	–
Impact of a decrease of (10)% of exchange rates on:			
– Shareholders' equity	(1,175)	(207)	–
– net income (TotalEnergies share)	(183)	(54)	–

Stock market risk

TotalEnergies holds interests in a number of publicly-traded companies (refer to Note 8 to the Consolidated Financial Statements). The market value of these holdings fluctuates due to various factors, including stock market trends, valuations of the sectors in which the companies operate, and the economic and financial condition of each individual company.

Liquidity risk

TotalEnergies SE has committed credit facilities granted by international banks allowing it to benefit from significant liquidity reserves.

As of December 31, 2024, these credit facilities amounted to $10,353 million and were entirely undrawn. The agreements underpinning credit facilities granted to TotalEnergies SE do not contain conditions related to TotalEnergies' financial ratios, to its credit ratings from specialized agencies, or to the occurrence of events that could have a material adverse effect on its financial position.

As of December 31, 2024, the aggregated amount of the main committed credit facilities granted by international banks to the TotalEnergies' companies, including TotalEnergies SE, was $10,919 million, of which $10,779 million were unutilized.

Credit facilities granted to the TotalEnergies' companies other than TotalEnergies SE are not intended to fund TotalEnergies' general corporate purposes; they are intended to fund either general corporate purposes of the borrowing affiliate, or a specific project.

The following tables show the maturity of the financial assets and liabilities of TotalEnergies as of December 31, 2024, 2023 and 2022 (refer to Note 15.1 to the Consolidated Financial Statements).

As of December 31, 2024 *(M$)* ASSETS/(LIABILITIES)	Less than one year	1-2 years	2-3 years	3-4 years	4-5 years	More than 5 years	Total
Non-current financial debt (notional value excluding interests)	–	(4,109)	(3,889)	(4,459)	(5,521)	(24,662)	(42,640)
Non-current financial assets excluding derivative financial instruments	–	183	275	130	114	710	1,412
Current borrowings	(10,024)	–	–	–	–	–	(10,024)
Other current financial liabilities	(664)	–	–	–	–	–	(664)
Current financial assets	6,914	–	–	–	–	–	6,914
Net financial assets and liabilities held for sale or exchange	(44)	–	–	–	–	–	(44)
Cash and cash equivalents	25,844	–	–	–	–	–	25,844
Net amount before financial expense	**22,026**	**(3,926)**	**(3,614)**	**(4,329)**	**(5,407)**	**(23,952)**	**(19,202)**
Financial expense on non-current financial debt	(827)	(822)	(784)	(785)	(608)	(12,802)	(16,628)
Interest differential on swaps	(342)	(295)	(247)	(240)	(183)	(535)	(1,842)
Net amount	20,857	(5,043)	(4,645)	(5,354)	(6,198)	(37,289)	(37,672)

As of December 31, 2023 *(M$)* ASSETS/(LIABILITIES)	Less than one year	1-2 years	2-3 years	3-4 years	4-5 years	More than 5 years	Total
Non-current financial debt (notional value excluding interests)	–	(5,079)	(3,816)	(3,615)	(4,356)	(22,525)	(39,391)
Non-current financial assets excluding derivative financial instruments	–	132	107	244	100	725	1,308
Current borrowings	(9,590)	–	–	–	–	–	(9,590)
Other current financial liabilities	(446)	–	–	–	–	–	(446)
Current financial assets	6,585	–	–	–	–	–	6,585
Net financial assets and liabilities held for sale or exchange	(310)	–	–	–	–	–	(310)
Cash and cash equivalents	27,263	–	–	–	–	–	27,263
Net amount before financial expense	**23,502**	**(4,947)**	**(3,709)**	**(3,371)**	**(4,256)**	**(21,800)**	**(14,581)**
Financial expense on non-current financial debt	(469)	(517)	(460)	(430)	(390)	(4,242)	(6,508)
Interest differential on swaps	(355)	(265)	(261)	(216)	(209)	(537)	(1,843)
Net amount	22,678	(5,729)	(4,430)	(4,017)	(4,855)	(26,579)	(22,932)

As of December 31, 2022 (M$) ASSETS/(LIABILITIES)	Less than one year	1-2 years	2-3 years	3-4 years	4-5 years	More than 5 years	Total
Non-current financial debt (notional value excluding interests)	–	(6,719)	(4,527)	(3,356)	(3,503)	(25,856)	(43,961)
Non-current financial assets excluding derivative financial instruments	–	367	85	85	85	806	1,428
Current borrowings	(15,502)	–	–	–	–	–	(15,502)
Other current financial liabilities	(488)	–	–	–	–	–	(488)
Current financial assets	8,746	–	–	–	–	–	8,746
Net financial assets and liabilities held for sale or exchange	38	–	–	–	–	–	38
Cash and cash equivalents	33,026	–	–	–	–	–	33,026
Net amount before financial expense	**25,820**	**(6,352)**	**(4,442)**	**(3,271)**	**(3,418)**	**(25,050)**	**(16,713)**
Financial expense on non-current financial debt	(662)	(583)	(515)	(449)	(416)	(4,611)	(7,236)
Interest differential on swaps	(431)	(312)	(264)	(272)	(221)	(761)	(2,261)
Net amount	24,727	(7,247)	(5,221)	(3,992)	(4,055)	(30,422)	(26,210)

The following table sets forth financial assets and liabilities related to operating activities as of December 31, 2024, 2023 and 2022 (refer to Note 14 of the notes to the Consolidated Financial Statements).

As of December 31, (M$) ASSETS/(LIABILITIES)	2024	2023	2022
Accounts payable	(39,932)	(41,335)	(41,346)
Other operating liabilities	(20,242)	(19,937)	(35,186)
including derivative financial instruments related to commodity contracts (liabilities)	*(7,680)*	*(7,650)*	*(18,774)*
Accounts receivable, net	19,281	23,442	24,378
Other operating receivables	16,846	14,952	28,289
including derivative financial instruments related to commodity contracts (assets)	*9,072*	*7,012*	*20,220*
Total	(24,047)	(22,878)	(23,865)

These financial assets and liabilities mainly have a maturity date below one year.

Credit risk

Credit risk is defined as the risk of the counterparty to a contract failing to perform or pay the amounts due.

TotalEnergies is exposed to credit risks in its operating and financing activities. TotalEnergies' maximum exposure to credit risk is partially related to financial assets recorded on its balance sheet, including energy derivative instruments that have a positive market value.

The following table presents TotalEnergies' maximum credit risk exposure:

As of December 31, (M$) ASSETS/(LIABILITIES)	2024	2023	2022
Loans to equity affiliates *(Note 8)*	6,533	4,562	3,733
Loans and advances *(Note 6)*	2,175	2,222	1,837
Other non-current financial assets related to operational activities *(Note 6)*	1,677	1,761	250
Non-current financial assets *(Note 15.1)*	2,305	2,395	2,731
Accounts receivable *(Note 5)*	19,281	23,442	24,378
Other operating receivables *(Note 5)*	16,846	14,952	28,289
Current financial assets *(Note 15.1)*	6,914	6,585	8,746
Cash and cash equivalents *(Note 15.1)*	25,844	27,263	33,026
Total	**81,575**	**83,182**	**102,990**

The valuation allowance on accounts receivable, other operating receivables and on loans and advances is detailed in Notes 5 and 6 to the Consolidated Financial Statements.

As part of its credit risk management related to operating and financing activities, TotalEnergies has developed margining agreements with certain counterparties. As of December 31, 2024, the net margin call paid amounted to $3,002 million (against $2,435 million paid as of December 31, 2023 and $2,857 million paid as of December 31, 2022).

TotalEnergies has established a number of programs for the sale of receivables, without recourse, with various banks, primarily to reduce its exposure to such receivables. As a result of these programs TotalEnergies retains no risk of payment default after the sale, but may continue to service the customer accounts as part of a service arrangement on behalf of the buyer and is required to pay to the buyer payments it receives from the customers relating to the receivables sold. As of December 31, 2024, the net value of receivables sold amounted to $9,643 million. TotalEnergies has substantially transferred all the risks and rewards related to receivables. No financial asset or liability remains recognized in the consolidated balance sheet after the date of sale.

Furthermore, in 2024, TotalEnergies conducted several operations of reverse factoring. The value of factored payables outstanding at year-end is $466 million.

Credit risk is managed by TotalEnergies' business segments as follows:

Exploration & Production segment

Risks arising under contracts with government authorities or other oil companies or under long-term supply contracts necessary for the development of projects are evaluated during the project approval process. The long-term aspect of these contracts and the high-quality of the other parties lead to a low level of credit risk.

Risks related to commercial operations, other than those described above (which are, in practice, directly monitored by subsidiaries), are subject to procedures for establishing credit limits and reviewing outstanding balances.

Integrated LNG & Integrated Power segments

Gas & Power activities

Trading of gas & power activities deal with counterparties in the energy, industrial and financial sectors throughout the world. Financial institutions providing credit risk coverage are highly rated international banks and insurance groups.

Potential counterparties are subject to credit assessment and approval before concluding transactions and are thereafter subject to regular review, including re-appraisal and approval of the limits previously granted.

The creditworthiness of counterparties is assessed based on an analysis of quantitative and qualitative data regarding financial standing and business risks, together with the review of any relevant third party and market information, such as data published by rating agencies. On this basis, credit limits are defined for each potential counterparty and, where appropriate, transactions are subject to specific authorizations.

Credit exposure, which is essentially an economic exposure or an expected future physical exposure, is permanently monitored and subject to sensitivity measures.

Credit risk is mitigated by the systematic use of industry standard contractual frameworks that permit netting, enable requiring added security in case of adverse change in the counterparty risk, and allow for termination of the contract upon occurrence of certain events of default.

About the professionals and retail gas and power sales activities, credit risk management policy is adapted to the type of customer either through the use of procedures of prepayments and appropriate collection, especially for mass customers or through credit insurances and sureties/guarantees obtaining. For the Professionals segment, the segregation of duties between the commercial and financial teams allows an "a priori" control of risks.

Other activities

Internal procedures include rules on credit risk management. Procedures to monitor customer risk are defined at the local level, especially for Saft Groupe (rules for the approval of credit limits, use of guarantees, monitoring and assessment of the receivables portfolio).

Refining & Chemicals segment

Refining & Chemicals activities

Credit risk is primarily related to commercial receivables. Internal procedures of Refining & Chemicals include rules for the management of credit describing the fundamentals of internal control in this domain. Each Business Unit implements the procedures of the activity for managing and provisioning credit risk according to the size of the subsidiary and the market in which it operates. The principal elements of these procedures are:

- implementation of credit limits with different authorization schemes;
- use of insurance policies or specific guarantees (letters of credit);
- regular monitoring and assessment of overdue accounts (aging balance), including dunning procedures.

Counterparties are subject to credit assessment and approval prior to any transaction being concluded. Regular reviews are made for all active counterparties including a re-appraisal and renewing of the granted credit limits. The limits of the counterparties are assessed based on quantitative and qualitative data regarding financial standing, together with the review of any relevant third party and market information, such as that provided by rating agencies and insurance companies.

Trading & Shipping activities

Trading & Shipping deals with commercial counterparties and financial institutions located throughout the world. Counterparties to physical and derivative transactions are primarily entities involved in the oil and gas industry or in the trading of energy commodities, or financial institutions. Credit risk coverage is arranged with financial institutions, international banks and insurance groups selected in accordance with strict criteria.

The Trading & Shipping division applies a strict policy of internal delegation of authority in order to set up credit limits by country and counterparty and approval processes for specific transactions. Credit exposures contracted under these limits and approvals are monitored on a daily basis.

Potential counterparties are subject to credit assessment and approval prior to any transaction being concluded and all active counterparties are subject to regular reviews, including re-appraisal and approval of granted limits. The creditworthiness of counterparties is assessed based on an analysis of quantitative and qualitative data regarding financial standing and business risks, together with the review of any relevant third party and market information, such as ratings published by Standard & Poor's, Moody's Investors Service and other credit-rating agencies.

Contractual arrangements are structured so as to maximize the risk mitigation benefits of netting between transactions wherever possible and additional protective terms providing for the provision of security in the event of financial deterioration and the termination of transactions on the occurrence of defined default events are used to the greatest permitted extent.

Credit risks in excess of approved levels are secured by means of letters of credit and other guarantees, cash deposits and insurance arrangements. In respect of derivative transactions, risks are secured by margin call contracts wherever possible.

Marketing & Services segment

Internal procedures for the Marketing & Services division include rules on credit risk that describe the basis of internal control in this domain, including the segregation of duties between commercial and financial operations.

Credit policies are defined at the local level and procedures to monitor customer risk are implemented (credit committees at the subsidiary level, the creation of credit limits for corporate customers, etc.). Each entity also implements monitoring of its outstanding receivables. Risks related to credit may be mitigated or limited by subscription of credit insurance and/or requiring security or guarantees.

Note 16 Financial instruments related to commodity contracts

16.1 Financial instruments related to commodity contracts

Accounting principles

Financial instruments related to commodity contracts, including crude oil, petroleum products, gas, and power purchase/sales contracts within the trading activities, together with the commodity contract derivative instruments and freight rate swaps, are used to adjust TotalEnergies' exposure to price fluctuations within global trading limits. According to the industry practice, these instruments are considered as held for trading. Changes in fair value are recorded in the income statement. The fair value of these instruments is recorded in "Other current assets" or "Other creditors and accrued liabilities" depending on whether they are assets or liabilities.

The valuation methodology is to mark-to-market all open positions for both physical and paper transactions. The valuations are determined on a daily basis using observable market data based on organized and over the counter (OTC) markets. In specific cases when market data is not directly available, the valuations are derived from observable data such as arbitrages, freight or spreads and market corroboration. For valuation of risks which are the result of a calculation, such as options for example, commonly known models are used to compute the fair value.

As of December 31, 2024 (M$) ASSETS/(LIABILITIES)	Gross value before offsetting		Amounts offset		Net balance sheet value presented		Other amounts not offset	Net carrying amount	Fair value[b]
	Assets	Liabilities	Assets[c]	Liabilities[c]	Assets	Liabilities			
Gas & Power activities									
Swaps	117	(129)	(7)	7	110	(122)	–	(12)	(12)
Forwards[a]	8,060	(6,595)	(79)	79	7,981	(6,516)	–	1,465	1,465
Options	277	–	–	–	277	–	–	277	277
Futures	–	–	–	–	–	–	–	–	–
Other/Collateral	–	–	–	–	–	–	403	403	403
Total Gas & Power	**8,454**	**(6,724)**	**(86)**	**86**	**8,368**	**(6,638)**	**403**	**2,133**	**2,133**
Crude oil, petroleum products and freight rates activities									
Petroleum products, crude oil and freight rate swaps	85	(46)	(44)	44	41	(2)	–	39	39
Forwards[a]	656	(1,012)	(14)	14	642	(998)	–	(356)	(356)
Options	70	(102)	(60)	60	10	(42)	–	(32)	(32)
Futures	–	–	–	–	–	–	–	–	–
Options on futures	66	(55)	(55)	55	11	–	–	11	11
Other/Collateral	–	–	–	–	–	–	–	–	–
Total crude oil, petroleum products and freight rates	**877**	**(1,215)**	**(173)**	**173**	**704**	**(1,042)**	**–**	**(338)**	**(338)**
Total	**9,331**	**(7,939)**	**(259)**	**259**	**9,072**	**(7,680)**	**403**	**1,795**	**1,795**
Total of fair value non recognized in the balance sheet									**–**

(a) Forwards: contracts resulting in physical delivery are accounted for as derivative commodity contracts and included in the amounts shown.
(b) When the fair value of derivatives listed on an organized exchange market (futures, options on futures and swaps) is offset with the margin call received or paid in the balance sheet, this fair value is set to zero.
(c) Amounts offset in accordance with IAS 32.

As of December 31, 2023 (M$)	Gross value before offsetting		Amounts offset		Net balance sheet value presented		Other amounts not offset	Net carrying amount	Fair value[b]
ASSETS/(LIABILITIES)	Assets	Liabilities	Assets[c]	Liabilities[c]	Assets	Liabilities			
Gas & Power activities									
Swaps	116	(125)	(27)	27	89	(98)	–	(9)	(9)
Forwards[a]	5,875	(6,369)	(253)	253	5,622	(6,116)	–	(494)	(494)
Options	540	–	–	–	540	–	–	540	540
Futures	2	–	–	–	2	–	–	2	2
Other/Collateral	–	–	–	–	–	–	109	109	109
Total Gas & Power	**6,533**	**(6,494)**	**(280)**	**280**	**6,253**	**(6,214)**	**109**	**148**	**148**
Crude oil, petroleum products and freight rates activities									
Petroleum products, crude oil and freight rate swaps	66	(50)	(28)	28	38	(22)	–	16	16
Forwards[a]	655	(1,348)	(13)	13	642	(1,335)	–	(693)	(693)
Options	23	(97)	(23)	23	–	(74)	–	(74)	(74)
Futures	1	–	–	–	1	–	–	1	1
Options on futures	287	(214)	(209)	209	78	(5)	–	73	73
Other/Collateral	–	–	–	–	–	–	–	–	–
Total crude oil, petroleum products and freight rates	**1,032**	**(1,709)**	**(273)**	**273**	**759**	**(1,436)**	**–**	**(677)**	**(677)**
Total	7,565	(8,203)	(553)	553	7,012	(7,650)	109	(529)	(529)
Total of fair value non recognized in the balance sheet									–

(a) Forwards: contracts resulting in physical delivery are accounted for as derivative commodity contracts and included in the amounts shown.
(b) When the fair value of derivatives listed on an organized exchange market (futures, options on futures and swaps) is offset with the margin call received or paid in the balance sheet, this fair value is set to zero.
(c) Amounts offset in accordance with IAS 32.

As of December 31, 2022 (M$)	Gross value before offsetting		Amounts offset		Net balance sheet value presented		Other amounts not offset	Net carrying amount	Fair value[b]
ASSETS/(LIABILITIES)	Assets	Liabilities	Assets[c]	Liabilities[c]	Assets	Liabilities			
Gas & Power activities									
Swaps	1,268	(449)	(18)	18	1,250	(431)	–	819	819
Forwards[a]	18,014	(18,638)	(1,994)	1,994	16,020	(16,644)	–	(624)	(624)
Options	2,143	(1)	(1)	1	2,142	–	–	2,142	2,142
Futures	13	(3)	–	–	13	(3)	–	10	10
Other/Collateral	–	–	–	–	–	–	(406)	(406)	(406)
Total Gas & Power	**21,438**	**(19,091)**	**(2,013)**	**2,013**	**19,425**	**(17,078)**	**(406)**	**1,941**	**1,941**
Crude oil, petroleum products and freight rates activities									
Petroleum products, crude oil and freight rate swaps	122	(114)	(58)	58	64	(56)	–	8	8
Forwards[a]	631	(1,489)	(7)	7	624	(1,482)	–	(858)	(858)
Options	76	(227)	(69)	69	7	(158)	–	(151)	(151)
Futures	–	–	–	–	–	–	–	–	–
Options on futures	113	(13)	(13)	13	100	–	–	100	100
Other/Collateral	–	–	–	–	–	–	–	–	–
Total crude oil, petroleum products and freight rates	**942**	**(1,843)**	**(147)**	**147**	**795**	**(1,696)**	**–**	**(901)**	**(901)**
Total	22,380	(20,934)	(2,160)	2,160	20,220	(18,774)	(406)	1,040	1,040
Total of fair value non recognized in the balance sheet									–

(a) Forwards: contracts resulting in physical delivery are accounted for as derivative commodity contracts and included in the amounts shown.
(b) When the fair value of derivatives listed on an organized exchange market (futures, options on futures and swaps) is offset with the margin call received or paid in the balance sheet, this fair value is set to zero.
(c) Amounts offset in accordance with IAS 32.

Commitments on crude oil and refined products have, for the most part, a short-term maturity (less than one year).

The changes in fair value of financial instruments related to commodity contracts are detailed as follows:

For the year ended December 31, *(M$)*	Fair value as of January 1,	Impact on income	Settled contracts	Other	Fair value as of December 31,
Gas & Power activities					
2024	39	(345)	2,000	36	1,730
2023	2,347	(5,792)	3,681	(197)	39
2022	6,383	11,406	(15,628)	186	2,347
Crude oil, petroleum products and freight rates activities					
2024	(677)	10,118	(9,779)	–	(338)
2023	(901)	11,033	(10,812)	3	(677)
2022	(137)	5,891	(6,655)	–	(901)

The fair value hierarchy for financial instruments related to commodity contracts is as follows:

As of December 31, 2024 *(M$)*	Quoted prices in active markets for identical assets (level 1)	Prices based on observable data (level 2)	Prices based on non observable data (level 3)	Total
Gas & Power activities	(78)	(38)	1,846	1,730
Crude oil, petroleum products and freight rates activities	13	(351)	–	(338)
Total	(65)	(389)	1,846	1,392

As of December 31, 2023 *(M$)*	Quoted prices in active markets for identical assets (level 1)	Prices based on observable data (level 2)	Prices based on non observable data (level 3)	Total
Gas & Power activities	1,054	1,677	(2,692)	39
Crude oil, petroleum products and freight rates activities	73	(750)	–	(677)
Total	1,127	927	(2,692)	(638)

As of December 31, 2022 *(M$)*	Quoted prices in active markets for identical assets (level 1)	Prices based on observable data (level 2)	Prices based on non observable data (level 3)	Total
Gas & Power activities	1,034	1,678	(365)	2,347
Crude oil, petroleum products and freight rates activities	98	(999)	–	(901)
Total	1,132	679	(365)	1,446

Financial instruments classified as level 3 are mainly composed of long-term liquefied natural gas purchase and sale contracts which relate to the trading activity.

The management of positions is carried out on the basis of a net value of LNG purchase and sale commitments; the valuation of contracts is based on observable market data, such as commodity forward prices, but it also takes into account unobservable data on contract performance (assumptions on the variable terms of the contracts, on the availability of infrastructures, on the performance of counterparties...).

The valuation of LNG contracts is sensitive to changes in oil and natural gas prices on North American, Asian and European markets, as well as to these assumptions on contract performance.

TotalEnergies' management horizon is 12 months in 2024 (as in 2023 and 2022), and includes the full annual delivery program of LNG cargoes for the following year.

The analysis of the fair value of the LNG portfolio over the period beyond 12 months carried out by the Company, allows to verify that there is no material asset or liability to be recognized in its accounts for that period. This analysis, which takes into account the specific characteristics of LNG contracts and of the gas market, including its liquidity, incorporates valuation parameters that are unobservable over this period, in particular Company internal assumptions on the long-term evolution of hydrocarbon prices, the execution of contracts and the performance of counterparties, the renegotiation of price terms in contracts or the exercise of their contractual flexibilities.

The description of each fair value level is presented in Note 15 to the Consolidated Financial Statements.

Cash flow hedge

The impact on the income statement and other comprehensive income of the hedging instruments related to commodity contracts and qualified as cash flow hedges is detailed as follows:

As of December 31 *(M$)*	2024	2023	2022
Profit (Loss) recorded in other comprehensive income of the period	2,670	2,770	(5,524)
Recycled amount from other comprehensive income to the income statement of the period	(2,671)	117	1,317

These financial instruments are mainly European gas, power and CO_2 emission rights derivatives.

As of December 31, 2024, the ineffective portion of these financial instruments is $127 million (the ineffective portion of the financial instruments was $124 million in 2023 and $132 million in 2022).

16.2 Oil, Gas and Power markets related risks management

Due to the nature of its business, TotalEnergies has significant oil and gas trading activities as part of its day-to-day operations in order to optimize revenues from its oil and gas production and to obtain favorable pricing to supply its refineries.

In its international oil trading business, TotalEnergies usually follows a policy of not selling its future production. However, in connection with this trading business, TotalEnergies, like most other oil companies, uses energy derivative instruments to adjust its exposure to price fluctuations of crude oil, refined products, natural gas, and power. TotalEnergies also uses freight rate derivative contracts in its shipping business to adjust its exposure to freight-rate fluctuations. To hedge against this risk, TotalEnergies uses various instruments such as futures, forwards, swaps and options on organized markets or over-the-counter markets. The list of the different derivatives held by TotalEnergies in these markets is detailed in Note 16.1 to the Consolidated Financial Statements.

As part of its gas and power trading activity, TotalEnergies also uses derivative instruments such as futures, forwards, swaps and options in both organized and over-the-counter markets. In general, the transactions are settled at maturity date through physical delivery. TotalEnergies measures its market risk exposure, *i.e.* potential loss in fair values, on its trading business using a "value-at-risk" technique. This technique is based on a historical model and makes an assessment of the market risk arising from possible future changes in market values over a one-day period. The calculation of the range of potential changes in fair values takes into account a snapshot of the end-of-day exposures and the set of historical price movements for the past two years for all instruments and maturities in the global trading business.

Gas & Power division trading: "value-at-risk" with a 97.5% probability

As of December 31, *(M$)*	High	Low	Average	Year end
2024	139	19	54	77
2023	111	16	54	54
2022	119	15	53	92

The Trading & Shipping division measures its market risk exposure, *i.e.* potential loss in fair values, on its crude oil, refined products and freight rates trading activities using a "value-at-risk" technique. This technique is based on a historical model and makes an assessment of the market risk arising from possible future changes in market values over a 24-hour period. The calculation of the range of potential changes in fair values is based on the end-of-day exposures and historical price movements of the last 400 business days for all traded instruments and maturities. Options are systematically re-evaluated using appropriate models.

The "value-at-risk" represents the most unfavorable movement in fair value obtained with a 97.5% confidence level. This means that TotalEnergies' portfolio result is likely to exceed the value-at-risk loss measure once over 40 business days if the portfolio exposures were left unchanged.

Trading & Shipping: "value-at-risk with" a 97.5% probability

As of December 31, *(M$)*	High	Low	Average	Year end
2024	53	8	24	16
2023	74	17	37	28
2022	48	9	22	27

TotalEnergies has implemented strict policies and procedures to manage and monitor these market risks. These are based on the separation of control and front-office functions and on an integrated information system that enables real-time monitoring of trading activities.

Limits on trading positions are approved by TotalEnergies' Executive Committee and are monitored daily. To increase flexibility and encourage liquidity, hedging operations are performed with numerous independent operators, including other oil companies, major energy producers or consumers and financial institutions. TotalEnergies has established counterparty limits and monitors outstanding amounts with each counterparty on an ongoing basis.

Note 17 Post closing events

There are no post-balance sheet events that could have a material impact on the Company's financial statements.

Note 18 Consolidation scope

As of December 31, 2024, 1,441 entities are consolidated of which 199 are accounted for under the equity method (E).

The table below presents a comprehensive list of the consolidated entities:

Business segment	Statutory corporate name	% Company interest	Method	Country of incorporation	Country of operations
Exploration & Production					
	Abu Dhabi Gas Industries Limited	15.00%	E	United Arab Emirates	United Arab Emirates
	Angola LNG Supply Services, LLC	13.60%	E	United States	United States
	Bayou Bend CCS OpCo LLC	25.00%	E	United States	United States
	Bonny Gas Transport Limited	15.00%	E	Bermuda	Nigeria
	Brass Holdings B.V.	100.00%		Netherlands	Nigeria
	Brass LNG Limited	20.48%	E	Nigeria	Nigeria
	Congo Forest Company (CFC)	100.00%		Congo	Congo
	Dolphin Energy Limited	24.50%	E	United Arab Emirates	United Arab Emirates
	E.F. Oil And Gas Limited	100.00%		United Kingdom	United Kingdom
	East African Crude Oil Pipeline (EACOP) Ltd	62.00%	E	United Kingdom	Uganda
	Elf E&P	100.00%		France	France
	Elf Exploration UK Limited	100.00%		United Kingdom	United Kingdom
	Elf Petroleum Iran	100.00%		France	Iran
	Elf Petroleum UK Limited	100.00%		United Kingdom	United Kingdom
	Gas Investment and Services Company Limited	10.00%	E	Bermuda	Oman
	Global Forestry Development (GFD)	49.00%	E	Belgium	Belgium
	Luna Carbon Storage ANS	40.00%	E	Norway	Norway
	Mabruk Oil Operations	49.02%		France	Libya
	Net Zero North Sea Storage Holdings Ltd	10.00%	E	United Kingdom	United Kingdom
	Norpipe Oil AS	34.93%	E	Norway	Norway
	Norpipe Petroleum UK Limited	45.22%	E	United Kingdom	Norway
	Norpipe Terminal Holdco Limited	45.22%	E	United Kingdom	Norway
	Norsea Pipeline Limited	45.22%	E	United Kingdom	Norway
	North Oil Company	30.00%	E	Qatar	Qatar
	Northern Lights JV DA	33.33%	E	Norway	Norway
	Pars LNG Limited	40.00%	E	Bermuda	Iran
	Private Oil Holdings Oman Limited	10.00%	E	United Kingdom	Oman
	SapuraOMV Block 30 S.de R.L. de C.V.	100.00%		Mexico	Mexico
	Stogg Eagle Funding B.V.	100.00%		Netherlands	Nigeria
	TOQAP Guyana B.V.	60.00%		Netherlands	Guyana
	Total Austral	100.00%		France	Argentina
	Total E&P Al Shaheen A/S	100.00%		Denmark	Qatar
	Total E&P Angola Block 15/06	100.00%		France	Angola
	Total E&P Angola Block 33	100.00%		France	Angola
	Total E&P Angola Block 39	100.00%		France	Angola
	Total E&P Chine	100.00%		France	China
	Total E&P Guyane Francaise	100.00%		France	France
	Total E&P Jutland Denmark B.V.	100.00%		Netherlands	Denmark
	Total E&P Kurdistan Region of Iraq (Harir) B.V.	100.00%		Netherlands	Iraq
	Total E&P Kurdistan Region of Iraq (Safen) B.V.	100.00%		Netherlands	Iraq
	Total E&P Kurdistan Region of Iraq (Taza) B.V.	100.00%		Netherlands	Iraq
	Total E&P Kurdistan Region of Iraq B.V.	100.00%		Netherlands	Iraq

Business segment	Statutory corporate name	% Company interest	Method	Country of incorporation	Country of operations
Exploration & Production (continued)					
	Total E&P M2 Holdings Limited	100.00%		South Africa	South Africa
	Total E&P Participations Petrolieres Congo	100.00%		Congo	Congo
	Total E&P Philippines B.V.	100.00%		Netherlands	Philippines
	Total E&P Services China Company Limited	100.00%		China	China
	Total E&P South Pars	100.00%		France	Iran
	Total E&P South Sudan	100.00%		France	South Sudan
	Total E&P Syrie	100.00%		France	Syria
	Total E&P Tajikistan B.V.	100.00%		Netherlands	Tajikistan
	Total Oil and Gas South America	100.00%		France	France
	Total Pars LNG	100.00%		France	France
	Total South Pars	100.00%		France	Iran
	TotalEnergies Anchor USA LLC	100.00%		United States	United States
	TotalEnergies BTC B.V.	100.00%		Netherlands	Azerbaijan
	TotalEnergies Carbon Solutions	100.00%		France	France
	TotalEnergies CCS UK Ltd	100.00%		United Kingdom	United Kingdom
	TotalEnergies CCS USA, LLC	100.00%		United States	United States
	TotalEnergies Denmark ASW	100.00%		United States	Denmark
	TotalEnergies Denmark ASW Pipeline ApS	100.00%		Denmark	Denmark
	TotalEnergies E&P Algerie	100.00%		France	Algeria
	TotalEnergies E&P Algerie Berkine A/S	100.00%		Denmark	Algeria
	TotalEnergies E&P Americas LLC	100.00%		United States	United States
	TotalEnergies E&P Colombie	100.00%		France	Colombia
	TotalEnergies E&P New Ventures Inc.	100.00%		United States	United States
	TotalEnergies E&P North Sea UK Ltd	100.00%		United Kingdom	United Kingdom
	TotalEnergies E&P Research & Technology USA LLC	100.00%		United States	United States
	TotalEnergies E&P UK Ltd	100.00%		United Kingdom	United Kingdom
	TotalEnergies E&P USA Inc.	100.00%		United States	United States
	TotalEnergies E&P USA Oil Shale LLC	100.00%		United States	United States
	TotalEnergies E&P USA Well Containment LLC	100.00%		United States	United States
	TotalEnergies East Africa Midstream B.V.	100.00%		Netherlands	Uganda
	TotalEnergies EP Absheron B.V.	100.00%		Netherlands	Azerbaijan
	TotalEnergies EP Abu Al Bu Khoosh	100.00%		France	United Arab Emirates
	TotalEnergies EP Angola	100.00%		France	Angola
	TotalEnergies EP Angola Block 16	100.00%		France	Angola
	TotalEnergies EP Angola Block 16 Holdings	100.00%		France	Angola
	TotalEnergies EP Angola Block 16-21	100.00%		France	Angola
	TotalEnergies EP Angola Block 17.06	100.00%		France	Angola
	TotalEnergies EP Angola Block 20	100.00%		France	Angola
	TotalEnergies EP Angola Block 25	100.00%		France	Angola
	TotalEnergies EP Angola Block 29	100.00%		France	Angola
	TotalEnergies EP Angola Block 32	100.00%		France	Angola
	TotalEnergies EP Angola Block 40	100.00%		France	Angola
	TotalEnergies EP Angola Block 48 B.V.	100.00%		Netherlands	Angola
	TotalEnergies EP Aotearoa Sdn Bhd	100.00%		Malaysia	New Zealand
	TotalEnergies EP Asia Pacific Pte. Ltd	100.00%		Singapore	Singapore
	TotalEnergies EP Azerbaijan B.V.	100.00%		Netherlands	Azerbaijan
	TotalEnergies EP Block 9	100.00%		France	Lebanon
	TotalEnergies EP Bolivie	100.00%		France	Bolivia
	TotalEnergies EP Brasil Ltda	100.00%		Brazil	Brazil
	TotalEnergies EP Bulgaria B.V.	100.00%		Netherlands	Bulgaria
	TotalEnergies EP Cambodge	100.00%		France	Cambodia
	TotalEnergies EP Chissonga	100.00%		France	Angola
	TotalEnergies EP Company UK Ltd	100.00%		United Kingdom	United Kingdom
	TotalEnergies EP Congo	85.00%		Congo	Congo

Business segment	Statutory corporate name	% Company interest	Method	Country of incorporation	Country of operations
Exploration & Production (continued)					
	TotalEnergies EP Cyprus B.V.	100.00%		Netherlands	Cyprus
	TotalEnergies EP Danmark A/S	100.00%		Denmark	Denmark
	TotalEnergies EP Danmark A/S - CPH	100.00%		Denmark	Denmark
	TotalEnergies EP Dolphin Holdings	100.00%		France	France
	TotalEnergies EP Dolphin Midstream	100.00%		France	France
	TotalEnergies EP Dolphin Upstream	100.00%		France	Qatar
	TotalEnergies EP France	100.00%		France	France
	TotalEnergies EP Gabon	58.28%		Gabon	Gabon
	TotalEnergies EP Gass Handel Norge AS	100.00%		Norway	Norway
	TotalEnergies EP Gastransport Nederland B.V.	100.00%		Netherlands	Netherlands
	TotalEnergies EP Golfe	100.00%		France	Qatar
	TotalEnergies EP Greece B.V.	100.00%		Netherlands	Greece
	TotalEnergies EP Guyana B.V.	100.00%		Netherlands	Guyana
	TotalEnergies EP Holdings Russia	100.00%		France	France
	TotalEnergies EP Holdings UAE B.V.	100.00%		Netherlands	United Arab Emirates
	TotalEnergies EP International K1 Ltd	100.00%		United Kingdom	Kenya
	TotalEnergies EP International K2 Ltd	100.00%		United Kingdom	Kenya
	TotalEnergies EP International K3 Ltd	100.00%		United Kingdom	Kenya
	TotalEnergies EP International Ltd	100.00%		United Kingdom	Kenya
	TotalEnergies EP Iran B.V.	100.00%		Netherlands	Iran
	TotalEnergies EP Iraq	100.00%		France	Iraq
	TotalEnergies EP Italia S.p.A.	100.00%		Italy	Italy
	TotalEnergies EP Kazakhstan	100.00%		France	Kazakhstan
	TotalEnergies EP Kenya B.V.	100.00%		Netherlands	Kenya
	TotalEnergies EP Liban S.A.L.	100.00%		Lebanon	Lebanon
	TotalEnergies EP Libye	100.00%		France	Libya
	TotalEnergies EP Lower Zakum B.V.	100.00%		Netherlands	United Arab Emirates
	TotalEnergies EP Malaysia	100.00%		France	Malaysia
	TotalEnergies EP Mauritania Block C18 B.V.	100.00%		Netherlands	Mauritania
	TotalEnergies EP Mauritania Block C9 B.V.	100.00%		Netherlands	Mauritania
	TotalEnergies EP Mauritania Blocks DW B.V.	100.00%		Netherlands	Mauritania
	TotalEnergies EP Mauritanie	100.00%		France	Mauritania
	TotalEnergies EP M'Bridge B.V.	100.00%		Netherlands	Angola
	TotalEnergies EP Mexico S.A. de C.V.	100.00%		Mexico	Mexico
	TotalEnergies EP Myanmar	100.00%		France	Myanmar
	TotalEnergies EP Namibia B.V.	100.00%		Netherlands	Namibia
	TotalEnergies EP Nederland B.V.	100.00%		Netherlands	Netherlands
	TotalEnergies EP Nigeria Deepwater A Ltd	100.00%		Nigeria	Nigeria
	TotalEnergies EP Nigeria Deepwater B Ltd	100.00%		Nigeria	Nigeria
	TotalEnergies EP Nigeria Deepwater C Ltd	100.00%		Nigeria	Nigeria
	TotalEnergies EP Nigeria Deepwater D Ltd	100.00%		Nigeria	Nigeria
	TotalEnergies EP Nigeria Deepwater E Ltd	100.00%		Nigeria	Nigeria
	TotalEnergies EP Nigeria Deepwater F Ltd	100.00%		Nigeria	Nigeria
	TotalEnergies EP Nigeria Deepwater G Ltd	100.00%		Nigeria	Nigeria
	TotalEnergies EP Nigeria Deepwater H Ltd	100.00%		Nigeria	Nigeria
	TotalEnergies EP Nigeria Ltd	100.00%		Nigeria	Nigeria
	TotalEnergies EP Nigeria S.A.S.	100.00%		France	France
	TotalEnergies EP Norge AS	100.00%		Norway	Norway
	TotalEnergies EP Oman Block 11 B.V.	100.00%		France	Oman
	TotalEnergies EP Oman S.A.S.	100.00%		France	Oman
	TotalEnergies EP Petroleum Angola	100.00%		France	Angola
	TotalEnergies EP Pipelines Danmark A/S	100.00%		Denmark	Denmark
	TotalEnergies EP Profils Petroliers	100.00%		France	France
	TotalEnergies EP Qatar	100.00%		France	Qatar

Business segment	Statutory corporate name	% Company interest	Method	Country of incorporation	Country of operations
Exploration & Production (continued)					
	TotalEnergies EP Qatar 2	100.00%		France	Qatar
	TotalEnergies EP Ratawi Hub	100.00%		France	Iraq
	TotalEnergies EP Russie	100.00%		France	Russia
	TotalEnergies EP Sao Tome and Principe B.V.	100.00%		Netherlands	Angola
	TotalEnergies EP Sebuku	100.00%		France	Indonesia
	TotalEnergies EP Senegal	100.00%		France	Senegal
	TotalEnergies EP Services Brazil B.V.	100.00%		Netherlands	Netherlands
	TotalEnergies EP South Africa Block 567 (Pty) Ltd	100.00%		South Africa	South Africa
	TotalEnergies EP South Africa S.A.S.	100.00%		France	South Africa
	TotalEnergies EP Suriname B.V.	100.00%		Netherlands	Suriname
	TotalEnergies EP Thailand	100.00%		France	Thailand
	TotalEnergies EP UAE Unconventional Gas B.V.	100.00%		Netherlands	United Arab Emirates
	TotalEnergies EP Uganda S.A.S.	100.00%		France	Uganda
	TotalEnergies EP Umm Lulu SARB	100.00%		France	United Arab Emirates
	TotalEnergies EP Umm Shaif Nasr B.V.	100.00%		Netherlands	United Arab Emirates
	TotalEnergies EP Vostok LLC	100.00%		Russia	Russia
	TotalEnergies EP Waha	100.00%		France	Libya
	TotalEnergies EP Well Response	100.00%		France	France
	TotalEnergies EP Western Australia Pty Ltd	100.00%		Australia	Australia
	TotalEnergies EP Yemen	100.00%		France	Yemen
	TotalEnergies EP Yemen Block 3 B.V.	100.00%		Netherlands	Yemen
	TotalEnergies Holdings EACOP S.A.S.	100.00%		France	Uganda
	TotalEnergies Holdings International B.V.	100.00%		Netherlands	Netherlands
	TotalEnergies Holdings Nederland B.V.	100.00%		Netherlands	Netherlands
	TotalEnergies Jack USA LLC	100.00%		United States	United States
	TotalEnergies LNG Supply Services USA	100.00%		United States	United States
	TotalEnergies Nature Based Solutions	100.00%		France	France
	TotalEnergies Nature Based Solutions II	100.00%		France	France
	TotalEnergies Nederland Facilities Management B.V.	100.00%		Netherlands	Netherlands
	TotalEnergies Offshore GB Ltd	100.00%		United Kingdom	United Kingdom
	TotalEnergies Offshore UK Ltd	100.00%		United Kingdom	United Kingdom
	TotalEnergies Petroleo & Gas Brasil Ltda	100.00%		Brazil	Brazil
	TotalEnergies Shipping Brazil B.V.	100.00%		Netherlands	Brazil
	TotalEnergies Upstream Danmark A/S	100.00%		Denmark	Denmark
	TotalEnergies Upstream Nigeria	100.00%		Nigeria	Nigeria
	TotalEnergies Upstream UK Ltd	100.00%		United Kingdom	United Kingdom
	Uintah Colorado Resources II, LLC	100.00%		United States	United States
	Uintah Colorado Resources, LLC	66.67%		United States	United States
Integrated LNG					
	Abu Dhabi Gas Liquefaction Company Limited	5.00%	E	United Arab Emirates	United Arab Emirates
	Adani Total Gas Ltd (d)	37.40%	E	India	India
	Adani Total LNG Singapore Pte. Ltd	50.00%	E	Singapore	Singapore
	Adani Total Private Limited	50.00%	E	India	India
	Angola LNG Ltd	13.60%	E	Bermuda	Angola
	BioBearn S.A.S.	100.00%		France	France
	BioDeac S.A.S.	65.00%	E	France	France
	BioGasconha S.A.S.	100.00%		France	France
	Biogaz Breuil	100.00%		France	France
	Biogaz Chatillon	100.00%		France	France
	Biogaz Corcelles	100.00%		France	France
	Biogaz Epinay	100.00%		France	France
	Biogaz Libron	100.00%		France	France
	Biogaz Milhac	100.00%		France	France
	Biogaz Soignolles	100.00%		France	France

Business segment	Statutory corporate name	% Company interest	Method	Country of incorporation	Country of operations
Integrated LNG (continued)					
	Biogaz Torcy	100.00%		France	France
	Biogaz Vert Le Grand	100.00%		France	France
	Biogaz Viriat	100.00%		France	France
	BioLoie S.A.S.	55.00%	E	France	France
	BioPommeria S.A.S.	100.00%		France	France
	BioQuercy S.A.S.	66.00%	E	France	France
	Bioroussillon S.A.S.	100.00%		France	France
	Biovilleneuvois S.A.S.	100.00%		France	France
	Cameron LNG Holdings LLC	16.60%	E	United States	United States
	Del Rio Funding LLC (a)	59.53%	E	United States	United States
	ECA LNG Holdings B.V.	16.60%	E	Netherlands	Netherlands
	Fonroche Energies Renouvelables S.A.S.	100.00%		France	France
	Gas Del Litoral SRLCV	25.00%	E	Mexico	Mexico
	Global LNG North America Corporation	100.00%		United States	United States
	Global LNG S.A.S.	100.00%		France	France
	Greenflex Actirent Group, S.L.	100.00%		Spain	Spain
	Greenflex S.A.S.	100.00%		France	France
	Gulf Total Tractebel Power Company PSJC	20.00%	E	United Arab Emirates	United Arab Emirates
	Ichthys LNG Pty Limited	26.00%	E	Australia	Australia
	Margeriaz Energie	100.00%		France	France
	Marsa LNG, LLC	80.00%	E	Oman	Oman
	Methanergy	100.00%		France	France
	Moz LNG1 Co-Financing Company	26.50%		Mozambique	Mozambique
	Moz LNG1 Holding Company Ltd	26.50%		United Arab Emirates	United Arab Emirates
	Mozambique LNG Marine Terminal Company S.A.	26.50%		Mozambique	Mozambique
	Mozambique LNG1 Financing Company Ltd	26.50%		United Arab Emirates	United Arab Emirates
	Mozambique MOF Company S.A.	26.50%		Mozambique	Mozambique
	National Gas Shipping Company Limited	5.00%	E	United Arab Emirates	United Arab Emirates
	Nigeria LNG Limited	15.00%	E	Nigeria	Nigeria
	Oman LNG, LLC	5.54%	E	Oman	Oman
	Papua LNG Development Pte Ltd	100.00%		Singapore	Papua New Guinea
	PGB Energetyka	100.00%		Poland	Poland
	PGB Energetyka 1	100.00%		Poland	Poland
	PGB Energetyka 2	100.00%		Poland	Poland
	PGB Energetyka 3	100.00%		Poland	Poland
	PGB Energetyka 4	100.00%		Poland	Poland
	PGB Energetyka 5	100.00%		Poland	Poland
	PGB Energetyka 6	100.00%		Poland	Poland
	PGB Energetyka 7	100.00%		Poland	Poland
	PGB Energetyka 8	100.00%		Poland	Poland
	PGB Energetyka 9	100.00%		Poland	Poland
	PGB Energetyka 10	100.00%		Poland	Poland
	PGB Energetyka 11	100.00%		Poland	Poland
	PGB Energetyka 12	100.00%		Poland	Poland
	PGB Energetyka 13	100.00%		Poland	Poland
	PGB Energetyka 14	100.00%		Poland	Poland
	PGB Energetyka 15	100.00%		Poland	Poland
	PGB Energetyka 16	100.00%		Poland	Poland
	PGB Energetyka 17	100.00%		Poland	Poland
	PGB Energetyka 18	100.00%		Poland	Poland
	PGB Energetyka 19	100.00%		Poland	Poland
	PGB Energetyka 20	100.00%		Poland	Poland
	PGB Energetyka 21	100.00%		Poland	Poland

Business segment	Statutory corporate name	% Company interest	Method	Country of incorporation	Country of operations
Integrated LNG (continued)					
	PGB Energetyka 22	100.00%		Poland	Poland
	PGB Energetyka 23	100.00%		Poland	Poland
	PGB Energetyka 24	100.00%		Poland	Poland
	PGB Energetyka 25	100.00%		Poland	Poland
	PGB Energetyka 26	100.00%		Poland	Poland
	PGB Energetyka 27	100.00%		Poland	Poland
	PGB Energetyka 28	100.00%		Poland	Poland
	PGB Inwestycje	100.00%		Poland	Poland
	PGB Serwis	100.00%		Poland	Poland
	Polska Grupa Biogazowa S.A.	100.00%		Poland	Poland
	Qatar Liquefied Gas Company Limited (II)	16.70%	E	Qatar	Qatar
	Qatar Liquified Gas Company Limited 10 (QG10) - NFS Project	25.00%	E	Qatar	Qatar
	Qatar Liquified Gas Company Limited 5 (QG5) - NFE Project	25.00%	E	Qatar	Qatar
	Rio Grande LNG Intermediate Holdings, LLC (b)	20.31%	E	United States	United States
	South Hook LNG Terminal Company Limited	8.35%	E	United Kingdom	United Kingdom
	Total E&P East El Burullus Offshore B.V.	100.00%		Netherlands	Egypt
	Total E&P Egypt Block 2 B.V.	100.00%		Netherlands	Egypt
	Total E&P Indonesie	100.00%		France	Indonesia
	Total Eren H2	80.00%	E	France	France
	Total Shenergy LNG (Shanghai) Co., Ltd.	49.00%	E	China	China
	TotalEnergies Australia Unit Trust (c)	0.00%		Australia	Australia
	TotalEnergies Biogas Holdings USA, LLC	100.00%		United States	United States
	TotalEnergies Biogaz France	100.00%		France	France
	TotalEnergies CCS Australia Pty Ltd	100.00%		Australia	Australia
	TotalEnergies E&P SW Texas, LLC	100.00%		United States	United States
	TotalEnergies E&P Yamal	100.00%		France	France
	TotalEnergies EP Angola Developpement Gaz	100.00%		France	Angola
	TotalEnergies EP Australia	100.00%		France	Australia
	TotalEnergies EP Australia II	100.00%		France	Australia
	TotalEnergies EP Australia III	100.00%		France	Australia
	TotalEnergies EP Barnett USA	100.00%		United States	United States
	TotalEnergies EP CentralAmerica Sdn Bhd	100.00%		Malaysia	Malaysia
	TotalEnergies EP Egypt North Ras Kanayis Offshore B.V.	100.00%		Netherlands	Egypt
	TotalEnergies EP Egypte	100.00%		France	Egypt
	TotalEnergies EP Exploration Australia Pty Ltd	100.00%		Australia	Australia
	TotalEnergies EP Holdings Australia Pty Ltd	100.00%		Australia	Australia
	TotalEnergies EP Holdings Mauritius Ltd	100.00%		Mauritius Island	Mauritius Island
	TotalEnergies EP Ichthys Holdings	100.00%		France	France
	TotalEnergies EP Ichthys Pty Ltd	100.00%		Australia	Australia
	TotalEnergies EP JV New Zealand Sdn Bhd	100.00%		Malaysia	Malaysia
	TotalEnergies EP Kundu Limited	100.00%		Papua New Guinea	Papua New Guinea
	TotalEnergies EP Malaysia Holdings Sdn Bhd	100.00%		Malaysia	Malaysia
	TotalEnergies EP Malaysia International Sdn. Bhd	100.00%		Malaysia	Malaysia
	TotalEnergies EP Mozambique Area1, Ltda	100.00%		Mozambique	Mozambique
	TotalEnergies EP Oceania Sdn Bhd	100.00%		Malaysia	Malaysia
	TotalEnergies EP Oman Block 12 B.V.	100.00%		Netherlands	Oman
	TotalEnergies EP Oman Development B.V.	100.00%		Netherlands	Oman
	TotalEnergies EP PNG Ltd	100.00%		Papua New Guinea	Papua New Guinea
	TotalEnergies EP PNG2 B.V.	100.00%		Netherlands	Papua New Guinea
	TotalEnergies EP Sabah Sdn Bhd	100.00%		Malaysia	Malaysia
	TotalEnergies EP Salmanov	100.00%		France	France

Business segment	Statutory corporate name	% Company interest	Method	Country of incorporation	Country of operations
Integrated LNG (continued)					
	TotalEnergies EP Sarawak Inc	100.00%		Bahamas	Malaysia
	TotalEnergies EP Singapore Pte. Ltd.	100.00%		Singapore	Singapore
	TotalEnergies EP Sureste Sdn Bhd	100.00%		Malaysia	Malaysia
	TotalEnergies EP Tengah	100.00%		France	Indonesia
	TotalEnergies EP Transshipment S.A.S.	100.00%		France	France
	TotalEnergies EP Western Australia Sdn Bhd	100.00%		Malaysia	Malaysia
	TotalEnergies Gas & Power Asia Private Limited	100.00%		Singapore	Singapore
	TotalEnergies Gas & Power Holdings UK Ltd	100.00%		United Kingdom	United Kingdom
	TotalEnergies Gas & Power Ltd	100.00%		United Kingdom	United Kingdom
	TotalEnergies Gas & Power North America, Inc.	100.00%		United States	United States
	TotalEnergies Gas & Power Services UK Ltd	100.00%		United Kingdom	United Kingdom
	TotalEnergies Gas Pipeline USA, Inc.	100.00%		United States	United States
	TotalEnergies Gaz & Electricite Holdings	100.00%		France	France
	TotalEnergies GLNG Australia	100.00%		France	Australia
	TotalEnergies GLNG Holdings Australia S.A.S.	100.00%		France	Australia
	TotalEnergies LNG Angola	100.00%		France	France
	TotalEnergies LNG services France	100.00%		France	France
	TotalEnergies Sviluppo Italia S.R.L.	100.00%		Italy	Italy
	TotalEnergies USA International LLC	100.00%		United States	United States
	TotalEnergies Yemen LNG Company Ltd	100.00%		Bermuda	Bermuda
	Yamal LNG	20.02%	E	Russia	Russia
	Yemen LNG Company Limited	39.62%	E	Bermuda	Yemen
Integrated Power					
	Abarloar Solar S.L.U.	100.00%		Spain	Spain
	Abeto Solar, S.L.U.	100.00%		Spain	Spain
	Access Building Egypt Solar One	100.00%		Egypt	Egypt
	Access Egypt Solar One	100.00%		Egypt	Egypt
	Adani Green Energy Ltd	19.75%	E	India	India
	Adani Green Energy Twenty Three Limited	50.00%	E	India	India
	Adani Renewable Energy Holding Nine Limited	50.00%	E	India	India
	Adani Renewable Energy Sixty four Limited	50.00%	E	India	India
	Advanced Thermal Batteries Inc.	50.00%	E	United States	United States
	Aerospatiale Batteries (ASB)	50.00%	E	France	France
	Aerowatt Energies	65.00%	E	France	France
	Aerowatt Energies 2	51.00%	E	France	France
	AES CFE Holding III, LLC	30.00%	E	United States	United States
	Al Kharsaa Solar Holdings B.V.	49.00%	E	Netherlands	Netherlands
	Alberche Conex, S.L.	100.00%		Spain	Spain
	Alcad AB	100.00%		Sweden	Sweden
	Alicante	50.00%	E	France	France
	Alicante 2	50.00%	E	France	France
	Altergie Territoires 2	44.58%	E	France	France
	Altergie Territoires 3	50.00%	E	France	France
	Altergie Territoires 5	50.00%	E	France	France
	Amber Solar Power Cinco, S.L.	65.00%	E	Spain	Spain
	Amber Solar Power Cuatro, S.L.	65.00%	E	Spain	Spain
	Amber Solar Power Dieciseis, S.L.	65.00%	E	Spain	Spain
	Amber Solar Power Diez, S.L.	65.00%	E	Spain	Spain
	Amber Solar Power Nueve, S.L.	65.00%	E	Spain	Spain
	Amber Solar Power Quince, S.L.	65.00%	E	Spain	Spain
	Amber Solar Power Tres, S.L.	65.00%	E	Spain	Spain
	Amber Solar Power Uno, S.L.	65.00%	E	Spain	Spain
	Amura Solar, S.L.U.	100.00%		Spain	Spain
	Anayet Solar, S.L.U.	100.00%		Spain	Spain

Business segment	Statutory corporate name	% Company interest	Method	Country of incorporation	Country of operations
Integrated Power (continued)					
	Anclote Solar, S.L.U.	100.00%		Spain	Spain
	Ancora Solar, S.L.U.	100.00%		Spain	Spain
	Anemopetra	100.00%		Greece	Greece
	Arbotante Solar, S.L.U.	100.00%		Spain	Spain
	Armada Solar, S.L.U.	100.00%		Spain	Spain
	Atolon Solar, S.L.U.	100.00%		Spain	Spain
	Attentive Energy, LLC	56.00%	E	United States	United States
	Auriga Generacion S.L.	100.00%		Spain	Spain
	Automotive Cells Company, S.E.	24.27%	E	France	France
	Avenir Solaire Etoile	100.00%		France	France
	Avenir Solaire Portfolio	100.00%		France	France
	Avenir Solaire Rhea	100.00%		France	France
	Avenir Solaire Tethys	100.00%		France	France
	Avenir Solaire Titan	100.00%		France	France
	Baker Creek Solar, LLC	100.00%		United States	United States
	Ballupur Solar Power Projects Private Ltd	50.00%	E	India	India
	Baltic Sea OFW O-2.2 GmbH	100.00%		Germany	Germany
	Baser Comercializadora de Referencia	100.00%		Spain	Spain
	Belharra	100.00%		France	France
	Bidasoa Conex, S.L.	100.00%		Spain	Spain
	BJL11 Solar S.A.	90.00%		Brazil	Brazil
	BJL4 Solar S.A.	90.00%		Brazil	Brazil
	Brazoria Solar I, LLC	100.00%		United States	United States
	Brazoria Solar II, LLC	100.00%		United States	United States
	Brur Hail Sun, Limited Partnership	44.64%		Israel	Israel
	Budeshte Agro	100.00%		Bulgaria	Bulgaria
	Canal City Solar, LLC	100.00%		United States	United States
	Casa dos Ventos S.A.	34.00%	E	Brazil	Brazil
	Castellaneta Solar S.R.L.	100.00%		Italy	Italy
	Castille	50.00%	E	France	France
	Cefeo Solar, S.L.U.	100.00%		Spain	Spain
	Centaurus Environment S.L.U.	100.00%		Spain	Spain
	Central Eolica Pampa de Malaspina S.A.U.	100.00%		Argentina	Argentina
	Central Eolica Terra Santa SPE I S.A.	88.77%		Brazil	Brazil
	Central Eolica Terra Santa SPE II S.A.	88.77%		Brazil	Brazil
	Centrale Eolienne Alaincourt	100.00%		France	France
	Centrale Eolienne De La Vallee Gentillesse	74.80%		France	France
	Centrale Eolienne Mont de l'Arbre III	100.00%		France	France
	Centrale Eolienne RENFR 220	100.00%		France	France
	Centrale Eolienne Vallee de la Craie	100.00%		France	France
	Centrale Hydroelectrique Alas	100.00%		France	France
	Centrale Hydroelectrique Ardon	90.00%		France	France
	Centrale Hydroelectrique Arvan	100.00%		France	France
	Centrale Hydroelectrique Barbaira	100.00%		France	France
	Centrale Hydroelectrique Bonnant	100.00%		France	France
	Centrale Hydroelectrique Gavet	100.00%		France	France
	Centrale Hydroelectrique Grand Vallon	100.00%		France	France
	Centrale Hydroelectrique Miage	100.00%		France	France
	Centrale Hydroelectrique Previnquieres	100.00%		France	France
	Centrale Photovoltaique De Merle Sud	40.58%	E	France	France
	Centrale Solaire 2	100.00%		France	France
	Centrale Solaire 21.09-3	100.00%		France	France
	Centrale Solaire 21.09-4	100.00%		France	France
	Centrale Solaire 21.09-5	100.00%		France	France

Business segment	Statutory corporate name	% Company interest	Method	Country of incorporation	Country of operations
Integrated Power (continued)					
	Centrale Solaire APV R&D	100.00%		France	France
	Centrale Solaire Autoprod	100.00%		France	France
	Centrale Solaire Autoroutes PV BFC	100.00%		France	France
	Centrale Solaire Bayet	100.00%		France	France
	Centrale Solaire Beauce Val de Loire	60.00%		France	France
	Centrale Solaire Carrefour de l'Europe	100.00%		France	France
	Centrale Solaire CET La Babiniere	100.00%		France	France
	Centrale Solaire Chemin De Melette	51.00%	E	France	France
	Centrale Solaire De Cazedarnes	75.00%		France	France
	Centrale Solaire de La Bezassade	100.00%		France	France
	Centrale Solaire Dom	100.00%		France	France
	Centrale Solaire Du Centre Ouest	100.00%		France	France
	Centrale Solaire Du Lavoir	60.00%		France	France
	Centrale Solaire Estarac	35.00%	E	France	France
	Centrale Solaire Golbey	51.05%	E	France	France
	Centrale Solaire Guinots	60.00%	E	France	France
	Centrale Solaire Heliovale	59.63%	E	France	France
	Centrale Solaire La Castello	100.00%		France	France
	Centrale Solaire La Jouannetterie	100.00%		France	France
	Centrale Solaire La Potence	100.00%		France	France
	Centrale Solaire La Roquette	100.00%		France	France
	Centrale Solaire La Tastere	60.00%	E	France	France
	Centrale Solaire Lacoste	100.00%		France	France
	Centrale Solaire Le Carteyrou	100.00%		France	France
	Centrale Solaire Le Trabet	100.00%		France	France
	Centrale Solaire Les Cordeliers	83.98%		France	France
	Centrale Solaire Les Cordeliers 2	75.00%		France	France
	Centrale Solaire l'Estrade	100.00%		France	France
	Centrale Solaire Lodes	50.00%	E	France	France
	Centrale Solaire Lot 1	100.00%		France	France
	Centrale Solaire Macouria	100.00%		France	France
	Centrale Solaire Marlan	100.00%		France	France
	Centrale Solaire Mazeran Lr	50.00%	E	France	France
	Centrale Solaire Merle Sud 2	60.00%	E	France	France
	Centrale Solaire Moussoulens	100.00%		France	France
	Centrale Solaire Olinoca	10.00%	E	France	France
	Centrale Solaire Ombrieres Cap Agathois	83.98%		France	France
	Centrale Solaire Ombrieres De Blyes	60.00%		France	France
	Centrale Solaire Plateau De Pouls	51.00%		France	France
	Centrale Solaire Pouy Negue	100.00%		France	France
	Centrale Solaire Pouy Negue 2	100.00%		France	France
	Centrale Solaire RENFR 331	100.00%		France	France
	Centrale Solaire RENFR 397	100.00%		France	France
	Centrale Solaire RENFR 412	100.00%		France	France
	Centrale Solaire RENFR 422	100.00%		France	France
	Centrale Solaire RENFR 440	100.00%		France	France
	Centrale Solaire RENFR 450	100.00%		France	France
	Centrale Solaire RENFR 453	100.00%		France	France
	Centrale Solaire RENFR 627	100.00%		France	France
	Centrale Solaire RENFR 628	100.00%		France	France
	Centrale Solaire RENFR 629	100.00%		France	France
	Centrale Solaire Roquecamude	100.00%		France	France
	Centrale Solaire Solarshare Bordeaux	100.00%		France	France

Business segment	Statutory corporate name	% Company interest	Method	Country of incorporation	Country of operations
Integrated Power (continued)					
	Centrale Solaire SRG Energy	80.00%	E	France	France
	Centrale Solaire Terre du Roi	100.00%		France	France
	Centrale Solaire Toiture Josse	60.00%	E	France	France
	Centrale Solaire Touzery	100.00%		France	France
	Centrale Solaire TQ 3	100.00%		France	France
	Centrale Solaire TQ 5	100.00%		France	France
	Centrale Solaire Vauvoix	60.00%	E	France	France
	Cerezo Solar, S.L.U.	100.00%		Spain	Spain
	Chudiala Solar Power Projects Private Ltd	50.00%	E	India	India
	Cidra Solar, S.L.U.	100.00%		Spain	Spain
	Circinus Energy, S.L.U.	100.00%		Spain	Spain
	Clean Energy	100.00%		Italy	Italy
	Clean Energy 1	100.00%		Italy	Italy
	Clinton Solar, LLC	100.00%		United States	United States
	Colorado Bend I Power, LLC	100.00%		United States	United States
	Colorado Bend Services, LLC	50.00%	E	United States	United States
	Columba Renovables S.L.U.	100.00%		Spain	Spain
	Comanche Solar, LLC	100.00%		United States	United States
	Core Energy Development, LLC	100.00%		United States	United States
	Core Fund 1, LLC	100.00%		United States	United States
	Core Solar Capital, LLC	100.00%		United States	United States
	Core Solar Data, LLC	100.00%		United States	United States
	Core Solar Development, LLC	100.00%		United States	United States
	Core Solar DG, LLC	100.00%		United States	United States
	Core Solar Holdings I, LLC	100.00%		United States	United States
	Core Solar Land Holdings I, LLC	100.00%		United States	United States
	Core Solar SPV X, LLC	100.00%		United States	United States
	Core Solar SPV XV, LLC	100.00%		United States	United States
	Core Solar SPV XXIV, LLC	100.00%		United States	United States
	Core Solar, LLC	100.00%		United States	United States
	Cottonwood Bayou Storage, LLC	100.00%		United States	United States
	Cottonwood Solar Cash Equity HoldCo, LLC	100.00%		United States	United States
	Cottonwood Solar Class B HoldCo, LLC	50.00%	E	United States	United States
	Cowtown Solar, LLC	100.00%		United States	United States
	Crc Kern Front Tugboat, LLC	100.00%		United States	United States
	CS Anacona 1A, LLC	100.00%		United States	United States
	CS Anacona 1B, LLC	100.00%		United States	United States
	CS Anacona 1C, LLC	100.00%		United States	United States
	CS Black Oak A, LLC	100.00%		United States	United States
	CS Black Oak B, LLC	100.00%		United States	United States
	CS Clare, LLC	100.00%		United States	United States
	CS Danville, LLC	100.00%		United States	United States
	CS Kernan A, LLC	100.00%		United States	United States
	CS Kernan B, LLC	100.00%		United States	United States
	CS Kernan C, LLC	100.00%		United States	United States
	CS Kernan D, LLC	100.00%		United States	United States
	CS Long Point 1, LLC	100.00%		United States	United States
	CS Long Point 2A, LLC	100.00%		United States	United States
	CS Long Point 2B, LLC	100.00%		United States	United States
	CS Quadrao 2	100.00%		United States	United States
	CS Spring Lake, LLC	100.00%		United States	United States
	CS Streator, LLC	100.00%		United States	United States
	Cygnus Environment, S.L.U.	100.00%		Spain	Spain

Business segment	Statutory corporate name	% Company interest	Method	Country of incorporation	Country of operations
Integrated Power (continued)					
	DEMOSITES2022	100.00%		France	France
	Dracena I Parque Solar S.A.	100.00%		Brazil	Brazil
	Dracena II Parque Solar S.A.	100.00%		Brazil	Brazil
	Dracena IV Parque Solar S.A.	100.00%		Brazil	Brazil
	Driza Solar, S.L.U.	100.00%		Spain	Spain
	Dubovo Energy	100.00%		Bulgaria	Bulgaria
	Eclipse Solar SpA	100.00%		Chile	Chile
	Ecosol San Luis S.A.U.	100.00%		Argentina	Argentina
	Edelweis Solar, S.L.U.	100.00%		Spain	Spain
	Eden Mumbai Solar Private Ltd	50.00%	E	India	India
	Eden Renewable Cite Private Ltd	50.00%	E	India	India
	Eden Renewable Ranji Private Ltd	50.00%	E	India	India
	Eden Solar Energy Gurgaon Private Ltd	50.00%	E	India	India
	Eden Solar Rajdhani Private Ltd	50.00%	E	India	India
	El Bosc	60.00%	E	France	France
	Elliniki Eoliki Energeiaki S.A.	86.00%		Greece	Greece
	EMV Energy Investments S.A.	100.00%		Greece	Greece
	ENEOS TotalEnergies Renewables Solar Development Japan G.K.	50.00%	E	Japan	Japan
	Energia SI	100.00%		Italy	Italy
	Energie Developpement	50.00%	E	France	France
	Eneryo S.A.S.	100.00%		France	France
	Enwind	98.00%		Poland	Poland
	Eol Maral I SPE S.A.	100.00%		Brazil	Brazil
	Eol Maral II SPE S.A.	100.00%		Brazil	Brazil
	Eole Boin	100.00%		France	France
	Eole Champagne Conlinoise	66.00%	E	France	France
	Eole Dadoud	100.00%		France	France
	Eole Fonds Caraibes	100.00%		France	France
	Eole Grand Maison	100.00%		France	France
	Eole La Montagne	87.60%		France	France
	Eole La Perriere S.A.R.L.	100.00%		France	France
	Eole La Plaine	100.00%		France	France
	Eole Morne Carriere	100.00%		France	France
	Eole Yate	100.00%		France	France
	Eolica da Boneca - Empreendimentos Eolicos S.A.	33.00%	E	Portugal	Portugal
	Eolmed	20.00%	E	France	France
	Eren do Brasil Participacões e Consultoria em Energia Ltda	99.81%		Brazil	Brazil
	Eren Maral Participacões S.A.	100.00%		Brazil	Brazil
	Eren Terra Santa Participacões S.A.	94.22%		Brazil	Brazil
	Essakane Solar S.A.S.	90.00%		Burkina Faso	Burkina Faso
	E-Vento Ciro	100.00%		Italy	Italy
	Evergreen Solar, LLC	100.00%		United States	United States
	ExGen Texas Power, LLC	100.00%		United States	United States
	Falla Solar, S.L.U.	100.00%		Spain	Spain
	FE Tutly Solar LLC	100.00%		Uzbekistan	Uzbekistan
	Fleming Solar, LLC	100.00%		United States	United States
	Fluxsol	100.00%		France	France
	FPV Blanchard	100.00%		France	France
	Friemann & Wolf Batterietechnick GmbH	100.00%		Germany	Germany
	Futur Portfolio	100.00%		France	France
	G.K. Succeed Tsu Haze	45.00%	E	Japan	Japan
	Galibier	50.00%	E	France	France
	Gallocanta Solar, S.L.U.	100.00%		Spain	Spain

Business segment	Statutory corporate name	% Company interest	Method	Country of incorporation	Country of operations
Integrated Power (continued)					
	Garonne-et-Canal Energies	100.00%		France	France
	Generg - Gestão e Projectos de Energia S.A.	100.00%		Portugal	Portugal
	Generg Sol da Beira Baixa - Energias Renovaveis S.A.	100.00%		Portugal	Portugal
	Generg Sol do Alentejo - Energias Renovaveis, Sociedade Unipessoal, Lda	100.00%		Portugal	Portugal
	Generg Sol do Alentejo 2 - Energias Renovaveis, Sociedade Unipessoal, Lda	100.00%		Portugal	Portugal
	Generg Ventos da Gardunha - Energias Renovaveis S.A.	100.00%		Portugal	Portugal
	Generg Ventos da Gardunha - Sobre Equipamento S.A.	100.00%		Portugal	Portugal
	Generg Ventos de Proenca-a-Nova - Energias Renovaveis S.A.	100.00%		Portugal	Portugal
	Generg Ventos de Sines - Energias Renovaveis S.A.	100.00%		Portugal	Portugal
	Generg Ventos de Trancoso - Energias Renovaveis S.A.	100.00%		Portugal	Portugal
	Generg Ventos de Trancoso - Sobre Equipamento S.A.	100.00%		Portugal	Portugal
	Generg Ventos de Viana do Castelo - Energias Renovaveis S.A.	100.00%		Portugal	Portugal
	Generg Ventos de Viana do Castelo - Sobre Equipamento S.A.	100.00%		Portugal	Portugal
	Generg Ventos do Caramulo - Energias Renovaveis S.A.	100.00%		Portugal	Portugal
	Generg Ventos do Caramulo - Sobre Equipamento S.A.	100.00%		Portugal	Portugal
	Generg Ventos do Pinhal Interior - Energias Renovaveis S.A.	100.00%		Portugal	Portugal
	Generg Ventos do Pinhal Interior - Sobre Equipamento S.A.	100.00%		Portugal	Portugal
	Geomundo Offshore Wind Power Co., Ltd.	42.50%	E	South Korea	South Korea
	Glaciere De Palisse	100.00%		France	France
	Global Energy	100.00%		Bulgaria	Bulgaria
	Global Solar Services	100.00%		France	France
	Go Electric	100.00%		United States	United States
	Golden Triangle Solar, LLC	100.00%		United States	United States
	Goleta Solar, S.L.U.	100.00%		Spain	Spain
	Goodfellow Solar III, LLC	100.00%		United States	United States
	Goritsa Aiolos Energy S.M.S.A	100.00%		Greece	Greece
	Gray Whale Offshore Wind Power No.1 Co., Ltd	42.50%	E	South Korea	South Korea
	Gray Whale Offshore Wind Power No.2 Co., Ltd	42.50%	E	South Korea	South Korea
	Gray Whale Offshore Wind Power No.3 Co., Ltd	42.50%	E	South Korea	South Korea
	Greenwind S.A.	100.00%		Argentina	Argentina
	Grillete Solar, S.L.U.	100.00%		Spain	Spain
	GT R4 Holdings Limited	50.00%	E	United Kingdom	United Kingdom
	Haiding one international investment co Ltd	50.00%	E	Talwan	Talwan
	Haiding three international investment co Ltd	50.00%	E	Talwan	Talwan
	Haiding two international investment co Ltd	50.00%	E	Talwan	Talwan
	Hanwha Total Solar II, LLC	50.00%	E	United States	United States
	Hanwha Total Solar, LLC	50.00%	E	United States	United States
	Helio 100 Kw	100.00%		France	France
	Helio 971	100.00%		France	France
	Helio 974 Sol 1	100.00%		France	France
	Helio 974 Toiture 2	100.00%		France	France
	Helio Fonds Caraibes	100.00%		France	France
	Helio L'R	100.00%		France	France
	Helio Prony Resources New Caledonia	100.00%		New Caledonia	New Caledonia
	Helio Saint Benoit	100.00%		France	France
	Helio Wabealo	100.00%		France	France
	Helix Project V, LLC	100.00%		United States	United States
	HETTY	100.00%		France	France

Business segment	Statutory corporate name	% Company interest	Method	Country of incorporation	Country of operations
Integrated Power (continued)					
	HFV Montenero	100.00%		Italy	Italy
	HFV Salentina	50.00%	E	Italy	Italy
	Hidrinveste - Investimentos Energeticos, Lda	100.00%		Portugal	Portugal
	Hidroelectrica de Manteigas, Lda	90.00%		Portugal	Portugal
	Hidroelectrica do Monte, Lda	100.00%		Portugal	Portugal
	Hill Solar II, LLC	100.00%		United States	United States
	HT Solar Holdings II, LLC	50.00%	E	United States	United States
	HT Solar Holdings III, LLC	50.00%	E	United States	United States
	HTS Holdings LLC	50.00%	E	United States	United States
	Hydro 974	100.00%		France	France
	Hydro Tinee	50.00%	E	France	France
	Hydromons	100.00%		France	France
	Inov	100.00%		Italy	Italy
	Ise Total Nanao Power Plant G.K.	50.00%	E	Japan	Japan
	Jingdan New Energy investment (Shanghai) Co. Ltd	50.00%	E	China	China
	Jmcp	50.05%		France	France
	Keith Solar I, LLC	100.00%		United States	United States
	Kidds Store	100.00%		United States	United States
	KSF Holding Trust	57.50%	E	Australia	Australia
	Kyon Energy Finance GmbH	100.00%		Germany	Germany
	Kyon Energy Solutions GmbH	100.00%		Germany	Germany
	LA Basin Solar I, LLC	100.00%		United States	United States
	La Compagnie Electrique de Bretagne	50.00%	E	France	France
	La Metairie Neuve	25.00%	E	France	France
	La Quercia Solar S.R.L	100.00%		Italy	Italy
	La Seauve	40.00%	E	France	France
	Lanuza Solar, S.L.U.	100.00%		Spain	Spain
	LaPorte Power, LLC	100.00%		United States	United States
	Lauderdale Solar, LLC	100.00%		United States	United States
	Laurens Solar I, LLC	100.00%		United States	United States
	Le Bois Joli	100.00%		France	France
	Lemoore Stratford Land Holdings IV, LLC	100.00%		United States	United States
	Les ailes de Taillard	50.00%	E	France	France
	Les Vents de la Moivre 1	100.00%		France	France
	Les Vents de la Moivre 2	100.00%		France	France
	Les Vents de la Moivre 3	100.00%		France	France
	Les Vents de la Moivre 4	100.00%		France	France
	Les Vents de la Moivre 5	100.00%		France	France
	Leuret	50.00%	E	France	France
	Lithos Aiolos Energy S.A.	100.00%		Greece	Greece
	Lorance Creek Solar, LLC	100.00%		United States	United States
	Lorca	50.00%	E	France	France
	Luce Solar SpA	100.00%		Chile	Chile
	Luminora Solar Cinco, S.L.	65.00%	E	Spain	Spain
	Luminora Solar Cuatro, S.L.	65.00%	E	Spain	Spain
	Luminora Solar Dos, S.L.	65.00%	E	Spain	Spain
	Luminora Solar Tres, S.L.	65.00%	E	Spain	Spain
	Maenggoldo Offshore Wind Power Co., Ltd	42.50%	E	South Korea	South Korea
	Martianez Solar, S.L.U.	100.00%		Spain	Spain
	Marvel Solar Holdco 1, LLC	100.00%		United States	United States
	Marysville Unified School District Solar, LLC	100.00%		United States	United States
	Mastil Solar, S.L.U.	100.00%		Spain	Spain
	Mauricio Solar, S.L.U.	100.00%		Spain	Spain
	Meco 8	100.00%		France	France

Business segment	Statutory corporate name	% Company interest	Method	Country of incorporation	Country of operations
Integrated Power (continued)					
	Medha Energy Private Ltd	50.00%	E	India	India
	Megavento - Producão de Electricidade S.A.	100.00%		Portugal	Portugal
	Merysol	50.00%	E	France	France
	Mishmar HaNegev Sun, Limited Partnership	44.64%		Israel	Israel
	Missiles & Space Batteries Limited	50.00%	E	United Kingdom	United Kingdom
	Miyagi Osato Solar Park G.K.	45.00%	E	Japan	Japan
	Miyako Kuzakai Solarpark G.K.	50.00%	E	Japan	Japan
	M-KAT Green Limited Liability Partnership	100.00%		Kazakhstan	Kazakhstan
	Morena Solar, S.L.U.	100.00%		Spain	Spain
	Mulilo Prieska PV (RF) Proprietary Limited	27.00%	E	South Africa	South Africa
	Mustang Creek Solar, LLC	100.00%		United States	United States
	Myrtle Solar Cash Equity HoldCo, LLC	100.00%		United States	United States
	Myrtle Solar Class B HoldCo	100.00%		United States	United States
	Myrtle Solar Class B member	100.00%		United States	United States
	Myrtle Solar TE HoldCo, LLC	100.00%		United States	United States
	Myrtle Solar, LLC	100.00%		United States	United States
	Myrtle Storage Cash Equity HoldCo, LLC	100.00%		United States	United States
	Myrtle Storage Class B HoldCo, LLC	100.00%		United States	United States
	Myrtle Storage Class B Member, LLC	100.00%		United States	United States
	Myrtle Storage TE Partnership, LLC	100.00%		United States	United States
	Myrtle Storage, LLC	100.00%		United States	United States
	Nevada Joint Union High School District Solar, LLC	100.00%		United States	United States
	New Green Energy Services	100.00%		France	France
	Nomad Solar	100.00%		Kazakhstan	Kazakhstan
	North Sea OFW N-12.1 GmbH	100.00%		Germany	Germany
	Nouvelle Centrale Eolienne de Lastours	50.00%	E	France	France
	Nuza Solar, S.L.U.	100.00%		Spain	Spain
	Ombrea	100.00%		France	France
	OmbreaAOI2022	100.00%		France	France
	Ophelia Solar, LLC	100.00%		United States	United States
	Oranje Wind Power II B.V.	50.00%	E	Netherlands	Netherlands
	OSKVOLT Battery Services KB	100.00%		Sweden	Sweden
	Parc Eolien de Cassini	50.00%	E	France	France
	Parc Eolien de l'Equinville	100.00%		France	France
	Parc Eolien Du Coupru	50.00%	E	France	France
	Parc Eolien Du Vilpion	50.00%	E	France	France
	Parc Photovoltaique de Puyloubier	100.00%		France	France
	Parc Solaire du Lorrain	100.00%		France	France
	Parco Eolico La Guardia S.R.L.	100.00%		Italy	Italy
	Parque Fotovoltaico Alicahue Solar SpA	100.00%		Chile	Chile
	Parque Fotovoltaico Santa Adriana Solar SpA	100.00%		Chile	Chile
	Photonotos Energy	100.00%		Greece	Greece
	Photovoras Energy S.M.S.A	100.00%		Greece	Greece
	Piedra Solar, LLC	100.00%		United States	United States
	Pigeon Run Solar, LLC	100.00%		United States	United States
	Pilastra Solar, S.L.U.	100.00%		Spain	Spain
	Plum Creek Solar, LLC	100.00%		United States	United States
	Pontenure Solar S.R.L.	100.00%		Italy	Italy
	Portalon Solar, S.L.U.	100.00%		Spain	Spain
	Pos Production Ii	60.00%		France	France
	Pos Production Iii	70.00%		France	France
	Pos Production Iv	70.00%		France	France
	Pos Production V	70.00%		France	France
	Poste HTB du Mont de L'Arbre	100.00%		France	France

Business segment	Statutory corporate name	% Company interest	Method	Country of incorporation	Country of operations
Integrated Power (continued)					
	Postigo Solar, S.L.U.	100.00%		Spain	Spain
	Postor Solar, S.L.U.	100.00%		Spain	Spain
	PT TATS Indonesia	100.00%		Indonesia	Indonesia
	Quadra Energy GmbH	100.00%		Germany	Germany
	Quadrica	51.00%	E	France	France
	Quilla Solar, S.L.U.	100.00%		Spain	Spain
	Rabiza Solar, S.L.U.	100.00%		Spain	Spain
	Randolph Solar I, LLC	100.00%		United States	United States
	Rececho Solar, S.L.U.	100.00%		Spain	Spain
	Recova Solar, S.L.U.	100.00%		Spain	Spain
	Regata Solar, S.L.U.	100.00%		Spain	Spain
	Renewable Energy Seagreen Holdco Limited	50.00%	E	United Kingdom	United Kingdom
	Risen Bangladesh SKS Pte Ltd	100.00%		Bangladesh	Singapore
	Risen Energy (Cambodia) Battambang Co. Ltd	100.00%		Cambodia	Cambodia
	RLA Solar SpA	100.00%		Chile	Chile
	Rolling Green Solar, LLC	100.00%		United States	United States
	Rolling Plains Solar, LLC	100.00%		United States	United States
	Ronesans Enerji Uretim ve Ticaret Anonim Şirketi	50.00%	E	Turkey	Turkey
	Runway Solar, LLC	100.00%		United States	United States
	Saft (Zhuhai FTZ) Batteries Company Limited	100.00%		China	China
	Saft (Zhuhai) Energy Storage Co.	100.00%		China	China
	Saft AB	100.00%		Sweden	Sweden
	Saft America Inc.	100.00%		United States	United States
	Saft AS	100.00%		Norway	Norway
	Saft Australia Pty Limited	100.00%		Australia	Australia
	Saft Batterias SL	100.00%		Spain	Spain
	Saft Batterie Italia S.R.L.	100.00%		Italy	Italy
	Saft Batterien GmbH	100.00%		Germany	Germany
	Saft Batteries Pte Limited	100.00%		Singapore	Singapore
	Saft Batteries Pty Limited	100.00%		Australia	Australia
	Saft Batterijen B.V.	100.00%		Netherlands	Netherlands
	Saft Do Brasil Ltda	100.00%		Brazil	Brazil
	Saft EV S.A.S.	100.00%		France	France
	Saft Ferak AS	100.00%		Czech Republic	Czech Republic
	Saft Groupe S.A.S.	100.00%		France	France
	Saft Hong Kong Limited	100.00%		Hong Kong	Hong Kong
	Saft India Private Limited	100.00%		India	India
	Saft Japan KK	100.00%		Japan	Japan
	Saft Limited	100.00%		United Kingdom	United Kingdom
	Saft LLC	100.00%		Russia	Russia
	Saft Nife ME Limited	100.00%		Cyprus	Cyprus
	Saft S.A.S.	100.00%		France	France
	San Luis Obispo Solar I, LLC	100.00%		United States	United States
	Sanabria Solar, S.L.U.	100.00%		Spain	Spain
	Sanders Creek Solar, LLC	100.00%		United States	United States
	SGIP SLB Holdco 1, LLC	100.00%		United States	United States
	SGIP SLB I, LLC	100.00%		United States	United States
	Shakumbhari Solar Power Projects Private Ltd	50.00%	E	India	India
	Shams Power Company PJSC	20.00%	E	United Arab Emirates	United Arab Emirates
	SIIF EDF EN Israel Ltd	51.02%		Israel	Israel
	Sistemi Energie Calabria S.R.L.	100.00%		Italy	Italy
	Sociedade Exploradora de Recursos Energeticos, Lda	100.00%		Portugal	Portugal
	Sociedade Hidroelectrica da Grela, Lda	100.00%		Portugal	Portugal
	Societe Champenoise d'Energie	16.00%	E	France	France

Business segment	Statutory corporate name	% Company interest	Method	Country of incorporation	Country of operations
Integrated Power (continued)					
	Societe d'Exploitation du Soleil du Haut-Deffens	100.00%		France	France
	Societe Economie Mixte Production Energetique Renouvelable	35.92%	E	France	France
	Sol Holding, LLC	50.00%	E	United States	United States
	Solaire Habitat Social	100.00%		France	France
	Solar Barocco	100.00%		Italy	Italy
	Solar Carport NJ, LLC	100.00%		United States	United States
	Solar Energies	65.00%	E	France	France
	Solar Life Energy	100.00%		Italy	Italy
	Solar Star Academia 1, LLC	100.00%		United States	United States
	Solar Star Addison North, LLC	100.00%		United States	United States
	Solar Star Alleghany South, LLC	100.00%		United States	United States
	Solar Star Always Low Prices Hi, LLC	100.00%		United States	United States
	Solar Star Appling Peaches, LLC	100.00%		United States	United States
	Solar Star Arizona HMR-1, LLC	100.00%		United States	United States
	Solar Star Baltimore Carney, LLC	100.00%		United States	United States
	Solar Star Baltimore Roofs, LLC	100.00%		United States	United States
	Solar Star Bay City 2, LLC	100.00%		United States	United States
	Solar Star Bear Creek, LLC	100.00%		United States	United States
	Solar Star Big Apple BTM, LLC	100.00%		United States	United States
	Solar Star Big Apple CDG B, LLC	100.00%		United States	United States
	Solar Star Big Apple CDG, LLC	100.00%		United States	United States
	Solar Star Blakeslee 2, LLC	100.00%		United States	United States
	Solar Star Buchanan 2, LLC	100.00%		United States	United States
	Solar Star California LXXV, LLC	100.00%		United States	United States
	Solar Star California LXXVI, LLC	100.00%		United States	United States
	Solar Star California LXXVIII, LLC	100.00%		United States	United States
	Solar Star California XXXV, LLC	100.00%		United States	United States
	Solar Star California XXXVI, LLC	100.00%		United States	United States
	Solar Star California XXXVIII, LLC	100.00%		United States	United States
	Solar Star Cambridge 1, LLC	100.00%		United States	United States
	Solar Star Cantil 1, LLC	100.00%		United States	United States
	Solar Star Carbondale 1, LLC	100.00%		United States	United States
	Solar Star Carlsbad 1, LLC	100.00%		United States	United States
	Solar Star Central Light, LLC	100.00%		United States	United States
	Solar Star Charlotte 1, LLC	100.00%		United States	United States
	Solar Star Clovis Curry North, LLC	100.00%		United States	United States
	Solar Star Clovis Curry South, LLC	100.00%		United States	United States
	Solar Star Co Co 2500, LLC	100.00%		United States	United States
	Solar Star Coastal Pirate, LLC	100.00%		United States	United States
	Solar Star Colorado II, LLC	100.00%		United States	United States
	Solar Star CRC Kern Front, LLC	100.00%		United States	United States
	Solar Star CRC Mt. Poso, LLC	100.00%		United States	United States
	Solar Star CRC North Shafter, LLC	100.00%		United States	United States
	Solar Star CRC Pier A West, LLC	100.00%		United States	United States
	Solar Star CRC Yowlumne 1 North, LLC	100.00%		United States	United States
	Solar Star CRC Yowlumne 2 South, LLC	100.00%		United States	United States
	Solar Star Deer Island, LLC	100.00%		United States	United States
	Solar Star Dornsife 1, LLC	100.00%		United States	United States
	Solar Star Fort Atkinson South, LLC	100.00%		United States	United States
	Solar Star Gloucester 1, LLC	100.00%		United States	United States
	Solar Star Gloucester 2, LLC	100.00%		United States	United States
	Solar Star Golden Empire, LLC	100.00%		United States	United States
	Solar Star Goodwin Storage, LLC	100.00%		United States	United States
	Solar Star Harbor, LLC	100.00%		United States	United States

Business segment	Statutory corporate name	% Company interest	Method	Country of incorporation	Country of operations
Integrated Power (continued)					
	Solar Star Harpst Arcata, LLC	100.00%		United States	United States
	Solar Star Hartford South, LLC	100.00%		United States	United States
	Solar Star Hawley 1, LLC	100.00%		United States	United States
	Solar Star HD Maryland, LLC	100.00%		United States	United States
	Solar Star HD New Jersey, LLC	100.00%		United States	United States
	Solar Star HD New York, LLC	100.00%		United States	United States
	Solar Star Healthy 1, LLC	100.00%		United States	United States
	Solar Star Healthy Lake, LLC	100.00%		United States	United States
	Solar Star Herald Square 1, LLC	100.00%		United States	United States
	Solar Star Hernwood, LLC	100.00%		United States	United States
	Solar Star Hubbardson South, LLC	100.00%		United States	United States
	Solar Star Irvine Civic Center, LLC	100.00%		United States	United States
	Solar Star Jal, LLC	100.00%		United States	United States
	Solar Star Kennedale Storage, LLC	100.00%		United States	United States
	Solar Star Khsd, LLC	100.00%		United States	United States
	Solar Star LA County High Desert, LLC	100.00%		United States	United States
	Solar Star Lake Mills 1, LLC	100.00%		United States	United States
	Solar Star LCR Culver City, LLC	100.00%		United States	United States
	Solar Star LCR Irvine, LLC	100.00%		United States	United States
	Solar Star LCR Split 2, LLC	100.00%		United States	United States
	Solar Star Light Park, LLC	100.00%		United States	United States
	Solar Star Lincoln School, LLC	100.00%		United States	United States
	Solar Star Lompoc Diatomite 1, LLC	100.00%		United States	United States
	Solar Star Long Peaches, LLC	100.00%		United States	United States
	Solar Star Los Lunas 2 LLC	100.00%		United States	United States
	Solar Star Los Lunas, LLC	100.00%		United States	United States
	Solar Star MA - Tewksbury, LLC	100.00%		United States	United States
	Solar Star Massachusetts II, LLC	100.00%		United States	United States
	Solar Star Massachusetts III, LLC	100.00%		United States	United States
	Solar Star Maxx 1, LLC	100.00%		United States	United States
	Solar Star Mayfield 1, LLC	100.00%		United States	United States
	Solar Star Maynard 1, LLC	100.00%		United States	United States
	Solar Star Mifflinburg 1, LLC	100.00%		United States	United States
	Solar Star Millville Rohrsburg, LLC	100.00%		United States	United States
	Solar Star Millville, LLC	100.00%		United States	United States
	Solar Star Mountain Post, LLC	100.00%		United States	United States
	Solar Star North Herty Storage, LLC	100.00%		United States	United States
	Solar Star Orangeville 2, LLC	100.00%		United States	United States
	Solar Star Orangeville Eagle, LLC	100.00%		United States	United States
	Solar Star Palmyra North, LLC	100.00%		United States	United States
	Solar Star Parent CRC Kern Front, LLC	100.00%		United States	United States
	Solar Star Parent CRC Mt. Poso, LLC	100.00%		United States	United States
	Solar Star Parent CRC North Shafter, LLC	100.00%		United States	United States
	Solar Star Parent CRC Pier A West, LLC	100.00%		United States	United States
	Solar Star Parent CRC Yowlumne 1 North, LLC	100.00%		United States	United States
	Solar Star Parent CRC Yowlumne 2 South, LLC	100.00%		United States	United States
	Solar Star Parkton, LLC	100.00%		United States	United States
	Solar Star Pennsauken, LLC	100.00%		United States	United States
	Solar Star Petersburg 1, LLC	100.00%		United States	United States
	Solar Star Pleasant Mount 1, LLC	100.00%		United States	United States
	Solar Star Pleasant Mount 2, LLC	100.00%		United States	United States
	Solar Star Prime 2, LLC	100.00%		United States	United States
	Solar Star Prime 4, LLC	100.00%		United States	United States
	Solar Star Prime I, LLC	100.00%		United States	United States

Business segment	Statutory corporate name	% Company interest	Method	Country of incorporation	Country of operations
Integrated Power (continued)					
	Solar Star Prime SCK3, LLC	100.00%		United States	United States
	Solar Star PTC 1, LLC	100.00%		United States	United States
	Solar Star PTC 2, LLC	100.00%		United States	United States
	Solar Star PUSD Monache, LLC	100.00%		United States	United States
	Solar Star Saft Valdosta, LLC	100.00%		United States	United States
	Solar Star Santa Ana HS, LLC	100.00%		United States	United States
	Solar Star Serving Science 2, LLC	100.00%		United States	United States
	Solar Star Serving Science, LLC	100.00%		United States	United States
	Solar Star State of CT Solar 1, LLC	100.00%		United States	United States
	Solar Star Storage Texas, LLC	100.00%		United States	United States
	Solar Star Tift Toombs Peaches, LLC	100.00%		United States	United States
	Solar Star Timberville 1, LLC	100.00%		United States	United States
	Solar Star Timberville 2, LLC	100.00%		United States	United States
	Solar Star Track Southern Ave 1, LLC	100.00%		United States	United States
	Solar Star Tranquility, LLC	100.00%		United States	United States
	Solar Star Unkety Brook, LLC	100.00%		United States	United States
	Solar Star Urbana Landfill South, LLC	100.00%		United States	United States
	Solar Star Vegas 1, LLC	100.00%		United States	United States
	Solar Star Virginia Holdco, LLC	100.00%		United States	United States
	Solar Star Ware 1, LLC	100.00%		United States	United States
	Solar Star Western Hills Storage, LLC	100.00%		United States	United States
	Solar Star Whitewater South, LLC	100.00%		United States	United States
	Solar Star Wholesome Portland, LLC	100.00%		United States	United States
	Solarstar Ma I, LLC	100.00%		United States	United States
	SolarStorage Fund A, LLC	100.00%		United States	United States
	SolarStorage Fund B, LLC	100.00%		United States	United States
	SolarStorage Fund C, LLC	100.00%		United States	United States
	SolarStorage Fund D, LLC	100.00%		United States	United States
	Solenergy	100.00%		Italy	Italy
	Sombrero Solar, LLC	100.00%		United States	United States
	Spinnaker Solar, S.L.U.	100.00%		Spain	Spain
	SPWR SS 1, LLC	100.00%		United States	United States
	Strongstown Solar, LLC	100.00%		United States	United States
	SunPower Bobcat Solar, LLC	100.00%		United States	United States
	SunPower Commercial FTB Construction, LLC	100.00%		United States	United States
	SunPower Commercial Holding Company FTB SLB Parent, LLC	100.00%		United States	United States
	SunPower Commercial Holding Company FTB SLB, LLC	100.00%		United States	United States
	SunPower Helix I, LLC	100.00%		United States	United States
	SunPower NY CDG 1, LLC	100.00%		United States	United States
	SunPower Revolver HoldCo I Parent, LLC	100.00%		United States	United States
	SunPower Revolver HoldCo I, LLC	100.00%		United States	United States
	Sunzil	50.00%	E	France	France
	Swingletree Operations, LLC	100.00%		United States	United States
	Tadiran Batteries GmbH	100.00%		Germany	Germany
	Tadiran Batteries Limited	100.00%		Israel	Israel
	Talmei Eliyahu Green Energies Ltd.	46.94%		Israel	Israel
	Terrilvoltaique de Ronchamp et Magny-Danigon	40.80%	E	France	France
	TexGen Power, LLC	100.00%		United States	United States
	TNE Holdco 1 Ltd	100.00%		United Kingdom	United Kingdom
	Tosca Holdco, LLC	50.00%	E	United States	United States
	Total Envision Energy Services (Shanghai) Co., Ltd	50.00%	E	China	China
	Total Eren	100.00%		France	France
	Total Eren Chile	100.00%		Chile	Chile

Business segment	Statutory corporate name	% Company interest	Method	Country of incorporation	Country of operations
Integrated Power (continued)					
	Total Eren Holding	100.00%		France	France
	Total Tractebel Emirates O&M Company	50.00%	E	France	United Arab Emirates
	Total Tractebel Emirates Power Company	50.00%	E	France	United Arab Emirates
	TotalEnergies - Centrale Electrique Bayet	100.00%		France	France
	TotalEnergies - Centrale Electrique Marchienne-au-Pont	100.00%		Belgium	Belgium
	TotalEnergies - Centrale Electrique Pont-sur-Sambre	100.00%		France	France
	TotalEnergies - Centrale Electrique Saint-Avold	100.00%		France	France
	TotalEnergies - Centrale Electrique Toul	100.00%		France	France
	TotalEnergies Alamo Solar, S.L.U.	100.00%		Spain	Spain
	TotalEnergies Andromeda Solar, S.L.U.	100.00%		Spain	Spain
	TotalEnergies B Solar, LLC	100.00%		United States	United States
	TotalEnergies C HoldCo, LLC	100.00%		United States	United States
	TotalEnergies Carolina Long Bay, LLC	100.00%		United States	United States
	TotalEnergies Clientes	100.00%		Spain	Spain
	TotalEnergies CWB I Solar, LLC	100.00%		United States	United States
	TotalEnergies DF Solar, LLC	100.00%		United States	United States
	TotalEnergies Distributed Generation Assets USA, LLC	100.00%		United States	United States
	TotalEnergies Distributed Generation Philippines Inc.	100.00%		United States	United States
	TotalEnergies Distributed Generation USA, LLC	100.00%		United States	United States
	TotalEnergies Dracena Participacoes	100.00%		Brazil	Brazil
	TotalEnergies Electricidad y Gas España	100.00%		Spain	Spain
	TotalEnergies Electricite et Gaz France	100.00%		France	France
	TotalEnergies Flexible Power USA, LLC	100.00%		United States	United States
	TotalEnergies H Solar, LLC	100.00%		United States	United States
	TotalEnergies HI Holdco, LLC	100.00%		United States	United States
	TotalEnergies Integrated Power ESS Belgium	100.00%		Belgium	Belgium
	TotalEnergies M Solar, LLC	100.00%		United States	United States
	TotalEnergies Marahu Holding, LLC	100.00%		United States	United States
	TotalEnergies Offshore Wind Korea	100.00%		France	France
	TotalEnergies Offshore Wind Netherlands Participations I B.V.	100.00%		Netherlands	Netherlands
	TotalEnergies Offshore Wind Netherlands Participations II B.V.	100.00%		Netherlands	Netherlands
	TotalEnergies OFW NSE1 GmbH	100.00%		Germany	Germany
	TotalEnergies OFW OSE GmbH	100.00%		Germany	Germany
	TotalEnergies OFW US 1, LLC	100.00%		United States	United States
	TotalEnergies OFW US 4, LLC	100.00%		United States	United States
	TotalEnergies Planta Solar Andalucia 3, S.L.U.	100.00%		Spain	Spain
	TotalEnergies Power & Gas Belgium	100.00%		Belgium	Belgium
	TotalEnergies Power Generation France	100.00%		France	France
	TotalEnergies Renewables	100.00%		France	France
	TotalEnergies Renewables (Cambodia) Co., Ltd	100.00%		Cambodia	Cambodia
	TotalEnergies Renewables Asia	100.00%		Singapore	Singapore
	TotalEnergies Renewables Australia	100.00%		Australia	Australia
	TotalEnergies Renewables Bulgaria	100.00%		Bulgaria	Bulgaria
	TotalEnergies Renewables Deutschland GmbH	100.00%		Germany	Germany
	TotalEnergies Renewables Development Asia Pte. Ltd.	100.00%		Singapore	Singapore
	TotalEnergies Renewables Development Middle East	100.00%		France	France
	TotalEnergies Renewables Development Partnership, LLC	100.00%		United States	United States
	TotalEnergies Renewables Development Philippines Corporation	100.00%		Philippines	Philippines
	TotalEnergies Renewables DG Asia Assets Pte Ltd	100.00%		Singapore	Singapore
	TotalEnergies Renewables DG Development Asia Pte. Ltd.	100.00%		Singapore	Singapore
	TotalEnergies Renewables DG Holdings Asia Pte Ltd	100.00%		Singapore	Singapore
	TotalEnergies Renewables DG MEA - Assets 1 FZE	100.00%		United Arab Emirates	United Arab Emirates
	TotalEnergies Renewables DG MEA FZE	100.00%		United Arab Emirates	United Arab Emirates

Business segment	Statutory corporate name	% Company interest	Method	Country of incorporation	Country of operations
Integrated Power (continued)					
	TotalEnergies Renewables ESS Carling	100.00%		France	France
	TotalEnergies Renewables ESS Flandres	100.00%		France	France
	TotalEnergies Renewables ESS Grandpuits	100.00%		France	France
	TotalEnergies Renewables Holding Hellas	100.00%		Luxembourg	Luxembourg
	TotalEnergies Renewables Holding Luxembourg Nov S.A.	100.00%		Luxembourg	Luxembourg
	TotalEnergies Renewables Iberica, S.L.U	100.00%		Spain	Spain
	TotalEnergies Renewables India	100.00%		Luxembourg	Luxembourg
	TotalEnergies Renewables Indian Ocean Ltd	100.00%		Mauritius Island	Mauritius Island
	TotalEnergies Renewables International	100.00%		France	France
	TotalEnergies Renewables Italia	100.00%		Italy	Italy
	TotalEnergies Renewables Latin America	100.00%		Chile	Chile
	TotalEnergies Renewables Malaysia Sdn. Bhd.	100.00%		Malaysia	Malaysia
	TotalEnergies Renewables Nederland A B.V.	100.00%		Netherlands	Netherlands
	TotalEnergies Renewables Nederland B.V.	100.00%		Netherlands	Netherlands
	TotalEnergies Renewables Nov	100.00%		France	France
	TotalEnergies Renewables Poland	100.00%		Poland	Poland
	TotalEnergies Renewables Portugal Green S.A.	100.00%		Portugal	Portugal
	TotalEnergies Renewables Portugal Hibridizacão S.A.	100.00%		Portugal	Portugal
	TotalEnergies Renewables Portugal International S.A.	100.00%		Portugal	Portugal
	TotalEnergies Renewables Portugal Novos Desenvolvimentos S.A.	100.00%		Portugal	Portugal
	TotalEnergies Renewables Portugal Portfolio S.A.	100.00%		Portugal	Portugal
	TotalEnergies Renewables Portugal SGPS	100.00%		Portugal	Portugal
	TotalEnergies Renewables Portugal Sol & Vento S.A.	100.00%		Portugal	Portugal
	TotalEnergies Renewables Projects Philippines Corporation	100.00%		Philippines	Philippines
	TotalEnergies Renewables Projects Singapore Pte. Ltd	100.00%		Singapore	Singapore
	TotalEnergies Renewables Projects Vietnam	100.00%		Singapore	Singapore
	TotalEnergies Renewables R4 Holdco Ltd	100.00%		United Kingdom	United Kingdom
	TotalEnergies Renewables Services Bulgaria	100.00%		Bulgaria	Bulgaria
	TotalEnergies Renewables Services Italia	100.00%		Italy	Italy
	TotalEnergies Renewables Services Poland	100.00%		Poland	Poland
	TotalEnergies Renewables Services Portugal	100.00%		Portugal	Portugal
	TotalEnergies Renewables Singapore Pte. Ltd	100.00%		Singapore	Singapore
	TotalEnergies Renewables Solar Italia	100.00%		Italy	Italy
	TotalEnergies Renewables Thailand	100.00%		Thailand	Thailand
	TotalEnergies Renewables UK Limited	100.00%		United Kingdom	United Kingdom
	TotalEnergies Renewables USA, LLC	100.00%		United States	United States
	TotalEnergies Renouvelables Danemark ApS	100.00%		Denmark	Denmark
	TotalEnergies Renouvelables France	100.00%		France	France
	TotalEnergies Renouvelables Nogara	50.00%	E	France	France
	TotalEnergies Renouvelables Pacific	100.00%		France	France
	TotalEnergies Solar DG Nederland B.V.	100.00%		Netherlands	Netherlands
	TotalEnergies Solar France	100.00%		France	France
	TotalEnergies Solar Intl	100.00%		France	France
	TotalEnergies Solar Wind Indian Ocean Ltd	100.00%		Mauritius Island	Mauritius Island
	TotalEnergies Strong, LLC	50.00%	E	United States	United States
	TotalEnergies Wire 3, LLC	100.00%		United States	United States
	TQN Hydro	100.00%		France	France
	TQN Solar	100.00%		France	France
	TQN Solar Nogara	50.00%	E	France	France
	TQN Wind	100.00%		France	France
	Trofeo Solar, S.L.U.	100.00%		Spain	Spain
	Truyesol	50.00%	E	France	France
	TSGF SpA	100.00%		Chile	Chile
	TSSDG India Private Limited	100.00%		India	India

Business segment	Statutory corporate name	% Company interest	Method	Country of incorporation	Country of operations
Integrated Power (continued)					
	Valencia Solar 1, LLC	100.00%		United States	United States
	Valencia Solar 2, LLC	100.00%		United States	United States
	Valencia Solar 3, LLC	100.00%		United States	United States
	Valencia Solar 4, LLC	100.00%		United States	United States
	Valorene	66.00%		France	France
	Varadero Solar, S.L.U.	100.00%		Spain	Spain
	Ventos do Seixo Amarelo - Energias Renovaveis S.A.	90.00%		Portugal	Portugal
	Vents D'Oc Centrale D'Energie Renouvelable 16	100.00%		France	France
	Vents D'Oc Centrale D'Energie Renouvelable 17	50.00%	E	France	France
	Vents D'Oc Centrale D'Energie Renouvelable 18	100.00%		France	France
	Vertigo	25.92%	E	France	France
	Vientos Los Hercules	100.00%		Argentina	Argentina
	Vientos Solutions, S.L.U.	100.00%		Spain	Argentina
	Vireausol	50.00%	E	France	France
	West Burton Flexible Generation Ltd	50.00%	E	United Kingdom	United Kingdom
	Wichita Data, LLC	100.00%		United States	United States
	Wichita Solar I, LLC	100.00%		United States	United States
	Winche Solar, S.L.U.	100.00%		Spain	Spain
	Wind 1026 GmbH	100.00%		Germany	France
	Wind 1029 GmbH	100.00%		Germany	Germany
	Winergy	100.00%		France	France
	Wolf Hollow I Power, LLC	100.00%		United States	United States
	Wolf Hollow Services, LLC	50.00%	E	United States	United States
	Woodbury Solar, LLC	100.00%		United States	United States
	WP France 21	100.00%		France	France
	WP FRANCE 28	100.00%		France	France
	Yunlin Holding GmbH	23.00%	E	Germany	Germany
	Yunlin Ukco Limited	29.46%	E	United Kingdom	United Kingdom
	Zenith Solar, LLC	100.00%		United States	United States
	Zephyr Holdings GP, LLC	50.00%	E	United States	United States
Refining & Chemicals					
	Atlantic Trading and Marketing Financial Inc.	100.00%		United States	United States
	Atlantic Trading and Marketing Inc.	100.00%		United States	United States
	Balzatex S.A.S.	100.00%		France	France
	BASF TotalEnergies Petrochemicals LLC	40.00%		United States	United States
	Bay Junction Inc.	100.00%		United States	United States
	Bayport Polymers LLC	50.00%	E	United States	United States
	Borrachas Portalegre Ltda	100.00%		Portugal	Portugal
	BOU Verwaltungs GmbH	100.00%		Germany	Germany
	Catelsa-Caceres S.A.U.	100.00%		Spain	Spain
	Chartering and Shipping Services Singapore Pte. Ltd.	100.00%		Singapore	Singapore
	Composite Industrie Maroc S.A.R.L.	100.00%		Morocco	Morocco
	Composite Industrie S.A.S.	100.00%		France	France
	Cosden, LLC	100.00%		United States	United States
	COS-MAR Company	50.00%		United States	United States
	Cray Valley (Guangzhou) Chemical Company, Limited	100.00%		China	China
	Cray Valley Czech	100.00%		Czech Republic	Czech Republic
	Cray Valley HSC Asia Ltd	100.00%		China	China
	Cray Valley S.A.	100.00%		France	France
	CSSA - Chartering and Shipping Services S.A.	100.00%		Switzerland	Switzerland
	EcoMotion JV GmbH	49.90%	E	Germany	Germany
	Elf Aquitaine Fertilisants	100.00%		France	France
	Espa S.A.R.L.	100.00%		France	France
	Feluy Immobati	100.00%		Belgium	Belgium

Business segment	Statutory corporate name	% Company interest	Method	Country of incorporation	Country of operations
Refining & Chemicals (continued)					
	Fina Technology, Inc.	100.00%		United States	United States
	FPL Enterprises, Inc.	100.00%		United States	United States
	Gasket (Suzhou) Valve Components Company, Limited	100.00%		China	China
	Gasket International S.R.L.	100.00%		Italy	Italy
	Grande Paroisse S.A.	100.00%		France	France
	Hanwha TotalEnergies Petrochemical Co., Ltd	50.00%	E	South Korea	South Korea
	Hutchinson (Chongqing) Automotive Systems Ltd	100.00%		China	China
	Hutchinson (UK) Limited	100.00%		United Kingdom	United Kingdom
	Hutchinson (Wuhan) Automotive Rubber Products Company Limited	100.00%		China	China
	Hutchinson Aeronautique & Industrie Limited	100.00%		Canada	Canada
	Hutchinson Aerospace & Industry Inc.	100.00%		United States	United States
	Hutchinson Aerospace GmbH	100.00%		Germany	Germany
	Hutchinson Aerospace Services SNC	100.00%		France	France
	Hutchinson Antivibration Systems Inc.	100.00%		United States	United States
	Hutchinson Autopartes Mexico S.A. de C.V.	100.00%		Mexico	Mexico
	Hutchinson Borrachas de Portugal Ltda	100.00%		Portugal	Portugal
	Hutchinson Brazil Automotive	100.00%		Brazil	Brazil
	Hutchinson Corporation	100.00%		United States	United States
	Hutchinson d.o.o Ruma	100.00%		Serbia	Serbia
	Hutchinson Do Brasil S.A.	100.00%		Brazil	Brazil
	Hutchinson Fluid Management Systems Inc.	100.00%		United States	United States
	Hutchinson GmbH	100.00%		Germany	Germany
	Hutchinson Holding GmbH	100.00%		Germany	Germany
	Hutchinson Holdings UK Limited	100.00%		United Kingdom	United Kingdom
	Hutchinson Iberia S.A.	100.00%		Spain	Spain
	Hutchinson Industrial Rubber Products (Suzhou) Company, Limited	100.00%		China	China
	Hutchinson Industrial Rubber Products Private Limited Inde	100.00%		India	India
	Hutchinson Industrias Del Caucho SAU	100.00%		Spain	Spain
	Hutchinson Industries Inc.	100.00%		United States	United States
	Hutchinson Japan Company Limited	100.00%		Japan	Japan
	Hutchinson Korea Limited	100.00%		South Korea	South Korea
	Hutchinson Malta Ltd	100.00%		Malta	Malta
	Hutchinson Maroc S.A.R.L. AU	100.00%		Morocco	Morocco
	Hutchinson Poland SP ZO.O.	100.00%		Poland	Poland
	Hutchinson Polymers S.N.C.	100.00%		France	France
	Hutchinson Porto Tubos Flexiveis Ldta	100.00%		Portugal	Portugal
	Hutchinson Precision Sealing Systems Inc.	100.00%		United States	United States
	Hutchinson Research & Innovation Singapore Pte. Limited	100.00%		Singapore	Singapore
	Hutchinson S.A.	100.00%		France	France
	Hutchinson S.N.C.	100.00%		France	France
	Hutchinson S.R.L. (Brasov)	100.00%		Romania	Romania
	Hutchinson S.R.L. (Italie)	100.00%		Italy	Italy
	Hutchinson Seal De Mexico S.A. de C.V.	100.00%		Mexico	Mexico
	Hutchinson Sealing Systems Inc.	100.00%		United States	United States
	Hutchinson SRO	100.00%		Czech Republic	Czech Republic
	Hutchinson Stop-Choc GmbH & Co. KG	100.00%		Germany	Germany
	Hutchinson Technologies (Maanshan) Co., Ltd.	100.00%		China	China
	Hutchinson Technologies (Shenyang) Co., Ltd.	100.00%		China	China
	Hutchinson Transferencia de Fluidos S.A. de C.V.	100.00%		Mexico	Mexico
	Hutchinson Tunisie S.A.R.L.	100.00%		Tunisia	Tunisia
	Hutchinson Vietnam Company Limited	100.00%		Vietnam	Vietnam
	Iber Resinas S.L.	100.00%		Spain	Spain
	Industrias Tecnicas De La Espuma SL	100.00%		Spain	Spain

Business segment	Statutory corporate name	% Company interest	Method	Country of incorporation	Country of operations
Refining & Chemicals (continued)					
	Industrielle Desmarquoy S.N.C.	100.00%		France	France
	Jehier S.A.S.	99.89%		France	France
	Joint Precision Rubber	100.00%		France	France
	KTN Kunststofftechnik Nobitz GmbH	100.00%		Germany	Germany
	La Porte Pipeline Company, L.P.	19.96%	E	United States	United States
	La Porte Pipeline GP, LLC	19.96%	E	United States	United States
	Laffan Refinery Company Limited 1	10.00%	E	Qatar	Qatar
	Le Joint Francais S.N.C.	100.00%		France	France
	Legacy Site Services Funding Inc.	100.00%		United States	United States
	Legacy Site Services LLC	100.00%		United States	United States
	Les Stratifies S.A.S.	100.00%		France	France
	Lone Wolf Land Company	100.00%		United States	United States
	Machen Land Limited	100.00%		United Kingdom	United Kingdom
	Metafactory	100.00%		France	France
	Mide Technology Corporation	100.00%		United States	United States
	Olutex Oberlausitzer Luftfahrttextilien GmbH	100.00%		Germany	Germany
	Pamargan Products Limited	100.00%		United Kingdom	United Kingdom
	Paulstra S.N.C.	100.00%		France	France
	PFW Aerospace GmbH	100.00%		Germany	Germany
	PFW Havacilik Sanayi ve Dis Ticaret Limited Sirtketi	100.00%		Turkey	Turkey
	PFW UK Machining Ltd.	100.00%		United Kingdom	United Kingdom
	Polyblend GmbH	100.00%		Germany	Germany
	Qatar Petrochemical Company Q.S.C. (QAPCO)	20.00%	E	Qatar	Qatar
	Qatofin Company Limited	49.08%	E	Qatar	Qatar
	Resilium	100.00%		Belgium	Belgium
	Retia	100.00%		France	France
	Retia USA LLC	100.00%		United States	United States
	San Jacinto Rail Limited	17.00%	E	United States	United States
	Saudi Aramco Total Refining & Petrochemical Company	37.50%	E	Saoudia Arabia	Saoudia Arabia
	Septentrion Participations	100.00%		France	France
	Societe Bearnaise De Gestion Industrielle	100.00%		France	France
	Societe du Pipeline Sud-Europeen	35.14%	E	France	France
	Southeast Texas Pipelines LLC	40.00%		United States	United States
	Stillman Seal Corporation	100.00%		United States	United States
	Stop-Choc (UK) Limited	100.00%		United Kingdom	United Kingdom
	STR Tecoil Oy	100.00%		Finland	Finland
	Synova	100.00%		France	France
	TankOpslag en PijpleidingenNet N.V.	55.00%		Netherlands	Netherlands
	Techlam S.A.S.	100.00%		France	France
	Tesbo Oy	100.00%		Finland	Finland
	TESSAF S.A.S.	50.10%		France	France
	Thermal Control Systems Automotive Sasu	100.00%		France	France
	Total Atlantic Trading Mexico S.A. de C.V.	100.00%		Mexico	Mexico
	Total Energy Marketing A/S	100.00%		Denmark	Denmark
	TotalEnergies Activites Maritimes	100.00%		France	France
	TotalEnergies Belgium Services	100.00%		Belgium	Belgium
	TotalEnergies Corbion B.V.	50.00%	E	Netherlands	Netherlands
	TotalEnergies Fluids	100.00%		France	France
	TotalEnergies Laffan Refinery Holdco	100.00%		France	France
	TotalEnergies Marketing Deutschland GmbH Refining (d)	100.00%		Germany	Germany
	TotalEnergies Olefins Antwerp	100.00%		Belgium	Belgium
	TotalEnergies Petrochemicals & Refining SA/NV	100.00%		Belgium	Belgium
	TotalEnergies Petrochemicals (Hong-Kong) Ltd	100.00%		Hong Kong	Hong Kong
	TotalEnergies Petrochemicals (Shanghai) Co. Ltd	100.00%		China	China

Business segment	Statutory corporate name	% Company interest	Method	Country of incorporation	Country of operations
Refining & Chemicals (continued)					
	TotalEnergies Petrochemicals Development Feluy	100.00%		Belgium	Belgium
	TotalEnergies Petrochemicals Ecaussinnes	100.00%		Belgium	Belgium
	TotalEnergies Petrochemicals Feluy	100.00%		Belgium	Belgium
	TotalEnergies Petrochemicals France	100.00%		France	France
	TotalEnergies Petrochemicals Iberica	100.00%		Spain	Spain
	TotalEnergies Petrochemicals UK Ltd	100.00%		United Kingdom	United Kingdom
	TotalEnergies Pipeline USA, Inc.	100.00%		United States	United States
	TotalEnergies Plastic Energy Advanced Recycling S.A.S.	60.00%		France	France
	TotalEnergies Polymers Antwerp	100.00%		Belgium	Belgium
	TotalEnergies Raffinage Chimie	100.00%		France	France
	TotalEnergies Raffinage France	100.00%		France	France
	TotalEnergies Raffinerie Mitteldeutschland GmbH	100.00%		Germany	Germany
	TotalEnergies Refinery Antwerp	100.00%		Belgium	Belgium
	TotalEnergies Refinery Port Arthur, LLC	100.00%		United States	United States
	TotalEnergies Refining & Chemicals Arabia	100.00%		France	France
	TotalEnergies Splitter USA, Inc.	100.00%		United States	United States
	TotalEnergies Trading Asia Pte. Ltd	100.00%		Singapore	Singapore
	TotalEnergies Trading Europe	100.00%		France	France
	TotalEnergies Trading Products S.A.	100.00%		Switzerland	Switzerland
	TotalEnergies Trading Storage S.A.	100.00%		Switzerland	Switzerland
	TOTSA TotalEnergies Trading S.A.	100.00%		Switzerland	Switzerland
	Totseanergy	49.00%	E	Belgium	Belgium
	Vibrachoc S.A.U.	100.00%		Spain	Spain
	Zeeland Refinery NV	55.00%		Netherlands	Netherlands
Marketing & Services					
	Antilles Gaz	100.00%		France	France
	Argedis	100.00%		France	France
	Aristea	51.00%	E	Belgium	Belgium
	Arteco	49.99%	E	Belgium	Belgium
	AS 24	100.00%		France	France
	AS 24 Belgium	100.00%		Belgium	Belgium
	AS 24 Espanola S.A.	100.00%		Spain	Spain
	AS 24 Fuel Card Limited	100.00%		United Kingdom	United Kingdom
	AS 24 Lietuva	100.00%		Lithunia	Lithunia
	AS 24 Polska SP ZO.O.	100.00%		Poland	Poland
	AS 24 Tankservice GmbH	100.00%		Germany	Germany
	C.M.T.M. CENTRE DE MANAGEMENT DE TRANSACTIONS MONETIQUES	99.90%		France	France
	Circle K Belgium	40.00%	E	Belgium	Belgium
	Clean Energy Fuels Corp.	19.06%	E	United States	United States
	Elf Oil UK Aviation Limited	100.00%		United Kingdom	United Kingdom
	Elf Oil UK Properties Limited	100.00%		United Kingdom	United Kingdom
	Fioulmarket.fr	100.00%		France	France
	Gapco Kenya Limited	100.00%		Kenya	Kenya
	Gapco Tanzania Limited	100.00%		Tanzania	Tanzania
	Guangzhou Elf Lubricants Company Limited	77.00%		China	China
	Gulf Africa Petroleum Corporation	100.00%		France	France
	Lubricants Vietnam Holding Limited	100.00%		Hong Kong	Hong Kong
	Quimica Vasca S.A.U.	100.00%		Spain	Spain
	Saudi Total Petroleum Products	51.00%	E	Saoudia Arabia	Saoudia Arabia
	Societe mahoraise de stockage de produits petroliers	100.00%		France	France
	Societe pour l'exploitation de l'usine de Rouen	98.98%		France	France
	Societe Urbaine des Petroles	100.00%		France	France
	S-OIL TotalEnergies Lubricants Co. Ltd	50.00%	E	South Korea	South Korea
	Source EV Limited	50.00%	E	United Kingdom	United Kingdom

Business segment	Statutory corporate name	% Company interest	Method	Country of incorporation	Country of operations
Marketing & Services (continued)					
	South Asia LPG Company Private Limited	50.00%	E	India	India
	Stedis	100.00%		France	France
	Tas'Helat Marketing Company	50.00%	E	Saoudia Arabia	Saoudia Arabia
	TEAL Mobility	50.00%	E	France	France
	TEVGO	100.00%		France	France
	Total (Tianjin) Manufacturing Co., Ltd.	77.00%		China	China
	Total Bitumen UK Limited	100.00%		United Kingdom	United Kingdom
	Total Especialidades Argentina	100.00%		Argentina	Argentina
	Total Lubricants (China) Company Limited	77.00%		China	China
	Total Marketing Uganda Ltd	100.00%		Uganda	Uganda
	TotalEnergies (China) Investment Co Ltd	100.00%		China	China
	TotalEnergies Additives and Fuels Solutions	100.00%		France	France
	TotalEnergies Aviation	100.00%		France	France
	TotalEnergies Aviation Suisse S.A.	100.00%		Switzerland	Switzerland
	TotalEnergies Aviation Zambia Ltd	100.00%		Zambia	Zambia
	TotalEnergies Bitumen Deutschland GmbH	100.00%		Germany	Germany
	TotalEnergies Charging Services	100.00%		France	France
	TotalEnergies Charging Services España SL	100.00%		Spain	Spain
	TotalEnergies Charging Services Singapore Pte. Ltd.	100.00%		Singapore	Singapore
	TotalEnergies Charging Solutions Belgium	100.00%		Belgium	Belgium
	TotalEnergies Charging Solutions Deutschland GmbH	100.00%		Germany	Germany
	TotalEnergies Charging Solutions Nederland B.V.	100.00%		Netherlands	Netherlands
	TotalEnergies Charging Solutions UK Ltd	100.00%		United Kingdom	United Kingdom
	TotalEnergies Diesel Comercio e Transportes Brasil Ltda	100.00%		Brazil	Brazil
	TotalEnergies Distribuidora Brasil Ltda	100.00%		Brazil	Brazil
	TotalEnergies Glass Lubricants Europe GmbH	100.00%		Germany	Germany
	TotalEnergies Holdings Deutschland GmbH	100.00%		Germany	Germany
	TotalEnergies LPG Vietnam Company Ltd	100.00%		Vietnam	Vietnam
	TotalEnergies Lubrifiants	99.98%		France	France
	TotalEnergies Lubrifiants Algerie SPA	78.90%		Algeria	Algeria
	TotalEnergies Lubrifiants Services Automobile	99.98%		France	France
	TotalEnergies Marine Fuels Pte. Ltd	100.00%		Singapore	Singapore
	TotalEnergies Marketing (Cambodia) Co. Ltd	100.00%		Cambodia	Cambodia
	TotalEnergies Marketing (Fiji) Pte Ltd	100.00%		Fiji Islands	Fiji Islands
	TotalEnergies Marketing (Hubei) Co., Ltd	100.00%		China	China
	TotalEnergies Marketing (Shanghai) Co., Ltd	100.00%		China	China
	TotalEnergies Marketing African Holdings Ltd	100.00%		United Kingdom	United Kingdom
	TotalEnergies Marketing Afrique	100.00%		France	France
	TotalEnergies Marketing Angola S.A.	50.00%	E	Angola	Angola
	TotalEnergies Marketing Antilles-Guyane	100.00%		France	France
	TotalEnergies Marketing Asia-Pacific Middle East Pte. Ltd	100.00%		Singapore	Singapore
	TotalEnergies Marketing Belgium	100.00%		Belgium	Belgium
	TotalEnergies Marketing Burkina	100.00%		Burkina Faso	Burkina Faso
	TotalEnergies Marketing Cameroun S.A.	67.01%		Cameroon	Cameroon
	TotalEnergies Marketing Ceska republika S.R.O.	100.00%		Czech Republic	Czech Republic
	TotalEnergies Marketing Chile SA	100.00%		Chile	Chile
	TotalEnergies Marketing Congo	100.00%		Congo	Congo
	TotalEnergies Marketing Corse	100.00%		France	France
	TotalEnergies Marketing Côte d'Ivoire	72.99%		Côte d'Ivoire	Côte d'Ivoire
	TotalEnergies Marketing Denmark A/S	100.00%		Denmark	Denmark
	TotalEnergies Marketing Dominicana, S.A.	50.00%		Dominican Republic	Dominican Republic
	TotalEnergies Marketing Egypt	50.00%	E	Egypt	Egypt
	TotalEnergies Marketing España, S.A.U.	100.00%		Spain	Spain
	TotalEnergies Marketing Eswatini (Pty) Ltd	50.10%		Swaziland	Swaziland

Business segment	Statutory corporate name	% Company interest	Method	Country of incorporation	Country of operations
Marketing & Services (continued)					
	TotalEnergies Marketing Ethiopia Share Company	100.00%		Ethiopia	Ethiopia
	TotalEnergies Marketing France	100.00%		France	France
	TotalEnergies Marketing Gabon	90.00%		Gabon	Gabon
	TotalEnergies Marketing Ghana PLC	76.74%		Ghana	Ghana
	TotalEnergies Marketing Guinea Ecuatorial	70.00%		Equatorial Guinea	Equatorial Guinea
	TotalEnergies Marketing Guinee	100.00%		Guinea	Guinea
	TotalEnergies Marketing Holdings Africa	100.00%		France	France
	TotalEnergies Marketing Holdings Asia	100.00%		France	France
	TotalEnergies Marketing Holdings India	100.00%		France	France
	TotalEnergies Marketing India Private Ltd	100.00%		India	India
	TotalEnergies Marketing Italia SpA	100.00%		Italy	Italy
	TotalEnergies Marketing Jamaica Ltd	100.00%		Jamaica	Jamaica
	TotalEnergies Marketing Jordan	100.00%		Jordan	Jordan
	TotalEnergies Marketing Kenya PLC	93.96%		Kenya	Kenya
	TotalEnergies Marketing Lebanon	100.00%		Lebanon	Lebanon
	TotalEnergies Marketing Madagasikara S.A.	79.44%		Madagascar	Madagascar
	TotalEnergies Marketing Malawi Ltd	100.00%		Malawi	Malawi
	TotalEnergies Marketing Mali	100.00%		Mali	Mali
	TotalEnergies Marketing Maroc	55.00%		Morocco	Morocco
	TotalEnergies Marketing Mauritius Ltd	55.00%		Mauritius Island	Mauritius Island
	TotalEnergies Marketing Mayotte	100.00%		France	Mayotte
	TotalEnergies Marketing Mexico S.A. de C.V.	100.00%		Mexico	Mexico
	TotalEnergies Marketing Middle East FZE	100.00%		United Arab Emirates	United Arab Emirates
	TotalEnergies Marketing Mocambique S.A.	100.00%		Mozambique	Mozambique
	TotalEnergies Marketing Namibia (Pty) Ltd	50.10%		Namibia	Namibia
	TotalEnergies Marketing Nederland NV	100.00%		Netherlands	Netherlands
	TotalEnergies Marketing Nigeria PLC	61.72%		Nigeria	Nigeria
	TotalEnergies Marketing Pacifique	100.00%		France	New Caledonia
	TotalEnergies Marketing Polska	100.00%		Poland	Poland
	TotalEnergies Marketing Polynesie	100.00%		France	French Polynesia
	TotalEnergies Marketing Puerto Rico	100.00%		Puerto Rico	Puerto Rico
	TotalEnergies Marketing RDC	60.00%		Democratic Republic of Congo	Democratic Republic of Congo
	TotalEnergies Marketing Reunion	100.00%		France	Reunion
	TotalEnergies Marketing Romania S.A.	100.00%		Romania	Romania
	TotalEnergies Marketing Senegal	69.14%		Senegal	Senegal
	TotalEnergies Marketing Services	100.00%		France	France
	TotalEnergies Marketing South Africa (Pty) Ltd	50.10%		South Africa	South Africa
	TotalEnergies Marketing Taiwan Ltd	63.00%		Talwan	Talwan
	TotalEnergies Marketing Tanzania Ltd	100.00%		Tanzania	Tanzania
	TotalEnergies Marketing Togo	76.72%		Togo	Togo
	TotalEnergies Marketing Tunisie	100.00%		Tunisia	Tunisia
	TotalEnergies Marketing UAE LLC	100.00%		United Arab Emirates	United Arab Emirates
	TotalEnergies Marketing Uganda Ltd	100.00%		Uganda	Uganda
	TotalEnergies Marketing UK Limited	100.00%		United Kingdom	United Kingdom
	TotalEnergies Marketing Ukraine	100.00%		Ukraine	Ukraine
	TotalEnergies Marketing USA Inc.	100.00%		United States	United States
	TotalEnergies Marketing Vietnam Company Ltd	100.00%		Vietnam	Vietnam
	TotalEnergies Marketing Zambia Ltd	100.00%		Zambia	Zambia
	TotalEnergies Marketing Zimbabwe (Private) Ltd	80.00%		Zimbabwe	Zimbabwe
	TotalEnergies MKG Luxembourg S.A.	100.00%		Luxembourg	Luxembourg
	TotalEnergies Proxi Nord Est	100.00%		France	France
	TotalEnergies Proxi Nord Ouest	100.00%		France	France
	TotalEnergies Proxi Sud Est	100.00%		France	France
	TotalEnergies Proxi Sud Ouest	100.00%		France	France

Business segment	Statutory corporate name	% Company interest	Method	Country of incorporation	Country of operations
Marketing & Services (continued)					
	TotalEnergies Singapore Services Pte Ltd	100.00%		Singapore	Singapore
	TotalEnergies Sinochem Retail Company Ltd	49.00%	E	China	China
	TotalEnergies Supply Marketing Services S.A.	100.00%		Switzerland	Switzerland
	TotalEnergies Turkey Pazarlama A.S.	100.00%		Turkey	Turkey
	TotalEnergies Warme&Kraftstoff Deutschland GmbH	100.00%		Germany	Germany
	TotalEnergies Wash France	100.00%		France	France
	Trapil	5.50%	E	France	France
	Upbeatprops 100 Pty Limited	50.10%		South Africa	South Africa
	Yangtze Gorges Green Way Charging Technology (Hubei) Co., Ltd.	50.00%	E	China	China
Corporate					
	Albatros	100.00%		France	France
	Elf Aquitaine Inc.	100.00%		United States	United States
	Elf Forest Products LLC	100.00%		United States	United States
	Institut Photovoltaique D'Ile De France (IPVF)	43.00%		France	France
	Omnium Reinsurance Company S.A.	100.00%		Switzerland	Switzerland
	Pan Insurance Designated Activity Company	100.00%		Ireland	Ireland
	Socap S.A.S.	100.00%		France	France
	Societe Civile Immobiliere CB2	100.00%		France	France
	Sofax Banque	100.00%		France	France
	Total International NV	100.00%		Netherlands	Netherlands
	Total Operations Canada Limited	100.00%		Canada	Canada
	Total Resources (Canada) Limited	100.00%		Canada	Canada
	TotalEnergies (Beijing) Corporate Management Co., Ltd.	100.00%		China	China
	TotalEnergies American Services, Inc.	100.00%		United States	United States
	TotalEnergies Capital	100.00%		France	France
	TotalEnergies Capital Canada Ltd	100.00%		Canada	Canada
	TotalEnergies Capital International	100.00%		France	France
	TotalEnergies Consulting	100.00%		France	France
	TotalEnergies Delaware, Inc.	100.00%		United States	United States
	TotalEnergies Developpement Regional S.A.S.	100.00%		France	France
	TotalEnergies Digital Factory	100.00%		France	France
	TotalEnergies EP Gestion Filiales	100.00%		France	France
	TotalEnergies Facilities Management Services (TFMS)	100.00%		France	France
	TotalEnergies Finance	100.00%		France	France
	TotalEnergies Finance Corporate Services Ltd	100.00%		United Kingdom	United Kingdom
	TotalEnergies Finance Europe	100.00%		France	France
	TotalEnergies Finance International B.V.	100.00%		Netherlands	Netherlands
	TotalEnergies Finance USA, Inc.	100.00%		United States	United States
	TotalEnergies Funding Nederland B.V.	100.00%		Netherlands	Netherlands
	TotalEnergies Gestion USA	100.00%		France	France
	TotalEnergies Global Financial Services	100.00%		France	France
	TotalEnergies Global Human Resources Services	100.00%		France	France
	TotalEnergies Global Information Technology Services Belgium	99.98%		Belgium	Belgium
	TotalEnergies Global IT Services (TGITS)	100.00%		France	France
	TotalEnergies Global Procurement (TGP)	100.00%		France	France
	TotalEnergies Global Procurement Belgium S.A. (TGPB)	100.00%		Belgium	Belgium
	TotalEnergies Global Services Bucharest	100.00%		Romania	Romania
	TotalEnergies Global Services Philippines Inc.	100.00%		Philippines	Philippines
	TotalEnergies Holding Allemagne	100.00%		France	France
	TotalEnergies Holdings	100.00%		France	France
	TotalEnergies Holdings Europe	100.00%		France	France
	TotalEnergies Holdings UK Ltd	100.00%		United Kingdom	United Kingdom
	TotalEnergies Holdings USA, Inc.	100.00%		United States	United States

Business segment	Statutory corporate name	% Company interest	Method	Country of incorporation	Country of operations
Corporate					
	TotalEnergies Investment (Tianjin) Co., Ltd.	100.00%		China	China
	TotalEnergies Investment Management (Tianjin) Co., Ltd.	100.00%		China	China
	TotalEnergies Investments	100.00%		France	France
	TotalEnergies Learning Solutions (TLS)	100.00%		France	France
	TotalEnergies Marketing Holdings Nederland B.V.	100.00%		Netherlands	Netherlands
	TotalEnergies Marketing Holdings South Africa ZA (Pty) Ltd	100.00%		South Africa	Netherlands
	TotalEnergies OneTech	100.00%		France	France
	TotalEnergies OneTech Belgium	100.00%		Belgium	Belgium
	TotalEnergies Participations	100.00%		France	France
	TotalEnergies Petrochemicals & Refining USA, Inc. (d)	100.00%		United States	United States
	TotalEnergies SE	–		France	France
	TotalEnergies Security USA, Inc.	100.00%		United States	United States
	TotalEnergies Treasury	100.00%		France	France
	TotalEnergies Treasury Belgium	100.00%		Belgium	Belgium
	TotalEnergies UK Finance Ltd	100.00%		United Kingdom	United Kingdom
	TotalEnergies Ventures Europe	100.00%		France	France
	TotalEnergies Ventures International	100.00%		France	France

(a) Del Rio Funding LLC, % of control different from % of interest: 50.00%.
(b) Rio Grande LNG Intermediate Holdings LLC, % of control different from % of interest: 16.67%.
(c) TotalEnergies Australia Unit Trust, % of control different from % of interest: 75.16%.
(d) Multi-segment entities.

9

Supplemental oil and gas information (unaudited)

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9.1 Oil and gas information pursuant to FASB Accounting Standards Codification 932

Proved reserves estimates are calculated according to the Securities and Exchange Commission (SEC) Rule 4-10 of Regulation S-X set forth in the "Modernization of Oil and Gas Reporting" release (SEC Release n° 33-8995) and the Financial Accounting Standard Board (FASB) Accounting Standards Update regarding Extractive Activities – Oil and Gas (ASC 932), which provide definitions and disclosure requirements.

9.1.1 Assessment process for reserves

Reserves estimations are performed by experienced geoscientists, engineers and economists under the supervision of each subsidiary's General Management. Staff involved in reserves evaluation are trained to follow SEC-compliant internal guidelines and policies regarding criteria that must be met before reserves can be considered as proved. As of December 31, 2024, all of the Company's proved reserves held in consolidated subsidiaries and equity affiliates are estimated within the affiliates of the Company.

The technical validation process relies on a Technical Reserves Committee that is responsible for approving proved reserves variations above a certain threshold and technical evaluations of reserves associated with an investment decision that requires approval from the Exploration & Production Executive Committee. The Chairman of the Technical Reserves Committee is appointed by the President of Exploration & Production and the President of the OneTech Branch, and its members have expertise in reservoir engineering, production geology, production geophysics, reserves methodology, drilling and development studies.

An internal control process related to reserves estimation is formalized and involves the following elements:

- a central Reserves Entity, the role of which is to consolidate, document and archive the Company's reserves; to ensure coherence of evaluations worldwide; to maintain the Corporate Reserves Guidelines Standards in line with SEC guidelines and policies; to deliver training on reserves evaluation and classification; and to conduct periodically in-depth technical review of reserves for each affiliate,
- an annual review of affiliate reserves conducted by an internal group of specialists selected for their expertise in geosciences and engineering and their knowledge of the affiliates. All members of this group, chaired by the Reserves Vice-President of the Company and composed of at least three Technical Reserves Committee members, are knowledgeable in the SEC guidelines for proved reserves evaluation. Their responsibility is to provide an independent review of significant reserves changes proposed by affiliates and ensure that reserves are estimated using appropriate standards and procedures,
- following the annual review of the reserves, a SEC Reserves Committee chaired by the Exploration & Production Senior Vice President Finance and Economics and comprised of the New Business - Carbon Neutrality EP, the Legal EP, the Finance EP, the Reserves Vice Presidents as well as the Chairman of the Technical Reserves Committee, approves the elements of the SEC reserves booking proposals concerning criteria that are not dependent upon technical expertise (reservoir, geosciences, etc.). The results of the annual review and the proposals for including revisions or additions of SEC Proved Reserves are presented to the Exploration & Production Executive Committee for approval before final validation by the Company's General Management and Chief Financial Officer.

The reserves evaluation and control process are audited periodically by the Company's internal auditors.

The Reserves Vice-President in charge of the central Reserves Entity is appointed by the President of Exploration & Production. As Reserves Vice-President, he supervises the Reserves Entity, chairs the annual review of reserves, and is member of the Technical Reserves Committee and the SEC Reserves Committee. The Reserves Vice-President is also member of the Development Committee of the OneTech Branch. The current Reserves Vice-President has over 35 years of experience in the oil and gas industry, with skills in geosciences and reservoir engineering, as well as in the field of reserves evaluation and control process. He holds an engineering degree from Ecole Nationale Supérieure de Géologie de Nancy, France and a Master of Science from Stanford University, California. He is an active member of the SPE (Society of Petroleum Engineers) for more than 35 years.

9.1.2 Proved developed reserves

As of December 31, 2024, TotalEnergies' proved developed reserves of hydrocarbons (oil, bitumen and gas) were 6,965 Mboe and represented 63% of the proved reserves. As of December 31, 2023, proved developed reserves of hydrocarbons were 6,835 Mboe and represented 65% of the proved reserves. As of December 31, 2022, proved developed reserves of hydrocarbons were 6,990 Mboe and represented 69% of the proved reserves.

9.1.3 Proved undeveloped reserves

As of December 31, 2024, TotalEnergies' proved undeveloped reserves (PUDs) of hydrocarbons were 4,108 Mboe compared to 3,729 Mboe as of December 31, 2023 and 3,200 Mboe as of December 31, 2022. The variation between December 31, 2023 and December 31, 2024 is due to:

- -612 Mboe converted from PUDs to proved developed reserves within the scope of development activities mainly in Brazil, Denmark, Argentina, the United States, Qatar, Australia, the United Arab Emirates, Angola, Oman and Norway. This confirms once again the Company's ability to develop and bring into production large scale and complex projects;
- +493 Mboe of net revisions of previous estimates which break down to -4 Mboe due to economic factors, +70 Mboe due to technical revisions and +427 Mboe due to improved recovery mainly in the United Arab Emirates and Qatar;
- +512 Mboe related to extensions and discoveries, mainly in Brazil, Suriname, Angola and Malaysia;
- -14 Mboe from sales, in Brunei.

In 2024, the costs incurred to develop proved undeveloped reserves were $7.4 billion, which represented 74% of 2024 development costs incurred, and were related to projects located for the most part in the United Arab Emirates, Qatar, Uganda, Norway and Brazil.

The Company's PUDs that may remain undeveloped for five years or more after first disclosure (PUD5+) correspond to the remaining PUD on large scale and complex development projects and to field development projects the implementation of which is dependent on capacity constraints.

Although the Company has converted significant amount of reserves associated to large scale and complex projects from PUD5+ into developed reserves in the last years, those projects still hold PUD5+ that are expected to be developed over time as part of initial field development plans or additional development phases.

In addition, some projects are designed and optimized for a given production capacity that controls the pace at which the field is developed and the wells are drilled. At production start-up, only a portion of the proved reserves is developed to meet capacity constraints and contractual obligations.

Under these specific circumstances, the Company believes that it is justified to report as proved reserves those PUDs, the development of which could span over more than five years after the launching of the project.

9.1.4 Estimated proved reserves of oil, bitumen and gas

The following tables present, for oil, bitumen and gas reserves, an estimate of the Company's oil, bitumen and gas quantities by geographic areas as of December 31, 2024, 2023 and 2022.

Quantities shown correspond to proved developed and undeveloped reserves together with changes in quantities for 2024, 2023 and 2022.

The definitions used for proved, proved developed and proved undeveloped oil and gas reserves are in accordance with the revised Rule 4-10 of SEC Regulation S-X.

All references in the following tables to reserves or production are to the Company's entire share of such reserves or production. TotalEnergies's worldwide proved reserves include the proved reserves of its consolidated subsidiaries as well as its proportionate share of the proved reserves of equity affiliates.

Year-over-year variations in proved reserves at December 31, 2024 are detailed in points 9.1.2, 9.1.3 and are complemented below.

For consolidated subsidiaries, notwithstanding the transfer of Marsa LNG reserves in Oman to equity affiliates following the change in consolidation method, the revisions for the year 2024 are explained by:

- +317 Mboe due to new information obtained from drilling and production history, notably in recent developments in Australia, in Brazil, United Arab Emirates, Angola and Argentina;
- +300 Mboe due to improved recovery projects mainly in United Arab Emirates, Nigeria, Libya and Norway;
- -61 Mboe due to change of economic factors leading to reduced economic life mainly in North America;
- +11 Mboe resulting from contractual effects linked to low prices in 2024;
- +12 Mboe resulting from variations related to projects reclassifications, change in the contractuals terms and license extensions.

For consolidated subsidiaries, the acquisitions were completed in Malaysia and United States. The sales were completed in Brunei and Azerbaijan.

For equity affiliates, the revisions for the year 2024 are mainly explained in Qatar, by improved recovery and the inclusion of new gas contracts, and in Oman by the change in consolidation method of Marsa LNG.

9.1.4.1 Changes in oil, bitumen and gas reserves

Proved developed and undeveloped reserves *(in million barrels of oil equivalent)*	Consolidated subsidiaries					
	Africa (excl. North Africa)	Americas	Asia-Pacific	Europe	Middle East and North Africa	Total
Balance as of December 31, 2021 – Brent at 69.23$/b	**1,973**	**1,605**	**1,227**	**1,313**	**2,273**	**8,391**
Revisions of previous estimates	(27)	294	14	97	95	473
Extensions, discoveries and other	15	153	16	4	15	203
Acquisitions of minerals in place	–	182	–	–	42	224
Sales of minerals in place	(9)	(21)	–	(11)	(9)	(50)
Production for the year	(166)	(155)	(96)	(164)	(178)	(759)
Balance as of December 31, 2022 – Brent at 101.24$/b	**1,786**	**2,058**	**1,161**	**1,239**	**2,238**	**8,482**
Revisions of previous estimates	144	89	68	56	108	465
Extensions, discoveries and other	18	38	13	–	1	70
Acquisitions of minerals in place	–	12	–	–	346	358
Sales of minerals in place	–	(589)	(20)	–	–	(609)
Production for the year	(165)	(155)	(94)	(166)	(204)	(784)
Balance as of December 31, 2023 – Brent at 83.27$/b	**1,783**	**1,453**	**1,128**	**1,129**	**2,489**	**7,982**
Revisions of previous estimates	72	92	55	58	199	476
Extensions, discoveries and other	100	352	34	6	20	512
Acquisitions of minerals in place	–	23	93	–	–	116
Sales of minerals in place	–	–	(24)	(34)	–	(58)
Production for the year	(158)	(137)	(85)	(165)	(214)	(759)
December 31, 2024 – Brent at 81.17$/b	**1,797**	**1,783**	**1,201**	**994**	**2,494**	**8,269**
Minority interest in proved developed and undeveloped reserves as of						
December 31, 2022 – Brent at 101.24$/b	53	–	–	–	–	53
December 31, 2023 – Brent at 83.27$/b	51	–	–	–	–	51
December 31, 2024 – Brent at 81.17$/b	**47**	**–**	**–**	**–**	**–**	**47**

Proved developed and undeveloped reserves *(in million barrels of oil equivalent)*	Equity affiliates						
	Africa (excl. North Africa)	Americas	Asia-Pacific	Europe	Middle East and North Africa	Total	*Total excl. Novatek[a]*
Balance as of December 31, 2021 – Brent at 69.23$/b	**69**	**–**	**–**	**2,477**	**1,125**	**3,671**	***1,929***
Revisions of previous estimates	8	–	–	(1,621)	50	(1,563)	*59*
Extensions, discoveries and other	2	–	–	–	–	2	*2*
Acquisitions of minerals in place	–	–	–	–	–	–	*–*
Sales of minerals in place	–	–	–	(152)	–	(152)	*(152)*
Production for the year	(6)	–	–	(170)	(74)	(250)	*(130)*
Balance as of December 31, 2022 – Brent at 101.24$/b	**73**	**–**	**–**	**534**	**1,101**	**1,708**	***1,708***
Revisions of previous estimates	6	–	–	–	67	73	*73*
Extensions, discoveries and other	–	–	–	–	–	–	*–*
Acquisitions of minerals in place	–	–	–	–	923	923	*923*
Sales of minerals in place	–	–	–	–	–	–	*–*
Production for the year	(7)	–	–	(40)	(75)	(122)	*(122)*
Balance as of December 31, 2023 – Brent at 83.27$/b	**72**	**–**	**–**	**494**	**2,016**	**2,582**	***2,582***
Revisions of previous estimates	<1	–	–	–	354	354	*354*
Extensions, discoveries and other	–	–	–	–	–	–	*–*
Acquisitions of minerals in place	–	–	–	–	–	–	*–*
Sales of minerals in place	–	–	–	–	–	–	*–*
Production for the year	(7)	–	–	(44)	(81)	(132)	*(132)*
Balance as of December 31, 2024 – Brent at 81.17$/b	**65**	**–**	**–**	**450**	**2,289**	**2,804**	***2,804***

(a) Given the material nature of the deconsolidation in 2022 of the reserves relating to the Company's share in Novatek, this column displays, for information, the Company's proved reserves, excluding Novatek.

Proved developed and undeveloped reserves *(in million barrels of oil equivalent)*	Consolidated subsidiaries and equity affiliates					
	Africa (excl. North Africa)	Americas	Asia-Pacific	Europe	Middle East and North Africa	Total
As of December 31, 2022 – Brent at 101.24$/b						
Proved developed and undeveloped reserves	**1,859**	**2,058**	**1,161**	**1,773**	**3,339**	**10,190**
Consolidated subsidiaries	1,786	2,058	1,161	1,239	2,238	8,482
Equity affiliates	73	–	–	534	1,101	1,708
Proved developed reserves	**919**	**1,243**	**920**	**1,173**	**2,735**	**6,990**
Consolidated subsidiaries	914	1,243	920	842	1,785	5,704
Equity affiliates	5	–	–	331	950	1,286
Proved undeveloped reserves	**940**	**815**	**241**	**600**	**604**	**3,200**
Consolidated subsidiaries	872	815	241	397	453	2,778
Equity affiliates	68	–	–	203	151	422
As of December 31, 2023 – Brent at 83.27$/b						
Proved developed and undeveloped reserves	**1,855**	**1,453**	**1,128**	**1,624**	**4,504**	**10,564**
Consolidated subsidiaries	1,783	1,453	1,128	1,130	2,488	7,982
Equity affiliates	72	–	–	494	2,016	2,582
Proved developed reserves	**871**	**919**	**912**	**1,185**	**2,948**	**6,835**
Consolidated subsidiaries	865	919	912	882	1,972	5,550
Equity affiliates	6	–	–	303	976	1,285
Proved undeveloped reserves	**984**	**534**	**216**	**439**	**1,556**	**3,729**
Consolidated subsidiaries	918	534	216	248	516	2,432
Equity affiliates	66	–	–	191	1,040	1,297
As of December 31, 2024 – Brent at 81.17$/b						
Proved developed and undeveloped reserves	**1,862**	**1,783**	**1,201**	**1,444**	**4,783**	**11,073**
Consolidated subsidiaries	1,797	1,783	1,201	994	2,494	8,269
Equity affiliates	65	–	–	450	2,289	2,804
Proved developed reserves	**841**	**1,082**	**1,022**	**1,124**	**2,896**	**6,965**
Consolidated subsidiaries	794	1,082	1,022	847	1,855	5,600
Equity affiliates	47	–	–	277	1,041	1,365
Proved undeveloped reserves	**1,021**	**701**	**179**	**320**	**1,887**	**4,108**
Consolidated subsidiaries	1,003	701	179	147	639	2,669
Equity affiliates	18	–	–	173	1,248	1,439

9.1.4.2 Changes in oil & bitumen reserves

The oil reserves include crude oil, condensates and natural gas liquids reserves[1].

Proved developed and undeveloped reserves *(in million barrels)*	Consolidated subsidiaries						
	Oil						Bitumen
	Africa (excl. North Africa)	Americas	Asia-Pacific	Europe	Middle East and North Africa	Total	Americas
Balance as of December 31, 2021 – Brent at 69.23$/b	**1,109**	**546**	**557**	**604**	**1,878**	**4,694**	**417**
Revisions of previous estimates	(4)	39	3	55	62	155	240[a]
Extensions, discoveries and other	15	54	–	2	1	72	–
Acquisitions of minerals in place	–	173	–	–	34	207	–
Sales of minerals in place	(8)	–	–	(7)	(9)	(24)	–
Production for the year	(129)	(50)	(33)	(79)	(152)	(443)	(37)
Balance as of December 31, 2022 – Brent at 101.24$/b	**983**	**762**	**527**	**575**	**1,814**	**4,661**	**620**
Revisions of previous estimates	81	116	36	33	84	350	–
Extensions, discoveries and other	4	2	–	–	1	7	–
Acquisitions of minerals in place	–	–	–	–	334	334	–
Sales of minerals in place	–	–	(18)	–	–	(18)	(589)
Production for the year	(125)	(61)	(39)	(83)	(172)	(480)	(31)
Balance as of December 31, 2023 – Brent at 83.27$/b	**943**	**819**	**506**	**525**	**2,061**	**4,854**	**–**
Revisions of previous estimates	57	60	22	19	292	450	–
Extensions, discoveries and other	91	309	2	1	20	423	–
Acquisitions of minerals in place	–	–	6	–	–	6	–
Sales of minerals in place	–	–	(3)	(12)	–	(15)	–
Production for the year	(118)	(66)	(34)	(80)	(183)	(481)	–
December 31, 2024 – Brent at 81.17$/b	**973**	**1,122**	**499**	**453**	**2,190**	**5,237**	**–**
Minority interest in proved developed and undeveloped reserves as of							
December 31, 2022 – Brent at 101.24$/b	48	–	–	–	–	48	–
December 31, 2023 – Brent at 83.27$/b	44	–	–	–	–	44	–
December 31, 2024 – Brent at 81.17$/b	**40**	**–**	**–**	**–**	**–**	**40**	**–**

(a) The significant revisions in 2022 are mainly due to changes in economical conditions impacting Fort Hills mine project.

Proved developed and undeveloped reserves *(in million barrels)*	Equity affiliates[a]						
	Oil						
	Africa (excl. North Africa)	Americas	Asia-Pacific	Europe	Middle East and North Africa	Total	*Total excl. Novatek[b]*
Balance as of December 31, 2021 – Brent at 69.23$/b	**10**	**–**	**–**	**314**	**408**	**732**	***479***
Revisions of previous estimates	4	–	–	(234)	47	(183)	*50*
Extensions, discoveries and other	–	–	–	–	–	–	–
Acquisitions of minerals in place	–	–	–	–	–	–	–
Sales of minerals in place	–	–	–	–	–	(40)	*(40)*
Production for the year	(2)	–	–	(23)	(49)	(74)	*(54)*
Balance as of December 31, 2022 – Brent at 101.24$/b	**12**	**–**	**–**	**17**	**406**	**435**	***435***
Revisions of previous estimates	1	–	–	–	19	20	*20*
Extensions, discoveries and other	<1	–	–	–	–	<1	*<1*
Acquisitions of minerals in place	–	–	–	–	233	233	*233*
Sales of minerals in place	–	–	–	–	–	–	–
Production for the year	(2)	–	–	(2)	(51)	(55)	*(55)*
Balance as of December 31, 2023 – Brent at 83.27$/b	**11**	**–**	**–**	**15**	**607**	**633**	***633***
Revisions of previous estimates	(1)	–	–	–	167	166	*166*
Extensions, discoveries and other	–	–	–	–	–	–	–
Acquisitions of minerals in place	–	–	–	–	–	–	–
Sales of minerals in place	–	–	–	–	–	–	–
Production for the year	(2)	–	–	(2)	(52)	(56)	*(56)*
Balance as of December 31, 2024 – Brent at 81.17$/b	**8**	**–**	**–**	**13**	**722**	**743**	***743***

(a) There are no bitumen reserves for equity affiliates.
(b) Given the material nature of the deconsolidation in 2022 of the reserves relating to the Company's share in Novatek, this column displays, for information, the Company's proved reserves, excluding Novatek.

(1) The tables do not include separate figures for NGL reserves because they represented less than 8.5% of the Company's proved developed and undeveloped oil reserves in each of the years 2022, 2023 and 2024.

Proved developed and undeveloped reserves *(in million barrels)*	Consolidated subsidiaries and equity affiliates						
	Oil						Bitumen
	Africa (excl. North Africa)	Americas	Asia-Pacific	Europe	Middle East and North Africa	Total	Americas
As of December 31, 2022 – Brent at 101.24$/b							
Proved developed and undeveloped reserves[a]	**995**	**762**	**527**	**592**	**2,220**	**5,096**	**620**
Consolidated subsidiaries	983	762	527	575	1,814	4,661	620
Equity affiliates	12	–	–	17	406	435	–
Proved developed reserves	**657**	**382**	**477**	**437**	**1,874**	**3,827**	**385**
Consolidated subsidiaries	656	382	477	425	1,566	3,506	385
Equity affiliates	1	–	–	12	308	321	–
Proved undeveloped reserves	**338**	**380**	**50**	**155**	**346**	**1,269**	**235**
Consolidated subsidiaries	327	380	50	150	248	1,155	235
Equity affiliates	11	–	–	5	98	114	–
As of December 31, 2023 – Brent at 83.27$/b							
Proved developed and undeveloped reserves[a]	**954**	**819**	**506**	**540**	**2,667**	**5,486**	**–**
Consolidated subsidiaries	943	819	506	525	2,061	4,854	–
Equity affiliates	11	–	–	15	606	632	–
Proved developed reserves	**610**	**459**	**441**	**451**	**2,048**	**4,009**	**–**
Consolidated subsidiaries	608	459	441	442	1,742	3,692	–
Equity affiliates	2	–	–	9	306	317	–
Proved undeveloped reserves	**344**	**360**	**65**	**89**	**619**	**1,477**	**–**
Consolidated subsidiaries	335	360	65	83	319	1,162	–
Equity affiliates	9	–	–	6	300	315	–
As of December 31, 2024 – Brent at 81.17$/b							
Proved developed and undeveloped reserves[a]	**981**	**1,122**	**499**	**466**	**2,912**	**5,980**	**–**
Consolidated subsidiaries	973	1,122	499	453	2,190	5,237	–
Equity affiliates	8	–	–	13	722	743	–
Proved developed reserves	**567**	**563**	**448**	**430**	**1,970**	**3,978**	**–**
Consolidated subsidiaries	562	563	448	420	1,665	3,658	–
Equity affiliates	5	–	–	10	305	320	–
Proved undeveloped reserves	**414**	**559**	**51**	**36**	**942**	**2,002**	**–**
Consolidated subsidiaries	411	559	51	33	525	1,579	–
Equity affiliates	3	–	–	3	417	423	–

(a) The tables do not include separate figures for NGL reserves because they represented less than 8.5% of the Company's proved developed and undeveloped oil reserves in each of the years 2022, 2023 and 2024.

9.1.4.3 Changes in gas reserves

Proved developed and undeveloped reserves *(in billion cubic feet)*	Consolidated subsidiaries					
	Africa (excl. North Africa)	Americas	Asia-Pacific	Europe	Middle East and North Africa	Total
Balance as of December 31, 2021 – Brent at 69.23$/b	**4,512**	**3,589**	**3,538**	**3,811**	**2,150**	**17,600**
Revisions of previous estimates	(123)	77	74	234	175	437
Extensions, discoveries and other	1	542	91	8	76	718
Acquisitions of minerals in place	–	43	–	–	43	86
Sales of minerals in place	(9)	(129)	–	(24)	–	(162)
Production for the year	(188)	(383)	(350)	(461)	(143)	(1,525)
Balance as of December 31, 2022 – Brent at 101.24$/b	**4,193**	**3,739**	**3,353**	**3,568**	**2,301**	**17,154**
Revisions of previous estimates	362	(146)	166	128	118	628
Extensions, discoveries and other	66	203	70	–	–	339
Acquisitions of minerals in place	–	63	–	–	61	124
Sales of minerals in place	–	–	(8)	(1)	–	(9)
Production for the year	(196)	(356)	(294)	(446)	(177)	(1,469)
Balance as of December 31, 2023 – Brent at 83.27$/b	**4,425**	**3,503**	**3,287**	**3,249**	**2,303**	**16,767**
Revisions of previous estimates	85	177	179	198	(507)	132
Extensions, discoveries and other	43	207	168	25	–	443
Acquisitions of minerals in place	–	139	490	–	–	629
Sales of minerals in place	–	–	(111)	(115)	–	(226)
Production for the year	(202)	(395)	(273)	(454)	(167)	(1,491)
December 31, 2024 – Brent at 81.17$/b	**4,351**	**3,631**	**3,740**	**2,903**	**1,629**	**16,254**
Minority interest in proved developed and undeveloped reserves as of						
December 31, 2022 – Brent at 101.24$/b	27	–	–	–	–	27
December 31, 2023 – Brent at 83.27$/b	34	–	–	–	–	34
December 31, 2024 – Brent at 81.17$/b	**31**	**–**	**–**	**–**	**–**	**31**

Proved developed and undeveloped reserves *(in billion cubic feet)*	Equity affiliates						
	Africa (excl. North Africa)	Americas	Asia-Pacific	Europe	Middle East and North Africa	Total	*Total excl. Novatek[a]*
Balance as of December 31, 2021 – Brent at 69.23$/b	**316**	**–**	**–**	**11,623**	**3,911**	**15,850**	***7,901***
Revisions of previous estimates	25	–	–	(7,403)	7	(7,371)	*43*
Extensions, discoveries and other	10	–	–	–	–	10	*10*
Acquisitions of minerals in place	–	–	–	–	–	–	–
Sales of minerals in place	–	–	–	(608)	–	(608)	*(608)*
Production for the year	(25)	–	–	(790)	(127)	(942)	*(407)*
Balance as of December 31, 2022 – Brent at 101.24$/b	**326**	**–**	**–**	**2,822**	**3,791**	**6,939**	***6,939***
Revisions of previous estimates	29	–	–	–	226	255	*255*
Extensions, discoveries and other	–	–	–	–	–	–	–
Acquisitions of minerals in place	–	–	–	–	3,922	3,922	*3,922*
Sales of minerals in place	–	–	–	–	–	–	–
Production for the year	(28)	–	–	(211)	(127)	(366)	*(366)*
Balance as of December 31, 2023 – Brent at 83.27$/b	**327**	**–**	**–**	**2,611**	**7,812**	**10,750**	***10,750***
Revisions of previous estimates	7	–	–	–	1,031	1,038	*1,038*
Extensions, discoveries and other	–	–	–	–	–	–	–
Acquisitions of minerals in place	–	–	–	–	–	–	–
Sales of minerals in place	–	–	–	–	–	–	–
Production for the year	(28)	–	–	(228)	(160)	(416)	*(416)*
Balance as of December 31, 2024 – Brent at 81.17$/b	**306**	**–**	**–**	**2,383**	**8,683**	**11,372**	***11,372***

(a) Given the material nature of the deconsolidation in 2022 of the reserves relating to the Company's share in Novatek, this column displays, for information, the Company's proved reserves, excluding Novatek.

Proved developed and undeveloped reserves *(in billion cubic feet)*	Consolidated subsidiaries and equity affiliates					
	Africa (excl. North Africa)	Americas	Asia-Pacific	Europe	Middle East and North Africa	Total
As of December 31, 2022 – Brent at 101.24$/b						
Proved developed and undeveloped reserves	**4,519**	**3,739**	**3,353**	**6,390**	**6,092**	**24,093**
Consolidated subsidiaries	4,193	3,739	3,353	3,568	2,301	17,154
Equity affiliates	326	–	–	2,822	3,791	6,939
Proved developed reserves	**1,281**	**2,651**	**2,339**	**3,985**	**4,704**	**14,960**
Consolidated subsidiaries	1,259	2,651	2,339	2,243	1,206	9,698
Equity affiliates	22	–	–	1,742	3,498	5,262
Proved undeveloped reserves	**3,238**	**1,088**	**1,014**	**2,405**	**1,388**	**9,133**
Consolidated subsidiaries	2,934	1,088	1,014	1,325	1,095	7,456
Equity affiliates	304	–	–	1,080	293	1,677
As of December 31, 2023 – Brent at 83.27$/b						
Proved developed and undeveloped reserves	**4,751**	**3,503**	**3,287**	**5,861**	**10,115**	**27,517**
Consolidated subsidiaries	4,424	3,503	3,287	3,250	2,303	16,767
Equity affiliates	327	–	–	2,611	7,812	10,750
Proved developed reserves	**1,285**	**2,562**	**2,488**	**3,970**	**4,880**	**15,185**
Consolidated subsidiaries	1,262	2,562	2,488	2,369	1,259	9,940
Equity affiliates	23	–	–	1,601	3,621	5,245
Proved undeveloped reserves	**3,466**	**941**	**799**	**1,891**	**5,235**	**12,332**
Consolidated subsidiaries	3,162	941	799	881	1,044	6,827
Equity affiliates	304	–	–	1,010	4,191	5,505
As of December 31, 2024 – Brent at 81.17$/b						
Proved developed and undeveloped reserves	**4,657**	**3,631**	**3,740**	**5,286**	**10,312**	**27,626**
Consolidated subsidiaries	4,351	3,631	3,740	2,903	1,629	16,254
Equity affiliates	306	–	–	2,383	8,683	11,372
Proved developed reserves	**1,369**	**2,891**	**3,062**	**3,744**	**5,025**	**16,091**
Consolidated subsidiaries	1,142	2,891	3,062	2,287	1,038	10,420
Equity affiliates	227	–	–	1,457	3,987	5,671
Proved undeveloped reserves	**3,288**	**740**	**678**	**1,542**	**5,287**	**11,535**
Consolidated subsidiaries	3,209	740	678	616	591	5,834
Equity affiliates	79	–	–	926	4,696	5,701

9.1.5 Results of operations for oil and gas producing activities

The following tables do not include revenues and expenses related to oil and gas transportation activities and LNG liquefaction and transportation.

	Consolidated subsidiaries					
(M$)	Africa (excl. North Africa)	Americas	Asia-Pacific	Europe	Middle East and North Africa	Total
2022						
Revenues Non-Company sales	1,407	980	2,059	2,650	2,110	9,207
TotalEnergies sales	11,257	6,512	2,052	18,077	12,755	50,653
Total Revenues	**12,664**	**7,492**	**4,111**	**20,727**	**14,865**	**59,859**
Production costs	(1,037)	(1,037)	(425)	(1,130)	(638)	(4,267)
Exploration expenses	(185)	(900)	(27)	(130)	(56)	(1,299)
Depreciation, depletion and amortization and valuation allowances	(3,459)	(823)	(1,015)	(1,875)	(1,055)	(8,227)
Other expenses[a]	(1,007)	(919)	(262)	(466)	(10,506)	(13,160)
Pre-tax income from producing activities[b]	**6,976**	**3,813**	**2,382**	**17,126**	**2,609**	**32,907**
Income tax	(3,278)	(910)	(837)	(12,288)	(952)	(18,265)
Results of oil and gas producing activities[b]	**3,698**	**2,903**	**1,545**	**4,838**	**1,657**	**14,641**
2023						
Revenues Non-Company sales	1,049	884	1,402	1,240	1,930	6,505
TotalEnergies sales	8,766	5,561	2,213	10,128	12,480	39,148
Total Revenues	**9,815**	**6,445**	**3,615**	**11,369**	**14,410**	**45,654**
Production costs	(1,006)	(1,051)	(342)	(1,178)	(740)	(4,317)
Exploration expenses	(118)	(149)	(6)	(226)	(74)	(573)
Depreciation, depletion and amortization and valuation allowances	(3,453)	(1,181)	(1,125)	(1,661)	(1,044)	(8,465)
Other expenses[c]	(711)	(1,047)	(227)	(417)	(9,673)	(12,075)
Pre-tax income from producing activities[d]	**4,527**	**3,017**	**1,915**	**7,886**	**2,879**	**20,224**
Income tax	(1,756)	(739)	(559)	(6,194)	(930)	(10,178)
Results of oil and gas producing activities[d]	**2,771**	**2,278**	**1,356**	**1,692**	**1,949**	**10,046**
2024						
Revenues Non-Company sales	1,053	1,083	1,072	863	1,799	5,870
TotalEnergies sales	8,142	4,312	2,084	8,696	12,852	36,085
Total Revenues	**9,195**	**5,395**	**3,156**	**9,558**	**14,651**	**41,955**
Production costs	(939)	(448)	(327)	(1,235)	(802)	(3,751)
Exploration expenses	(597)	(138)	2	(219)	(48)	(999)
Depreciation, depletion and amortization and valuation allowances	(3,109)	(1,289)	(1,040)	(1,677)	(1,091)	(8,206)
Other expenses[e]	(725)	(974)	(219)	(456)	(9,620)	(11,994)
Pre-tax income from producing activities[f]	**3,825**	**2,546**	**1,572**	**5,972**	**3,090**	**17,004**
Income tax	(2,038)	(570)	(428)	(4,763)	(812)	(8,611)
Results of oil and gas producing activities[f]	**1,787**	**1,976**	**1,144**	**1,209**	**2,278**	**8,394**

(a) Including production taxes ($12,740 million) and accretion expense as provided by IAS 37 ($420 million in 2022).
(b) Including adjustment items applicable to ASC932 perimeter, amounting to a net charge of $631 million before tax, related to production cost ($84 million), net asset impairment reversal ($178 million) and exploration charges ($725 million). Adjustment after tax is a charge of $1,379 million, including non-recurrent tax charge ($725 million).
(c) Including production taxes ($11,498 million) and accretion expense as provided by IAS 37 ($576 million in 2023).
(d) Including adjustment items applicable to ASC932 perimeter, amounting to a net charge of $481 million before tax and $436 million after tax, related to asset impairments.
(e) Including production taxes ($11,373 million) and accretion expense as provided by IAS 37 ($620 million in 2024).
(f) Including adjustment items applicable to ASC932 perimeter, amounting to a net charge of $782 million before tax and $788 million after tax, related to asset impairments.

(M$)	Equity affiliates					
	Africa (excl. North Africa)	Americas	Asia-Pacific	Europe	Middle East and North Africa	Total
2022						
Revenues Non-Company sales	725	–	–	4,844	4,249	9,817
TotalEnergies sales	(36)	–	–	512	1,981	2,457
Total Revenues	**688**	**–**	**–**	**5,356**	**6,230**	**12,274**
Production costs	(6)	–	–	(311)	(277)	(595)
Exploration expenses	–	–	–	(47)	–	(47)
Depreciation, depletion and amortization and valuation allowances	–	–	–	(6,546)	(334)	(6,881)
Other expenses	6	–	–	(399)	(3,620)	(4,013)
Pre-tax income from producing activities	**688**	**–**	**–**	**(1,948)**	**1,998**	**739**
Income tax	–	–	–	(866)	(717)	(1,583)
Results of oil and gas producing activities	**688**	**–**	**–**	**(2,814)**	**1,282**	**(844)**
2023						
Revenues Non-Company sales	276	–	–	1,203	3,473	4,951
TotalEnergies sales	1	–	–	373	1,299	1,673
Total Revenues	**277**	**–**	**–**	**1,576**	**4,771**	**6,625**
Production costs	(8)	–	–	(23)	(300)	(331)
Exploration expenses	–	–	–	–	–	–
Depreciation, depletion and amortization and valuation allowances	–	–	–	(81)	(792)	(873)
Other expenses	(64)	–	–	(1)	(2,799)	(2,864)
Pre-tax income from producing activities	**205**	**–**	**–**	**1,472**	**880**	**2,557**
Income tax		–	–	(397)	(501)	(898)
Results of oil and gas producing activities	**205**	**–**	**–**	**1,075**	**379**	**1,659**
2024						
Revenues Non-Company sales	201	–	–	1,272	3,577	5,050
TotalEnergies sales	8	–	–	297	1,212	1,518
Total Revenues	**210**	**–**	**–**	**1,568**	**4,789**	**6,567**
Production costs	(9)	–	–	(29)	(336)	(374)
Exploration expenses	–	–	–	–	–	–
Depreciation, depletion and amortization and valuation allowances	–	–	–	(88)	(520)	(608)
Other expenses	(48)	–	–	(1)	(2,395)	(2,444)
Pre-tax income from producing activities	**153**	**–**	**–**	**1,451**	**1,537**	**3,141**
Income tax	–	–	–	(573)	(597)	(1,171)
Results of oil and gas producing activities	**153**	**–**	**–**	**877**	**940**	**1,971**

9.1.6 Cost incurred

The following tables set forth the costs incurred in the Company's oil and gas property acquisition, exploration and development activities, including both capitalized and expensed amounts. They do not include costs incurred related to oil and gas transportation and LNG liquefaction and transportation activities.

	Consolidated subsidiaries					
(M$)	Africa (excl. North Africa)	Americas	Asia-Pacific	Europe	Middle East and North Africa	Total
2022						
Proved property acquisition[a]	96	4,227	6	5	102	4,436
Unproved property acquisition	3	438	4	–	48	493
Exploration costs	158	493	44	172	154	1,021
Development costs[c]	1,609	1,671	719	979	1,085	6,063
Total cost incurred	**1,866**	**6,829**	**773**	**1,156**	**1,389**	**12,013**
2023						
Proved property acquisition[c]	97	309	5	21	1,243	1,675
Unproved property acquisition	24	255	56	–	273	608
Exploration costs	528	367	12	204	140	1,250
Development costs[c]	2,259	2,059	835	1,014	1,698	7,825
Total cost incurred	**2,908**	**2,989**	**908**	**1,239**	**3,354**	**11,398**
2024						
Proved property acquisition[d]	2	107	1,111	–	42	1,262
Unproved property acquisition[d]	111	477	385	–	(9)	964
Exploration costs	406	129	6	183	106	830
Development costs[b]	2,634	1,858	659	1,362	1,802	8,315
Total cost incurred	**3,153**	**2,571**	**2,161**	**1,545**	**1,941**	**11,371**

(a) Including cost incurred relating to acquisition of Atapu and Sépia assets in Brazil.
(b) Including asset retirement costs capitalized during the year and any gains or losses recognized upon settlement of asset retirement obligation during the year.
(c) Including cost incurred relating to acquisition of Umm Lulu SARB assets in Abu Dhabi.
(d) Including cost incurred relating to the acquisition of Sapura OMV.

	Equity affiliates					
(M$)	Africa (excl. North Africa)	Americas	Asia-Pacific	Europe	Middle East and North Africa	Total
2022						
Proved property acquisition	–	–	–	–	–	–
Unproved property acquisition	–	–	–	–	–	–
Exploration costs	–	–	–	–	2	2
Development costs[a]	–	–	–	693[b]	635	1,328
Total cost incurred	**–**	**–**	**–**	**693**	**637**	**1,330**
2023						
Proved property acquisition	–	–	–	–	225	225
Unproved property acquisition	–	–	–	–	–	–
Exploration costs	–	–	–	–	5	5
Development costs[a]	–	–	–	–	899	899
Total cost incurred	**–**	**–**	**–**	**–**	**1,129**	**1,129**
2024						
Proved property acquisition	–	–	–	–	–	–
Unproved property acquisition	–	–	–	–	–	–
Exploration costs	–	–	–	–	5	5
Development costs[a]	–	–	–	–	1,455	1,455
Total cost incurred	**–**	**–**	**–**	**–**	**1,460**	**1,460**

(a) Including asset retirement costs capitalized during the year and any gains or losses recognized upon settlement of asset retirement obligation during the year.
(b) Including mainly the Novatek incurred costs.

9.1.7 Capitalized costs related to oil and gas producing activities

Capitalized costs represent the amount of capitalized proved and unproved property costs, including support equipment and facilities, along with the related accumulated depreciation, depletion and amortization. The following tables do not include capitalized costs related to oil and gas transportation and LNG liquefaction and transportation activities.

	Consolidated subsidiaries					
(M$)	Africa (excl. North Africa)	Americas	Asia-Pacific	Europe	Middle East and North Africa	Total
As of December 31, 2022						
Proved properties	84,613	38,635	38,051	48,414	18,646	228,359
Unproved properties	8,240	5,673	1,761	1,820	2,484	19,978
Total capitalized costs	**92,853**	**44,308**	**39,812**	**50,234**	**21,130**	**248,337**
Accumulated depreciation, depletion and amortization	(61,898)	(21,433)	(22,366)	(35,464)	(10,882)	(152,043)
Net capitalized costs	**30,955**	**22,875**	**17,446**	**14,770**	**10,248**	**96,294**
As of December 31, 2023						
Proved properties	86,930	27,654	36,066	49,825	21,266	221,741
Unproved properties	8,184	5,373	1,827	1,672	2,734	19,790
Total capitalized costs	**95,114**	**33,027**	**37,893**	**51,497**	**24,000**	**241,531**
Accumulated depreciation, depletion and amortization	(65,070)	(12,632)	(21,160)	(37,838)	(11,423)	(148,122)
Net capitalized costs	**30,044**	**20,395**	**16,733**	**13,659**	**12,578**	**93,409**
As of December 31, 2024						
Proved properties	84,222	32,327	36,802	44,731	22,796	220,878
Unproved properties	7,711	3,626	2,286	1,435	2,474	17,532
Total capitalized costs	**91,933**	**35,953**	**39,088**	**46,166**	**25,270**	**238,410**
Accumulated depreciation, depletion and amortization	(62,930)	(13,924)	(21,361)	(33,582)	(12,323)	(144,120)
Net capitalized costs	**29,003**	**22,029**	**17,727**	**12,584**	**12,947**	**94,290**

	Equity affiliates					
(M$)	Africa (excl. North Africa)	Americas	Asia-Pacific	Europe	Middle East and North Africa	Total
As of December 31, 2022						
Proved properties	–	–	–	1,445	5,505	6,949
Unproved properties	–	–	–	–	–	–
Total capitalized costs	**–**	**–**	**–**	**1,445**	**5,505**	**6,949**
Accumulated depreciation, depletion and amortization	–	–	–	(471)	(2,742)	(3,213)
Net capitalized costs	**–**	**–**	**–**	**973**	**2,763**	**3,737**
As of December 31, 2023						
Proved properties	–	–	–	1,445	6,658	8,103
Unproved properties	–	–	–	–	–	–
Total capitalized costs	**–**	**–**	**–**	**1,445**	**6,658**	**8,103**
Accumulated depreciation, depletion and amortization	–	–	–	(552)	(3,523)	(4,075)
Net capitalized costs	**–**	**–**	**–**	**892**	**3,135**	**4,028**
As of December 31, 2024						
Proved properties	–	–	–	1,445	9,368	10,813
Unproved properties	–	–	–	–	–	–
Total capitalized costs	**–**	**–**	**–**	**1,445**	**9,368**	**10,813**
Accumulated depreciation, depletion and amortization	–	–	–	(640)	(4,167)	(4,807)
Net capitalized costs	**–**	**–**	**–**	**805**	**5,201**	**6,006**

9.1.8 Standardized measure of discounted future net cash flows (excluding transportation)

The standardized measure of discounted future net cash flows relating to proved oil and gas reserve quantities was developed as follows:

- estimates of proved reserves and the corresponding production profiles are based on existing technical and economic conditions;
- the estimated future cash flows are determined based on prices used in estimating the Company's proved oil and gas reserves;
- the future cash flows incorporate estimated production costs (including production taxes), future development costs and asset retirement costs. All cost estimates are based on year-end technical and economic conditions;
- future income taxes are computed by applying the year-end statutory tax rate to future net cash flows after consideration of permanent differences and future income tax credits; and
- future net cash flows are discounted at a standard discount rate of 10%.

These principles applied are those required by ASC 932 and do not reflect the expectations of real revenues from these reserves, nor their present value; hence, they do not constitute criteria for investment decisions. An estimate of the fair value of reserves should also take into account, among other things, the recovery of reserves not presently classified as proved, anticipated future changes in prices and costs and a discount factor more representative of the time value of money and the risks inherent in reserves estimates.

	Consolidated subsidiaries					
(M$)	Africa (excl. North Africa)	Americas	Asia-Pacific	Europe	Middle East and North Africa	Total
As of December 31, 2022						
Future cash inflows	125,701	117,978	61,701	165,523	181,680	652,583
Future production costs	(27,589)	(34,944)	(9,358)	(20,919)	(148,030)	(240,840)
Future development costs	(15,040)	(12,470)	(4,024)	(13,695)	(8,923)	(54,153)
Future income taxes	(30,512)	(12,121)	(9,502)	(92,432)	(7,562)	(152,130)
Future net cash flows, after income taxes	**52,560**	**58,442**	**38,817**	**38,476**	**17,165**	**205,461**
Discount at 10%	(24,939)	(28,526)	(19,929)	(15,412)	(7,255)	(96,061)
Standardized measure of discounted future net cash flows	**27,621**	**29,916**	**18,887**	**23,064**	**9,911**	**109,399**
As of December 31, 2023						
Future cash inflows	93,472	68,658	47,109	73,259	170,685	453,183
Future production costs	(23,152)	(19,026)	(8,443)	(16,464)	(132,755)	(199,840)
Future development costs	(13,816)	(7,018)	(3,270)	(11,634)	(11,745)	(47,484)
Future income taxes	(16,536)	(9,055)	(7,461)	(31,320)	(6,846)	(71,218)
Future net cash flows, after income taxes	**39,968**	**33,559**	**27,934**	**13,841**	**19,339**	**134,641**
Discount at 10%	(19,230)	(15,698)	(13,809)	(5,290)	(8,047)	(62,074)
Standardized measure of discounted future net cash flows	**20,738**	**17,861**	**14,125**	**8,552**	**11,292**	**72,567**
As of December 31, 2024						
Future cash inflows	92,191	87,952	47,106	56,815	175,978	460,041
Future production costs	(22,390)	(24,241)	(8,176)	(14,761)	(135,776)	(205,344)
Future development costs	(14,536)	(12,901)	(3,166)	(11,233)	(15,337)	(57,172)
Future income taxes	(15,178)	(11,549)	(7,421)	(22,002)	(6,303)	(62,452)
Future net cash flows, after income taxes	**40,087**	**39,261**	**28,343**	**8,820**	**18,562**	**135,072**
Discount at 10%	(19,804)	(19,741)	(13,338)	(3,301)	(8,058)	(64,242)
Standardized measure of discounted future net cash flows	**20,283**	**19,520**	**15,004**	**5,519**	**10,504**	**70,830**
Minority interests in future net cash flows as of						
December 31, 2022	1,148	–	–	–	–	1,148
December 31, 2023	720	–	–	–	–	720
December 31, 2024	**555**	**–**	**–**	**–**	**–**	**555**

(M$)	Equity affiliates					
	Africa (excl. North Africa)	Americas	Asia-Pacific	Europe	Middle East and North Africa	Total
As of December 31, 2022						
Future cash inflows	9,596	–	–	31,691	91,597	132,884
Future production costs	(217)	–	–	(3,716)	(63,146)	(67,079)
Future development costs	–	–	–	(131)	(3,370)	(3,501)
Future income taxes	(2,090)	–	–	(7,368)	(4,312)	(13,770)
Future net cash flows, after income taxes	**7,289**	**–**	**–**	**20,475**	**20,770**	**48,534**
Discount at 10%	(3,289)	–	–	(10,507)	(11,447)	(25,243)
Standardized measure of discounted future net cash flows	**3,999**	**–**	**–**	**9,969**	**9,323**	**23,291**
As of December 31, 2023						
Future cash inflows	3,818	–	–	20,141	103,518	127,477
Future production costs	(955)	–	–	(3,322)	(62,997)	(67,274)
Future development costs	–	–	–	(70)	(4,081)	(4,151)
Future income taxes	(542)	–	–	(4,517)	(13,907)	(18,966)
Future net cash flows, after income taxes	**2,321**	**–**	**–**	**12,232**	**22,533**	**37,086**
Discount at 10%	(1,008)	–	–	(5,900)	(14,523)	(21,431)
Standardized measure of discounted future net cash flows	**1,313**	**–**	**–**	**6,332**	**8,010**	**15,655**
As of December 31, 2024						
Future cash inflows	3,018	–	–	16,723	112,196	131,937
Future production costs	(693)	–	–	(3,060)	(67,400)	(71,152)
Future development costs	–	–	–	(47)	(7,308)	(7,354)
Future income taxes	(447)	–	–	(3,542)	(12,262)	(16,251)
Future net cash flows, after income taxes	**1,878**	**–**	**–**	**10,074**	**25,227**	**37,179**
Discount at 10%	(753)	–	–	(4,613)	(16,127)	(21,493)
Standardized measure of discounted future net cash flows	**1,126**	**–**	**–**	**5,460**	**9,100**	**15,686**

9.1.9 Changes in the standardized measure of discounted future net cash flows

Consolidated subsidiaries *(M$)*	2022	2023	2024
Discounted future net cash flows at January 1	**66,411**	**109,399**	**72,567**
Sales and transfers, net of production costs	(42,852)	(29,837)	(27,429)
Net change in sales and transfer prices and in production costs and other expenses	107,114	(81,604)	(7,845)
Extensions, discoveries and improved recovery	5,367	887	5,078
Changes in estimated future development costs	(2,986)	(1,122)	(2,536)
Previously estimated development costs incurred during the year	7,656	8,458	8,195
Revisions of previous quantity estimates	5,516	5,669	5,483
Accretion of 10% discount	6,637	10,940	7,256
Net change in income taxes	(49,265)	54,260	9,318
Purchases of reserves in place	6,248	2,047	1,624
Sales of reserves in place	(448)	(6,530)	(880)
End of year	**109,399**	**72,567**	**70,830**

Equity affiliates *(M$)*	2022	2023	2024
Discounted future net cash flows at January 1	20,847	**23,291**	**15,655**
Sales and transfers, net of production costs	(7,676)	(3,442)	(3,764)
Net change in sales and transfer prices and in production costs and other expenses	17,470	(12,731)	151
Extensions, discoveries and improved recovery	172	487	177
Changes in estimated future development costs	(209)	25	(944)
Previously estimated development costs incurred during the year	1,016	743	808
Revisions of previous quantity estimates	(7,675)	250	691
Accretion of 10% discount	2,084	2,329	1,566
Net change in income taxes	(2,318)	900	1,347
Purchases of reserves in place	–	3,803	–
Sales of reserves in place	(420)	–	–
End of year	**23,291**	**15,655**	**15,686**

9.2 Other information

9.2.1 Natural Gas production available for sale

	Consolidated subsidiaries					
	Africa (excl. North Africa)	Americas	Asia-Pacific	Europe	Middle East and North Africa	Total
2022						
Natural Gas production available for sale[a] *(Bcf)*	150	370	339	432	127	1,418
2023						
Natural Gas production available for sale[a] *(Bcf)*	162	341	284	418	159	1,363
2024						
Natural Gas production available for sale[a] *(Bcf)*	167	379	264	425	150	1,385

(a) The reported volumes are different from those shown in the reserves table due to gas consumed in operations.

	Equity affiliates					
	Africa (excl. North Africa)	Americas	Asia-Pacific	Europe	Middle East and North Africa	Total
2022						
Natural Gas production available for sale[a] *(Bcf)*	22	–	–	730	118	870
2023						
Natural Gas production available for sale[a] *(Bcf)*	24	–	–	187	117	328
2024						
Natural Gas production available for sale[a] *(Bcf)*	24	–	–	200	148	373

(a) The reported volumes are different from those shown in the reserves table due to gas consumed in operations.

9.2.2 Production prices

	Consolidated subsidiaries					
	Africa (excl. North Africa)	Americas	Asia-Pacific	Europe	Middle East and North Africa	Total
2022[a]						
Oil *($/b)*[b]	95.72	80.58	71.38	89.90	95.10	90.99
Bitumen *($/b)*	–	60.66	–	–	–	60.66
Natural Gas *($/kcf)*	2.60	3.32	5.45	31.27	3.94	12.61
2023[a]						
Oil *($/b)*[b]	76.47	67.67	61.27	74.45	80.98	75.41
Bitumen *($/b)*	–	45.27	–	–	–	45.27
Natural Gas *($/kcf)*	1.96	2.93	4.76	12.61	3.44	6.24
2024[a]						
Oil *($/b)*[b]	75.99	69.13	61.19	72.20	78.53	74.30
Bitumen *($/b)*	–	–	–	–	–	–
Natural Gas *($/kcf)*	2.28	2.55	4.39	9.33	3.44	5.07

(a) The volumes used for calculation of the average sales prices are the ones sold from the Company's own production.
(b) The reported price represents an average aggregate price of prices for crude oil, condensates and NGL. The table does not include separate figures for NGL production prices because the production of NGL represented less than 7.5% of the Company's total liquids production in each of the years 2022, 2023 and 2024.

	Equity affiliates					
	Africa (excl. North Africa)	Americas	Asia-Pacific	Europe	Middle East and North Africa	Total
2022[a]						
Oil *($/b)*[b]	–	–	–	46.12	90.21	75.98
Bitumen *($/b)*	–	–	–	–	–	–
Natural Gas *($/kcf)*	34.75	–	–	7.91	13.73	9.49
2023[a]						
Oil *($/b)*[b]	–	–	–	44.64	73.35	70.26
Bitumen *($/b)*	–	–	–	–	–	–
Natural Gas *($/kcf)*	11.79	–	–	7.97	8.77	8.51
2024[a]						
Oil *($/b)*[b]	–	–	–	46.38	71.94	69.10
Bitumen *($/b)*	–	–	–	–	–	–
Natural Gas *($/kcf)*	8.79	–	–	7.09	6.50	6.99

(a) The volumes used for calculation of the average sales prices are the ones sold from the Company's own production.
(b) The reported price represents an average aggregate price of prices for crude oil, condensates and NGL. The table does not include separate figures for NGL production prices because the production of NGL represented less than 7.5% of the Company's total liquids production in each of the years 2022, 2023 and 2024.

9.2.3 Production costs

(in $/boe)	Consolidated subsidiaries					
	Africa (excl. North Africa)	Americas	Asia-Pacific	Europe	Middle East and North Africa	Total
2022[a]						
Oil, bitumen and natural gas	6.50	6.87	4.54	7.01	3.65	5.76
Of which bitumen	–	16.58	–	–	–	16.58
2023[a]						
Oil, bitumen and natural gas	6.36	6.88	3.72	7.34	3.69	5.65
Of which bitumen	–	20.83	–	–	–	20.83
2024[a]						
Oil, bitumen and natural gas	6.21	3.34	3.91	7.77	3.81	5.08
Of which bitumen	–	–	–	–	–	–

(a) The volumes of oil used for this computation are shown in the proved reserves tables of this report. The reported volumes for natural gas are different from those shown in the reserves table due to gas consumed in operations.

(in $/boe)	Equity affiliates					
	Africa (excl. North Africa)	Americas	Asia-Pacific	Europe	Middle East and North Africa	Total
2022[a]						
Oil, bitumen and natural gas	1.13	–	–	1.95	3.90	2.52
Of which bitumen	–	–	–	–	–	–
2023[a]						
Oil, bitumen and natural gas	1.32	–	–	0.63	4.12	2.87
Of which bitumen	–	–	–	–	–	–
2024[a]						
Oil, bitumen and natural gas	1.39	–	–	0.74	4.23	3.00
Of which bitumen	–	–	–	–	–	–

(a) The volumes of oil used for this computation are shown in the proved reserves tables of this report. The reported volumes for natural gas are different from those shown in the reserves table due to gas consumed in operations.

9.3 Report on the payments made to governments

Articles L. 232-6-2 and L. 22-10-37 of the French Commercial Code[1] require large undertakings and public-interest entities that are active in the extractive industry or logging of primary forests to disclose, in an annual report, payments of at least 100,000 euros made to governments in the countries in which they operate.

The consolidated report of TotalEnergies is presented pursuant to the aforementioned provisions. This report covers the aforementioned payments made in 2024 by the Company's Extractive Companies as defined below, for the benefit of each government of states or territories in which TotalEnergies carries out its activities, by detailing the total amount of payments made, the total amount by payment type, the total amount by project and the total amount by payment type for each project. When payments were made in kind, valuated hydrocarbons' volumes are specified.

This report has been approved by the Board of Directors of TotalEnergies SE.

DEFINITIONS

The meaning of certain terms used in this report are set forth below:

Extractive Companies: TotalEnergies SE and any company or undertaking fully consolidated by TotalEnergies SE, the activities of which consist, in whole or in part, of exploration, prospection, discovery, development and extraction of minerals, crude oil and natural gas, among others.

Payment: a single payment or multiple interconnected payments of an amount equal to, or in excess of, 100,000 euros (or its equivalent) paid, whether in money or in kind, for extractive activities. Payment types included in this report are the following:

- **Taxes**:
  - **Income taxes:** corporate income taxes based on taxable profits of Extractive Companies,
  - **Other Taxes:** other taxes and levies (other than Income taxes). Other Taxes include those based on revenues or production of Extractive Companies, and exclude taxes levied on consumption such as added value taxes, customs duties, personal income taxes and sales taxes.
- **Royalties**: percentage of production payable to the owner of mineral rights,
- **License Fees**: license fees, surface or rental fees, and other consideration for licenses and /or concessions that are paid for access to the area where the extractive activities are conducted,
- **License bonuses**: bonuses paid for and in consideration of signature, discovery, production, awards, grants and transfers of extraction rights; bonuses related to the achievement or failure to achieve certain production levels or certain targets, and discovery of additional mineral reserves /deposits,
- **Dividends**: dividends paid to a host government holding an interest in an Extractive Company,
- **Payments for Infrastructure Improvements**: payments for local development, including the improvement of infrastructure, not directly necessary for the conduct of extractive activities but mandatory pursuant to the terms of a production sharing contract or to the terms of a law relating to oil and gas activities,
- **Production entitlement**: host Government's share of production. This payment is generally made in kind.

Government: any national, regional or local authority of a country or territory, or any department, agency or undertaking controlled by that authority.

Project: operational activities governed by a single contract, license, lease, concession or similar legal agreement and that form the basis for payment liabilities with a Government. If multiple such agreements are substantially interconnected, they shall be considered as a single Project. Payments (such as company income tax when it concerns several projects which cannot be separated in application of the fiscal regulations) unable to be attributed to a Project are disclosed under the item "non-attributable".

REPORTING PRINCIPLES

This report sets forth all Payments as booked in the Extractive Companies' accounts. They are presented based on the Company's share in each Project, whether the Payments have been made directly by the Extractive Companies of TotalEnergies as operator or indirectly through third-party operating companies.

Production entitlement and Royalties that are mandatorily paid in kind and that are owed to host Governments pursuant to legal or contractual provisions (not booked in the Extractive Companies' accounts pursuant to accounting standards) are reported in proportion of the interest held by the Extractive Company in the Project as of the date on which such Production entitlements and Royalties are deemed to be acquired.

Payments in kind are estimated at fair value.

Fair value corresponds to the contractual price of hydrocarbons used to calculate Production entitlement, market price (if available) or an appropriate benchmark price. These prices might be calculated on an averaged basis over a given period.

(1) Transposing certain provisions set out in Directive 2013/24/UE of the European Parliament and of the Council of June 26, 2013 (chapter 10).

9.3.1 Reporting by country and type of Payment

9.3.1.1 Paid in cash

paid in cash (in thousands of dollars)	*Income Taxes*	*Other Taxes*	Taxes (Total)	Royalties	License fees	License bonuses	Dividends	Infrastructure improvements	Production entitlements	Total of Payments
Europe	***5,240,201***	***116,765***	***5,356,966***	**–**	**19,822**	**–**	**–**	**1,948**	**–**	**5,378,736**
Denmark	*48,515*	*659*	49,174	–	7,907	–	–	–	–	57,081
France	–	–	–	–	–	–	–	1,948	–	1,948
Italy	*6,971*	*58,643*	65,614	–	1,844	–	–	–	–	67,458
Netherlands	*343,231*	–	343,231	–	728	–	–	–	–	343,959
Norway	*3,547,847*	*57,463*	3,605,310	–	3,263	–	–	–	–	3,608,573
United Kingdom	*1,293,637*	–	1,293,637	–	6,080	–	–	–	–	1,299,717
Africa	***1,668,500***	***231,102***	**1,899,602**	**–**	**61,179**	**4,500**	**25,000**	**59,787**	**–**	**2,050,068**
Angola	*657,020*	*71,325*	728,345	–	8,416	2,000	–	2,789	–	741,550
Gabon	*30,101*	*57,039*	87,140	–	3,295	–	25,000	17,482	–	132,917
Kenya	–	–	–	–	457	–	–	–	–	457
Mozambique	–	–	–	–	–	–	–	3,472	–	3,472
Namibia	–	–	–	–	142	–	–	–	–	142
Nigeria	*981,033*	*81,993*	1,063,026	–	22,502	–	–	35,236	–	1,120,764
Republic of the Congo	*346*	*20,745*	21,091	–	18,536	–	–	808	–	40,435
São Tomé and Principe	–	–	–	–	2,161	2,500	–	–	–	4,661
Senegal	–	–	–	–	2,577	–	–	–	–	2,577
Uganda	–	–	–	–	3,093	–	–	–	–	3,093
Middle East and North Africa	***89,089***	***10,488,463***	**10,577,552**	**–**	**32,057**	**24,428**	**–**	**1,031**	**–**	**10,635,068**
Algeria	*586*	*187,486*	188,072	–	1,314	24,428	–	–	–	213,814
Cyprus	–	–	–	–	876	–	–	–	–	876
Egypt	–	–	–	–	464	–	–	–	–	464
Iraq	–	–	–	–	2,986	–	–	–	–	2,986
Lebanon	–	–	–	–	138	–	–	–	–	138
Libya	–	*1,337,179*	1,337,179	–	14,088	–	–	1,031	–	1,352,298
Oman	*7,411*	*471,930*	479,341	–	215	–	–	–	–	479,556
Qatar	*81,092*	*27,855*	108,947	–	–	–	–	–	–	108,947
United Arab Emirates	–	*8,464,013*	8,464,013	–	11,976	–	–	–	–	8,475,989
Americas	***322,697***	***796,820***	**1,119,517**	**68,090**	**41,891**	**156,382**	**–**	**131**	**–**	**1,386,011**
Argentina	*9,974*	*94,046*	104,020	–	20,112	–	–	–	–	124,132
Bolivia	–	*135,191*	135,191	–	623	–	–	131	–	135,945
Brazil	*312,723*	*548,989*	861,712	–	19,124	156,382	–	–	–	1,037,218
Guyana	–	–	–	–	114	–	–	–	–	114
Mexico	–	*552*	552	–	1,046	–	–	–	–	1,598
Suriname	–	–	–	–	227	–	–	–	–	227
United States	–	*18,042*	18,042	68,090	645	–	–	–	–	86,777
Asia Pacific	***114,301***	***152,494***	**266,795**	**–**	**7,097**	**–**	**–**	**3,736**	**6,106**	**283,734**
Australia	*3,090*	*68,501*	71,591	–	2,823	–	–	–	–	74,414
Brunei	*41,382*	*6,471*	47,853	–	2	–	–	–	6,106	53,961
China	*32,298*	*12,352*	44,650	–	–	–	–	–	–	44,650
Indonesia	*7,020*	–	7,020	–	–	–	–	–	–	7,020
Kazakhstan	–	*63,693*	63,693	–	332	–	–	3,736	–	67,761
Malaysia	*6,053*	*1,084*	7,137	–	3,746	–	–	–	–	10,883
Papua New Guinea	–	–	–	–	194	–	–	–	–	194
Thailand	*24,458*	*393*	24,851	–	–	–	–	–	–	24,851
Total	***7,434,788***	***11,785,644***	**19,220,432**	**68,090**	**162,046**	**185,310**	**25,000**	**66,633**	**6,106**	**19,733,617**

9.3.1.2 Paid in kind

paid in kind (in kboe)	*Income Taxes*	*Other Taxes*	Taxes (Total)	Royalties	License fees	License bonuses	Dividends	Infrastructure improvements	Production entitlements	Total of Payments
Europe	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**1,071**	**1,071**
Azerbaijan	–	–	–	–	–	–	–	–	1,071	1,071
Africa	***2,830***	***3,590***	**6,420**	**–**	**0**	**–**	**–**	**2**	**23,063**	**29,485**
Angola	–	–	–	–	–	–	–	–	21,885	21,885
Gabon	*241*	–	241	–	–	–	–	2	–	243
Nigeria	*958*	*906*	1,864	–	0	–	–	–	1,172	3,036
Republic of the Congo	*1,631*	*2,684*	4,314	–	–	–	–	–	6	4,320
Middle East and North Africa	***10,730***	***594***	**11,324**	**3,479**	**–**	**–**	**–**	**–**	**46,672**	**61,475**
Algeria	*1,220*	–	1,220	–	–	–	–	–	–	1,220
Iraq	*580*	–	580	2,416	–	–	–	–	–	2,996
Libya	*5,612*	*594*	6,206	–	–	–	–	–	16,322	22,528
Oman	–	–	–	1,063	–	–	–	–	–	1,063
Qatar	*3,318*	–	3,318	–	–	–	–	–	30,350	33,669
Americas	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**5,418**	**5,418**
Bolivia	–	–	–	–	–	–	–	–	741	741
Brazil	–	–	–	–	–	–	–	–	4,677	4,677
Asia Pacific	**–**	***621***	**621**	**137**	**–**	**–**	**–**	**–**	**2,068**	**2,826**
China	–	*621*	621	–	–	–	–	–	2,319	2,940
Indonesia	–	–	–	–	–	–	–	–	(1,019)	(1,019)
Kazakhstan	–	–	–	–	–	–	–	–	534	534
Malaysia	–	–	–	137	–	–	–	–	234	370
Total	***13,560***	***4,805***	**18,365**	**3,616**	**0**	**–**	**–**	**2**	**78,292**	**100,275**

9.3.1.3 Paid in cash and in kind (including valuation of in-kind payments)

In application of the regulation imposing a disclosure of the value of the total Payments, the table presented herebelow shows the sum of payments done in cash and in kind valuated as indicated in the footnotes.

all payments (in thousands of dollars)	*Income Taxes*	*Other Taxes*	Taxes (Total)	Royalties	License fees	License bonuses	Dividends	Infrastructure improvements	Production entitlements	Total of Payments
Europe	***5,240,201***	***116,765***	**5,356,966**	**–**	**19,822**	**–**	**–**	**1,948**	**38,481**	**5,417,217**
Azerbaijan	–	–	–	–	–	–	–	–	38,481	38,481
Denmark	*48,515*	*659*	49,174	–	7,907	–	–	–	–	57,081
France	–	–	–	–	–	–	–	1,948	–	1,948
Italy	*6,971*	*58,643*	65,614	–	1,844	–	–	–	–	67,458
Netherlands	*343,231*	–	343,231	–	728	–	–	–	–	343,959
Norway	*3,547,847*	*57,463*	3,605,310	–	3,263	–	–	–	–	3,608,573
United Kingdom	*1,293,637*	–	1,293,637	–	6,080	–	–	–	–	1,299,717
Africa	***1,891,293***	***513,204***	**2,404,497**	**–**	**61,197**	**4,500**	**25,000**	**59,972**	**1,856,027**	**4,411,193**
Angola	*657,020*	*71,325*	728,345	–	8,416	2,000	–	2,789	1,760,313	2,501,863
Gabon	*48,705*	*57,039*	105,744	–	3,295	–	25,000	17,667	–	151,706
Kenya	–	–	–	–	457	–	–	–	–	457
Mozambique	–	–	–	–	–	–	–	3,472	–	3,472
Namibia	–	–	–	–	142	–	–	–	–	142
Nigeria	*1,059,075*	*155,597*	1,214,672	–	22,520	–	–	35,236	95,237	1,367,665
Republic of the Congo	*126,493*	*229,243*	355,736	–	18,536	–	–	808	477	375,557
São Tomé and Principe	–	–	–	–	2,161	2,500	–	–	–	4,661
Senegal	–	–	–	–	2,577	–	–	–	–	2,577
Uganda	–	–	–	–	3,093	–	–	–	–	3,093
Middle East and North Africa	***759,099***	***10,536,467***	**11,295,566**	**237,943**	**32,057**	**24,428**	**–**	**1,031**	**2,035,654**	**13,626,679**
Algeria	*93,648*	*187,486*	281,134	–	1,314	24,428	–	–	–	306,876
Cyprus	–	–	–	–	876	–	–	–	–	876
Egypt	–	–	–	–	464	–	–	–	–	464
Iraq	*45,290*	–	45,290	183,322	2,986	–	–	–	–	231,598
Lebanon	–	–	–	–	138	–	–	–	–	138
Libya	*453,394*	*1,385,183*	1,838,577	–	14,088	–	–	1,031	1,319,727	3,173,423
Oman	*7,411*	*471,930*	479,341	54,621	215	–	–	–	–	534,177
Qatar	*159,356*	*27,855*	187,211	–	–	–	–	–	715,927	903,138
United Arab Emirates	–	*8,464,013*	8,464,013	–	11,976	–	–	–	–	8,475,989
Americas	***322,697***	***796,820***	**1,119,517**	**68,090**	**41,891**	**156,382**	**–**	**131**	**363,778**	**1,749,789**
Argentina	*9,974*	*94,046*	104,020	–	20,112	–	–	–	–	124,132
Bolivia	–	*135,191*	135,191	–	623	–	–	131	13,474	149,419
Brazil	*312,723*	*548,989*	861,712	–	19,124	156,382	–	–	350,304	1,387,522
Guyana	–	–	–	–	114	–	–	–	–	114
Mexico	–	*552*	552	–	1,046	–	–	–	–	1,598
Suriname	–	–	–	–	227	–	–	–	–	227
United States	–	*18,042*	18,042	68,090	645	–	–	–	–	86,777
Asia Pacific	***114,301***	***169,859***	**284,160**	**3,813**	**7,097**	**–**	**–**	**3,736**	**114,946**	**413,752**
Australia	*3,090*	*68,501*	71,591	–	2,823	–	–	–	–	74,414
Brunei	*41,382*	*6,471*	47,853	–	2	–	–	–	6,106	53,961
China	*32,298*	*29,717*	62,015	–	–	–	–	–	65,083	127,098
Indonesia	*7,020*	–	7,020	–	–	–	–	–	5,232	12,252
Kazakhstan	–	*63,693*	63,693	–	332	–	–	3,736	31,751	99,512
Malaysia	*6,053*	*1,084*	7,137	3,813	3,746	–	–	–	6,774	21,470
Papua New Guinea	–	–	–	–	194	–	–	–	–	194
Thailand	*24,458*	*393*	24,851	–	–	–	–	–	–	24,851
Total	***8,327,591***	***12,133,115***	**20,460,706**	**309,846**	**162,064**	**185,310**	**25,000**	**66,818**	**4,408,886**	**25,618,630**

9.3.2 Reporting of Payments by Project and by type of Payment, and by Government and by type of Payment

	Income Taxes	*Other Taxes*	Taxes (Total)	Royalties	License fees	License bonuses	Dividends	Infrastructure improvements	Production entitlements	Total of Payments
Algeria (paid in cash (kusd))										
Payments per Project										
Groupement Berkine	–	*22,423*	22,423	–	–	12,011	–	–	–	34,434
Organisation Orhoud	–	–	–	–	–	2,835	–	–	–	2,835
Timimoun	–	*22,062*	22,062	–	878	–	–	–	–	22,940
Tin Fouyé Tabankort II	*586*	*143,001*	143,587	–	267	9,582	–	–	–	153,436
Tin Fouyé Tabankort Sud	–	–	–	–	169	–	–	–	–	169
Total	***586***	***187,486***	**188,072**	**–**	**1,314**	**24,428**	**–**	**–**	**–**	**213,814**
Payments per Government										
Direction Générale des Impôts, Direction des Grandes Entreprises c/o Sonatrach	–	–	–	–	–	–	–	–	–	–
Direction Générale des Impôts, Direction des Grandes Entreprises	*586*	*120,686*	121,272	–	1,314	–	–	–	–	122,586
Agence Nationale pour Valorisation des Ressources en Hydrocarbures (ALNAFT)	–	*44,377*	44,377	–	–	–	–	–	–	44,377
Sonatrach	–	*22,423*	22,423	–	–	24,428	–	–	–	46,851
Total	***586***	***187,486***	**188,072**	**–**	**1,314**	**24,428**	**–**	**–**	**–**	**213,814**
Algeria (paid in kind (kboe))										
Payments per Project										
Groupement Berkine	*1,220*	–	1,220	–	–	–	–	–	–	1,220
Organisation Orhoud	–	–	–	–	–	–	–	–	–	–
Timimoun	–	–	–	–	–	–	–	–	–	–
Tin Fouyé Tabankort II	–	–	–	–	–	–	–	–	–	–
Tin Fouyé Tabankort Sud	–	–	–	–	–	–	–	–	–	–
Total	***1,220***	**–**	**1,220**	**–**	**–**	**–**	**–**	**–**	**–**	**1,220**
Payments per Government										
Direction Générale des Impôts, Direction des Grandes Entreprises c/o Sonatrach	*1,220*	–	1,220	–	–	–	–	–	–	1,220
Direction Générale des Impôts, Direction des Grandes Entreprises	–	–	–	–	–	–	–	–	–	–
Agence Nationale pour Valorisation des Ressources en Hydrocarbures (ALNAFT)	–	–	–	–	–	–	–	–	–	–
Sonatrach	–	–	–	–	–	–	–	–	–	–
Total	***1,220***	**–**	**1,220**	**–**	**–**	**–**	**–**	**–**	**–**	**1,220**

In application of the regulation imposing a disclosure of the value of the total Payments, the table presented herebelow shows the sum of payments done in cash and in kind valuated as indicated in the footnotes

Algeria (all payments (kusd) - including valuation of in-kind payments)										
Payments per Project										
Groupement Berkine	*93,062*[(a)]	*22,423*	115,485	–	–	12,011	–	–	–	127,496
Organisation Orhoud	–	–	–	–	–	2,835	–	–	–	2,835
Timimoun	–	*22,062*	22,062	–	878	–	–	–	–	22,940
Tin Fouyé Tabankort II	*586*	*143,001*	143,587	–	267	9,582	–	–	–	153,436
Tin Fouyé Tabankort Sud	–	–	–	–	169	–	–	–	–	169
Total	***93,648***	***187,486***	**281,134**	**–**	**1,314**	**24,428**	**–**	**–**	**–**	**306,876**
Payments per Government										
Direction Générale des Impôts, Direction des Grandes Entreprises c/o Sonatrach	*93,062*[(a)]	–	93,062	–	–	–	–	–	–	93,062
Direction Générale des Impôts, Direction des Grandes Entreprises	*586*	*120,686*	121,272	–	1,314	–	–	–	–	122,586
Agence Nationale pour Valorisation des Ressources en Hydrocarbures (ALNAFT)	–	*44,377*	44,377	–	–	–	–	–	–	44,377
Sonatrach	–	*22,423*[(b)]	*22,423*	–	–	24,428	–	–	–	46,851
Total	***93,648***	***187,486***	**281,134**	**–**	**1,314**	**24,428**	**–**	**–**	**–**	**306,876**

(a) Corresponds to the valuation of 1,220 kboe at fiscal selling prices for income taxes.
(b) Corresponds to the share of operating costs paid in complement to the economic interest of TotalEnergies in Groupement Berkine.

	Income Taxes	*Other Taxes*	Taxes (Total)	Royalties	License fees	License bonuses	Dividends	Infrastructure improvements	Production entitlements	Total of Payments
Angola (paid in cash (kusd))										
Payments per Project										
Block 0	*58,205*	*71,325*	129,530	–	735	–	–	–	–	130,265
Block 16	*204*	–	204	–	224	–	–	–	–	428
Block 17	*468,671*	–	468,671	–	5,158	2,000	–	291	–	476,120
Block 17/06	*143*	–	143	–	92	–	–	–	–	235
Block 20/11	*1,444*	–	1,444	–	116	–	–	–	–	1,560
Block 29	*62*	–	62	–	84	–	–	–	–	146
Block 32	*128,291*	–	128,291	–	1,886	–	–	2,498	–	132,675
Block 48	–	–	–	–	121	–	–	–	–	121
Total	***657,020***	***71,325***	**728,345**	**–**	**8,416**	**2,000**	**–**	**2,789**	**–**	**741,550**
Payments per Government										
Caixa do Tesouro Nacional	*657,020*	*71,325*	728,345	–	382	–	–	–	–	728,727
Ministério dos Recursos Minerais, Petróleo e Gás	–	–	–	–	8,034	–	–	–	–	8,034
ANPG - Agência Nacional de Petróleo, Gás e Biocombustíveis	–	–	–	–	–	2,000	–	2,789	–	4,789
Total	***657,020***	***71,325***	**728,345**	**–**	**8,416**	**2,000**	**–**	**2,789**	**–**	**741,550**

Angola (paid in kind (kboe))										
Payments per Project										
Block 0	–	–	–	–	–	–	–	–	–	–
Block 16	–	–	–	–	–	–	–	–	–	–
Block 17	–	–	–	–	–	–	–	–	21,085	21,085
Block 17/06	–	–	–	–	–	–	–	–	–	–
Block 20/11	–	–	–	–	–	–	–	–	–	–
Block 29	–	–	–	–	–	–	–	–	–	–
Block 32	–	–	–	–	–	–	–	–	800	800
Block 48	–	–	–	–	–	–	–	–	–	–
Total	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**21,885**	**21,885**
Payments per Government										
Caixa do Tesouro Nacional	–	–	–	–	–	–	–	–	–	–
Ministério dos Recursos Minerais, Petróleo e Gás	–	–	–	–	–	–	–	–	–	–
ANPG - Agência Nacional de Petróleo, Gás e Biocombustíveis	–	–	–	–	–	–	–	–	21,885	21,885
Total	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**21,885**	**21,885**

In application of the regulation imposing a disclosure of the value of the total Payments, the table presented herebelow shows the sum of payments done in cash and in kind valuated as indicated in the footnotes

Angola (all payments (kusd) - including valuation of in-kind payments)										
Payments per Project										
Block 0	*58,205*	*71,325*	129,530	–	735	–	–	–	–	130,265
Block 16	*204*	–	204	–	224	–	–	–	–	428
Block 17	*468,671*	–	468,671	–	5,158	2,000	–	291	1,696,986[(a)]	2,173,106
Block 17/06	*143*	–	143	–	92	–	–	–	–	235
Block 20/11	*1,444*	–	1,444	–	116	–	–	–	–	1,560
Block 29	*62*	–	62	–	84	–	–	–	–	146
Block 32	*128,291*	–	128,291	–	1,886	–	–	2,498	63,327[(b)]	196,002
Block 48	–	–	–	–	121	–	–	–	–	121
Total	***657,020***	***71,325***	**728,345**	**–**	**8,416**	**2,000**	**–**	**2,789**	**1,760,313**	**2,501,863**
Payments per Government										
Caixa do Tesouro Nacional	*657,020*	*71,325*	*728,345*	–	382	–	–	–	–	728,727
Ministério dos Recursos Minerais, Petróleo e Gás	–	–	–	–	8,034	–	–	–	–	8,034
ANPG - Agência Nacional de Petróleo, Gás e Biocombustíveis	–	–	–	–	–	2,000	–	2,789	1,760,313[(c)]	1,765,102
Total	***657,020***	***71,325***	**728,345**	**–**	**8,416**	**2,000**	**–**	**2,789**	**1,760,313**	**2,501,863**

(a) Corresponds to the valuation of 21,085 kboe at the weighted average fiscal price of the year.
(b) Corresponds to the valuation of 800 kboe at the weighted average fiscal price of the year.
(c) Corresponds to the valuation of 21,885 kboe at the weighted average fiscal price of the year.

	Income Taxes	*Other Taxes*	Taxes (Total)	Royalties	License fees	License bonuses	Dividends	Infrastructure improvements	Production entitlements	Total of Payments
Argentina (paid in cash (kusd))										
Payments per Project										
Cuenca Argentina Norte - Block 111	–	–	–	–	11,159	–	–	–	–	11,159
Cuenca Argentina Norte - Block 113	–	–	–	–	2,225	–	–	–	–	2,225
Malvinas Occidental - Block 123	–	–	–	–	44	–	–	–	–	44
Neuquen	–	*40,329*	40,329	–	497	–	–	–	–	40,826
Santa Cruz	–	–	–	–	507	–	–	–	–	507
Tierra del Fuego	–	*38,430*	38,430	–	5,680	–	–	–	–	44,110
Argentina (non-attributable)	*9,974*	*15,287*	25,261	–	–	–	–	–	–	25,261
Total	***9,974***	***94,046***	**104,020**	**–**	**20,112**	**–**	**–**	**–**	**–**	**124,132**
Payments per Government										
Administracion Federal de Ingresos Publicos	*9,974*	*15,287*	25,261	–	–	–	–	–	–	25,261
Secretaria de Energia, Republica Argentina	–	*25,029*	25,029	–	14,418	–	–	–	–	39,447
Provincia del Neuquen	–	*40,329*	40,329	–	497	–	–	–	–	40,826
Provincia de Tierra del Fuego	–	*13,401*	13,401	–	5,197	–	–	–	–	18,598
Total	***9,974***	***94,046***	**104,020**	**–**	**20,112**	**–**	**–**	**–**	**–**	**124,132**
Australia (paid in cash (kusd))										
Payments per Project										
GLNG	–	*59,899*	59,899	–	2,823	–	–	–	–	62,722
Ichthys LNG	*3,090*	*8,602*	11,692	–	–	–	–	–	–	11,692
Total	***3,090***	***68,501***	**71,591**	**–**	**2,823**	**–**	**–**	**–**	**–**	**74,414**
Payments per Government										
Australian Taxation Office	*3,090*	*8,602*	11,692	–	–	–	–	–	–	11,692
Queensland Government	–	–	–	–	2,823	–	–	–	–	2,823
Queensland Government, Queensland Revenue Office	–	*59,899*	59,899	–	–	–	–	–	–	59,899
Total	***3,090***	***68,501***	**71,591**	**–**	**2,823**	**–**	**–**	**–**	**–**	**74,414**
Azerbaijan (paid in cash (kusd))										
Payments per Project										
Absheron	–	–	–	–	–	–	–	–	–	–
Total	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**
Payments per Government										
State Oil Company of the Azerbaijan Republic	–	–	–	–	–	–	–	–	–	–
Total	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**
Azerbaijan (paid in kind (kboe))										
Payments per Project										
Absheron	–	–	–	–	–	–	–	–	1,071	1,071
Total	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**1,071**	**1,071**
Payments per Government										
State Oil Company of the Azerbaijan Republic	–	–	–	–	–	–	–	–	1,071	1,071
Total	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**1,071**	**1,071**

In application of the regulation imposing a disclosure of the value of the total Payments, the table presented herebelow shows the sum of payments done in cash and in kind valuated as indicated in the footnotes.

Azerbaijan (all payments (kusd) - including valuation of in-kind payments)										
Payments per Project										
Absheron	–	–	–	–	–	–	–	–	38,481[(a)]	38,481
Total	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**38,481**	**38,481**
Payments per Government										
State Oil Company of the Azerbaijan Republic	–	–	–	–	–	–	–	–	38,481[(a)]	38,481
Total	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**38,481**	**38,481**

(a) Corresponds to the valuation of 1,071 kboe for production entitlements at a fixed contractual price for gas and contractual net-back price for condensates.

	Income Taxes	*Other Taxes*	Taxes (Total)	Royalties	License fees	License bonuses	Dividends	Infrastructure improvements	Production entitlements	Total of Payments
Bolivia (paid in cash (kusd))										
Payments per Project										
Aquio	–	*17,249*	17,249	–	152	–	–	–	–	17,401
Ipatí	–	*79,259*	79,259	–	240	–	–	131	–	79,630
Itaú	–	*6,063*	6,063	–	131	–	–	–	–	6,194
San Alberto	–	*11,153*	11,153	–	34	–	–	–	–	11,187
San Antonio	–	*21,467*	21,467	–	66	–	–	–	–	21,533
Total	**–**	***135,191***	**135,191**	**–**	**623**	**–**	**–**	**131**	**–**	**135,945**
Payments per Government										
Yacimientos Petroliferos Fiscales Bolivianos (YPFB)	–	–	–	–	623	–	–	–	–	623
Servicio de Impuestos Nacionales (SIN) c/o YPFB	–	*86,522*	86,522	–	–	–	–	–	–	86,522
Departamentos c/o YPFB	–	*48,669*	48,669	–	–	–	–	–	–	48,669
Fundesoc c/o Indigeneous Communities	–	–	–	–	–	–	–	131	–	131
Total	**–**	***135,191***	**135,191**	**–**	**623**	**–**	**–**	**131**	**–**	**135,945**
Bolivia (paid in kind (kboe))										
Payments per Project										
Aquio	–	–	–	–	–	–	–	–	145	145
Ipatí	–	–	–	–	–	–	–	–	–	–
Itaú	–	–	–	–	–	–	–	–	–	–
San Alberto	–	–	–	–	–	–	–	–	119	119
San Antonio	–	–	–	–	–	–	–	–	476	476
Total	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**741**	**741**
Payments per Government										
Yacimientos Petroliferos Fiscales Bolivianos (YPFB)	–	–	–	–	–	–	–	–	741	741
Servicio de Impuestos Nacionales (SIN) c/o YPFB	–	–	–	–	–	–	–	–	–	–
Departamentos c/o YPFB	–	–	–	–	–	–	–	–	–	–
Fundesoc c/o Indigeneous Communities	–	–	–	–	–	–	–	–	–	–
Total	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**741**	**741**

In application of the regulation imposing a disclosure of the value of the total Payments, the table presented herebelow shows the sum of payments done in cash and in kind valuated as indicated in the footnotes.

	Income Taxes	*Other Taxes*	Taxes (Total)	Royalties	License fees	License bonuses	Dividends	Infrastructure improvements	Production entitlements	Total of Payments
Bolivia (all payments (kusd) - including valuation of in-kind payments)										
Payments per Project										
Aquio	–	*17,249*	17,249	–	152	–	–	–	2,716[a]	20,117
Ipatí	–	*79,259*	79,259	–	240	–	–	131	–	79,630
Itaú	–	*6,063*	6,063	–	131	–	–	–	–	6,194
San Alberto	–	*11,153*	11,153	–	34	–	–	–	3,740[b]	14,927
San Antonio	–	*21,467*	21,467	–	66	–	–	–	7,018[c]	28,551
Total	**–**	***135,191***	**135,191**	**–**	**623**	**–**	**–**	**131**	**13,474**	**149,419**
Payments per Government										
Yacimientos Petroliferos Fiscales Bolivianos (YPFB)	–	–	–	–	623	–	–	–	13,474[d]	14,097
Servicio de Impuestos Nacionales (SIN) c/o YPFB	–	*86,522*	86,522	–	–	–	–	–	–	86,522
Departamentos c/o YPFB	–	*48,669*	48,669	–	–	–	–	–	–	48,669
Fundesoc c/o Indigeneous Communities	–	–	–	–	–	–	–	131	–	131
Total	**–**	***135,191***	**135,191**	**–**	**623**	**–**	**–**	**131**	**13,474**	**149,419**

(a) Corresponds to the valuation of 145 kboe for production entitlements at a fixed regulated price for condensates and on a net-back regulated price for gas.
(b) Corresponds to the valuation of 119 kboe for production entitlements at a fixed regulated price for condensates and on a net-back regulated price for gas.
(c) Corresponds to the valuation of 476 kboe for production entitlements at a fixed regulated price for condensates and on a net-back regulated price for gas.
(d) Corresponds to the valuation of 741 kboe for production entitlements at a fixed regulated price for condensates and on a net-back regulated price for gas.

	Income Taxes	*Other Taxes*	Taxes (Total)	Royalties	License fees	License bonuses	Dividends	Infrastructure improvements	Production entitlements	Total of Payments
Brazil (paid in cash (kusd))										
Payments per Project										
Atapu	–	–	–	–	24	–	–	–	–	24
Atapu ToR Surplus	–	*61,734*	61,734	–	–	55,365	–	–	–	117,099
Barreirinhas	–	–	–	–	58	–	–	–	–	58
BM-S-54	–	–	–	–	73	–	–	–	–	73
C-M-541	–	–	–	–	798	–	–	–	–	798
Espirito Santo	–	–	–	–	5	–	–	–	–	5
Iara	–	*131,960*	131,960	–	467	–	–	–	–	132,427
Lapa	–	*54,552*	54,552	–	1,227	–	–	–	–	55,779
Libra	–	*203,960*	203,960	–	160	–	–	–	–	204,120
Sépia ToR Surplus	–	*96,783*	96,783	–	–	101,017	–	–	–	197,800
S-M-1711	–	–	–	–	43	–	–	–	–	43
S-M-1815	–	–	–	–	43	–	–	–	–	43
Xerelete	–	–	–	–	28	–	–	–	–	28
Brazil (non-attributable)	*312,723*	–	312,723	–	16,198	–	–	–	–	328,921
Total	***312,723***	***548,989***	**861,712**	**–**	**19,124**	**156,382**	**–**	**–**	**–**	**1,037,218**
Payments per Government										
Agencia National de Petroleo, Gas Natural e Biocombustiveis	–	–	–	–	16,198	–	–	–	–	16,198
Fundo de Compensação Ambiental (FCA)	–	–	–	–	1,047	–	–	–	–	1,047
Receita Federal	*312,723*	*548,989*	861,712	–	–	–	–	–	–	861,712
Petrobras	–	–	–	–	–	156,382	–	–	–	156,382
Pré-sal Petroleo (PPSA)	–	–	–	–	–	–	–	–	–	–
Secretaria do Tesouro Nacional	–	–	–	–	1,879	–	–	–	–	1,879
Total	***312,723***	***548,989***	**861,712**	**–**	**19,124**	**156,382**	**–**	**–**	**–**	**1,037,218**
Brazil (paid in kind (kboe))										
Payments per Project										
Atapu	–	–	–	–	–	–	–	–	–	–
Atapu ToR Surplus	–	–	–	–	–	–	–	–	111	111
Barreirinhas	–	–	–	–	–	–	–	–	–	–
BM-S-54	–	–	–	–	–	–	–	–	–	–
C-M-541	–	–	–	–	–	–	–	–	–	–
Espirito Santo	–	–	–	–	–	–	–	–	–	–
Iara	–	–	–	–	–	–	–	–	–	–
Lapa	–	–	–	–	–	–	–	–	–	–
Libra	–	–	–	–	–	–	–	–	4,201	4,201
Sépia ToR Surplus	–	–	–	–	–	–	–	–	365	365
S-M-1711	–	–	–	–	–	–	–	–	–	–
S-M-1815	–	–	–	–	–	–	–	–	–	–
Xerelete	–	–	–	–	–	–	–	–	–	–
Brazil (non-attributable)	–	–	–	–	–	–	–	–	–	–
Total	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**4,677**	**4,677**
Payments per Government										
Agencia National de Petroleo, Gas Natural e Biocombustiveis	–	–	–	–	–	–	–	–	–	–
Fundo de Compensação Ambiental (FCA)	–	–	–	–	–	–	–	–	–	–
Receita Federal	–	–	–	–	–	–	–	–	–	–
Petrobras	–	–	–	–	–	–	–	–	–	–
Pré-sal Petroleo (PPSA)	–	–	–	–	–	–	–	–	4,677	4,677
Secretaria do Tesouro Nacional	–	–	–	–	–	–	–	–	–	–
Total	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**4,677**	**4,677**

	Income Taxes	*Other Taxes*	Taxes (Total)	Royalties	License fees	License bonuses	Dividends	Infrastructure improvements	Production entitlements	Total of Payments

In application of the regulation imposing a disclosure of the value of the total Payments, the table presented herebelow shows the sum of payments done in cash and in kind valuated as indicated in the footnotes

Brazil (all payments (kusd) - including valuation of in-kind payments)										
Payments per Project										
Atapu	–	–	–	–	24	–	–	–	–	24
Atapu ToR Surplus	–	*61,734*	61,734	–	–	55,365[a]	–	–	8,274[a]	125,373
Barreirinhas	–	–	–	–	58	–	–	–	–	58
BM-S-54	–	–	–	–	73	–	–	–	–	73
C-M-541	–	–	–	–	798	–	–	–	–	798
Espirito Santo	–	–	–	–	5	–	–	–	–	5
Iara	–	*131,960*	131,960	–	467	–	–	–	–	132,427
Lapa	–	*54,552*	54,552	–	1,227	–	–	–	–	55,779
Libra	–	*203,960*	203,960	–	160	–	–	–	315,135[c]	519,255
Sépia ToR Surplus	–	*96,783*	96,783	–	–	101,017[d]	–	–	26,895[d]	224,695
S-M-1711	–	–	–	–	43	–	–	–	–	43
S-M-1815	–	–	–	–	43	–	–	–	–	43
Xerelete	–	–	–	–	28	–	–	–	–	28
Brazil (non-attributable)	*312,723*	–	312,723	–	16,198	–	–	–	–	328,921
Total	***312,723***	***548,989***	**861,712**	**–**	**19,124**	**156,382**	**–**	**–**	**350,304**	**1,387,522**
Payments per Government										
Agencia National de Petroleo, Gas Natural e Biocombustiveis	–	–	–	–	16,198	–	–	–	–	16,198
Fundo de Compensação Ambiental (FCA)	–	–	–	–	1,047	–	–	–	–	1,047
Receita Federal	*312,723*	*548,989*	861,712	–	–	–	–	–	–	861,712
Petrobras	–	–	–	–	–	156,382[e]	–	–	–	156,382
Pré-sal Petroleo (PPSA)	–	–	–	–	–	–	–	–	350,304[f]	350,304
Secretaria do Tesouro Nacional	–	–	–	–	1,879	–	–	–	–	1,879
Total	***312,723***	***548,989***	**861,712**	**–**	**19,124**	**156,382**	**–**	**–**	**350,304**	**1,387,522**

(a) Corresponds to the complementary variable consideration (earn-out) linked to the asset transfer realized in 2022 with Petrobras.
(b) Corresponds to the valuation of 111 kboe at the fiscal reference price determined by ANP (Agencia National de Petroleo) for production entitlements.
(c) Corresponds to the valuation of 4,201 kboe at the fiscal reference price determined by ANP (Agencia National de Petroleo) for production entitlements.
(d) Corresponds to the valuation of 365 kboe at the fiscal reference price determined by ANP (Agencia National de Petroleo) for production entitlements.
(e) Corresponds to the complementary variable consideration (earn-out) linked to the asset transfer realized in 2022 with Petrobras, majority controlled by the Brazilian State as of December 31, 2024.
(f) Corresponds to the valuation of 4,677 kboe at the fiscal reference price determined by ANP (Agencia National de Petroleo) for production entitlement.

Brunei (paid in cash (kusd))										
Payments per Project										
Block B	*41,382*	*6,471*	47,853	–	2	–	–	–	6,106[a]	53,961
Total	***41,382***	***6,471***	**47,853**	**–**	**2**	**–**	**–**	**–**	**6,106**	**53,961**
Payments per Government										
Brunei Government	*41,382*	*6,471*	47,853	–	2	–	–	–	6,106[a]	53,961
Total	***41,382***	***6,471***	**47,853**	**–**	**2**	**–**	**–**	**–**	**6,106**	**53,961**

(a) Corresponds to the payment related to Domestic Gas Supply Obligation.

China (paid in cash (kusd))										
Payments per Project										
Sulige	*32,298*	*12,352*	44,650	–	–	–	–	–	–	44,650
Total	***32,298***	***12,352***	**44,650**	**–**	**–**	**–**	**–**	**–**	**–**	**44,650**
Payments per Government										
China National Petroleum Company	–	–	–	–	–	–	–	–	–	–
Etoke Tax Bureau	*15,883*	*12,352*	28,235	–	–	–	–	–	–	28,235
Guangzhou Offshore Oil Tax Bureau	*266*	–	266	–	–	–	–	–	–	266
Tianjin Offshore Oil Tax Bureau	*16,149*	–	16,149	–	–	–	–	–	–	16,149
Total	***32,298***	***12,352***	**44,650**	**–**	**–**	**–**	**–**	**–**	**–**	**44,650**

China (paid in kind (kboe))										
Payments per Project										
Sulige	–	*621*	621	–	–	–	–	–	2,319	2,940
Total	**–**	***621***	**621**	**–**	**–**	**–**	**–**	**–**	**2,319**	**2,940**
Payments per Government										
China National Petroleum Company	–	–	–	–	–	–	–	–	2,319	2,319
Etoke Tax Bureau	–	*621*	621	–	–	–	–	–	–	621
Guangzhou Offshore Oil Tax Bureau	–	–	–	–	–	–	–	–	–	–
Tianjin Offshore Oil Tax Bureau	–	–	–	–	–	–	–	–	–	–
Total	**–**	***621***	**621**	**–**	**–**	**–**	**–**	**–**	**2,319**	**2,940**

In application of the regulation imposing a disclosure of the value of the total Payments, the table presented herebelow shows the sum of payments done in cash and in kind valuated as indicated in the footnotes.

China (all payments (kusd) - including valuation of in-kind payments)

Payments per Project										
Sulige	*32,298*	*29,717*[a]	62,015	–	–	–	–	–	65,083[b]	127,098
Total	***32,298***	***29,717***	**62,015**	–	–	–	–	–	**65,083**	**127,098**
Payments per Government										
China National Petroleum Company	–	–	–	–	–	–	–	–	65,083[b]	65,083
Etoke Tax Bureau	*15,883*	*29,717*[a]	45,600	–	–	–	–	–	–	45,600
Guangzhou Offshore Oil Tax Bureau	*266*	–	266	–	–	–	–	–	–	266
Tianjin Offshore Oil Tax Bureau	*16,149*	–	16,149	–	–	–	–	–	–	16,149
Total	***32,298***	***29,717***	**62,015**	–	–	–	–	–	**65,083**	**127,098**

(a) Includes the valuation for 17,365 kS of 621 kboe for taxes of different natures.
(b) Corresponds to the valuation of 2,319 kboe for production entitlements.

Cyprus (paid in cash (kusd))

Payments per Project										
Block 2	–	–	–	–	45	–	–	–	–	45
Block 3	–	–	–	–	67	–	–	–	–	67
Block 6	–	–	–	–	164	–	–	–	–	164
Block 7	–	–	–	–	168	–	–	–	–	168
Block 8	–	–	–	–	154	–	–	–	–	154
Block 9	–	–	–	–	44	–	–	–	–	44
Block 11	–	–	–	–	234	–	–	–	–	234
Total	**–**	**–**	**–**	**–**	**876**	**–**	**–**	**–**	**–**	**876**
Payments per Government										
Ministry of Energy, Commerce, Industry and Tourism	–	–	–	–	876	–	–	–	–	876
Total	**–**	**–**	**–**	**–**	**876**	**–**	**–**	**–**	**–**	**876**

Denmark (paid in cash (kusd))

Payments per Project										
Sole Concession Area	*48,515*[a]	*659*	49,174	–	7,907	–	–	–	–	57,081
Total	***48,515***	***659***	**49,174**	–	**7,907**	–	–	–	–	**57,081**
Payments per Government										
Arbejdstilsynet	–	–	–	–	224	–	–	–	–	224
Energistyrelsen	–	–	–	–	198	–	–	–	–	198
Dansk Teknisk Universitet	–	–	–	–	7,485	–	–	–	–	7,485
Skat	*48,515*[a]	*659*	49,174	–	–	–	–	–	–	49,174
Total	***48,515***	***659***	**49,174**	–	**7,907**	–	–	–	–	**57,081**

(a) Includes -2.7 M$ of windfall taxes refund (European Solidarity Contribution).

Egypt (paid in cash (kusd))

Payments per Project										
North Ras El Kanyis Offshore	–	–	–	–	464	–	–	–	–	464
Total	**–**	**–**	**–**	**–**	**464**	**–**	**–**	**–**	**–**	**464**
Payments per Government										
Egyptian Natural Gas Holding Company	–	–	–	–	464	–	–	–	–	464
Total	**–**	**–**	**–**	**–**	**464**	**–**	**–**	**–**	**–**	**464**

France (paid in cash (kusd))

Payments per Project										
Guyane Maritime	–	–	–	–	–	–	–	1,948	–	1,948
Total	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**1,948**	**–**	**1,948**
Payments per Government										
Alyse Guyane	–	–	–	–	–	–	–	1,948	–	1,948
Total	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**1,948**	**–**	**1,948**

	Income Taxes	*Other Taxes*	Taxes (Total)	Royalties	License fees	License bonuses	Dividends	Infrastructure improvements	Production entitlements	Total of Payments
Gabon (paid in cash (kusd))										
Payments per Project										
Baudroie-Mérou CEPP	–	*7,358*	7,358	–	805	–	–	1,489	–	9,652
Concessions (périmètre Convention d'Etablissement)	*30,101*	*2,865*	32,966	–	2,490	–	–	15,993	–	51,449
Concession Anguille	–	*28,436*	28,436	–	–	–	–	–	–	28,436
Concession Torpille	–	*18,380*	18,380	–	–	–	–	–	–	18,380
Non-attributable	–	–	–	–	–	–	25,000	–	–	25,000
Total	***30,101***	***57,039***	**87,140**	**–**	**3,295**	**–**	**25,000**	**17,482**	**–**	**132,917**
Payments per Government										
Trésor Public Gabonais	*30,101*	*57,039*	87,140	–	3,295	–	–	–	–	90,435
République du Gabon	–	–	–	–	–	–	25,000	12,394	–	37,394
Ville de Libreville	–	–	–	–	–	–	–	949	–	949
Ville de Port-Gentil	–	–	–	–	–	–	–	3,962	–	3,962
Miscellaneous PID beneficiaries	–	–	–	–	–	–	–	59	–	59
Miscellaneous PIH beneficiaries	–	–	–	–	–	–	–	118	–	118
Total	***30,101***	***57,039***	**87,140**	**–**	**3,295**	**–**	**25,000**	**17,482**	**–**	**132,917**
Gabon (paid in kind (kboe))										
Payments per Project										
Baudroie-Mérou CEPP	*241*	–	241	–	–	–	–	2	–	243
Concessions (périmètre Convention d'Etablissement)	–	–	–	–	–	–	–	–	–	–
Concession Anguille	–	–	–	–	–	–	–	–	–	–
Concession Torpille	–	–	–	–	–	–	–	–	–	–
Non-attributable	–	–	–	–	–	–	–	–	–	–
Total	***241***	**–**	**241**	**–**	**–**	**–**	**–**	**2**	**–**	**243**
Payments per Government										
Trésor Public Gabonais	–	–	–	–	–	–	–	2	–	2
République du Gabon	*241*	–	241	–	–	–	–	–	–	241
Ville de Libreville	–	–	–	–	–	–	–	–	–	–
Ville de Port-Gentil	–	–	–	–	–	–	–	–	–	–
Miscellaneous PID beneficiaries	–	–	–	–	–	–	–	–	–	–
Miscellaneous PIH beneficiaries	–	–	–	–	–	–	–	–	–	–
Total	***241***	**–**	**241**	**–**	**–**	**–**	**–**	**2**	**–**	**243**

In application of the regulation imposing a disclosure of the value of the total Payments, the table presented herebelow shows the sum of payments done in cash and in kind valuated as indicated in the footnotes.

Gabon (all payments (kusd) - including valuation of in-kind payments)										
Payments per Project										
Baudroie-Mérou CEPP	*18,604*[a]	*7,358*	25,962	–	805	–	–	1,674[c]	–	28,441
Concessions (périmètre Convention d'Etablissement)	*30,101*	*2,865*	32,966	–	2,490	–	–	15,993[c]	–	51,449
Concession Anguille	–	*28,436*	28,436	–	–	–	–	–	–	28,436
Concession Torpille	–	*18,380*	18,380	–	–	–	–	–	–	18,380
Non-attributable	–	–	–	–	–	–	25,000	–	–	25,000
Total	***48,705***	***57,039***	**105,744**	**–**	**3,295**	**–**	**25,000**	**17,667**	**–**	**151,706**
Payments per Government										
Trésor Public Gabonais	*30,101*	*57,039*	87,140	–	3,295	–	–	185[d]	–	90,620
République du Gabon	*18,604*[a]	–	18,604	–	–	–	25,000	12,394	–	55,998
Ville de Libreville	–	–	–	–	–	–	–	949	–	949
Ville de Port-Gentil	–	–	–	–	–	–	–	3,962	–	3,962
Miscellaneous PID beneficiaries	–	–	–	–	–	–	–	59	–	59
Miscellaneous PIH beneficiaries	–	–	–	–	–	–	–	118	–	118
Total	***48,705***	***57,039***	**105,744**	**–**	**3,295**	**–**	**25,000**	**17,667**	**–**	**151,706**

(a) Corresponds to the valuation of 241 kboe at the official selling price and applying the fiscal terms of the profit sharing agreements.
(b) Financing of projects (infrastructure, education, health) under joint control of the State and TotalEnergies within the framework of the *Provision pour Investissements Diversifiés* (PID - contribution to diversified investments) and of the *Provision pour Investissements dans les Hydrocarbures* (PIH - contribution to investments in hydrocarbons) including the valuation for 185 kusd of 2 kboe.
(c) Financing of projects (infrastructure, education, health) under joint control of the State and TotalEnergies within the framework of the *Provision pour Investissements Diversifiés* (PID - contribution to diversified investments) and of the *Provision pour Investissements dans les Hydrocarbures* (PIH - contribution to investments in hydrocarbons).
(d) Corresponds to the valuation of 2 kboe for *Provision pour Investissements Diversifiés* (PID - contribution to diversified investments) and of the *Provision pour Investissements dans les Hydrocarbures* (PIH - contribution to investments in hydrocarbons).

	Income Taxes	*Other Taxes*	Taxes (Total)	Royalties	License fees	License bonuses	Dividends	Infrastructure improvements	Production entitlements	Total of Payments
Guyana (paid in cash (kusd))										
Payments per Project										
Block S4	–	–	–	–	2	–	–	–	–	2
Canje	–	–	–	–	51	–	–	–	–	51
Orinduik	–	–	–	–	61	–	–	–	–	61
Total	**–**	**–**	**–**	**–**	**114**	**–**	**–**	**–**	**–**	**114**
Payments per Government										
Guyana Geology and Mines Commission	–	–	–	–	114	–	–	–	–	114
Total	**–**	**–**	**–**	**–**	**114**	**–**	**–**	**–**	**–**	**114**
Indonesia (paid in cash (kusd))										
Payments per Project										
Mahakam PSC	*5,103*	–	5,103	–	–	–	–	–	–	5,103
Sebuku PSC	*1,917*	–	1,917	–	–	–	–	–	–	1,917
Total	***7,020***	**–**	**7,020**	**–**	**–**	**–**	**–**	**–**	**–**	**7,020**
Payments per Government										
Directorate General of Taxation, Ministry of Finance	*7,020*	–	7,020	–	–	–	–	–	–	7,020
Satuan Khusus Kegiatan Usaha Hulu Minyak dan Gas Bumi (SKK Migas)	–	–	–	–	–	–	–	–	–	–
Total	***7,020***	**–**	**7,020**	**–**	**–**	**–**	**–**	**–**	**–**	**7,020**
Indonesia (paid in kind (kboe))										
Payments per Project										
Mahakam PSC	–	–	–	–	–	–	–	–	(1,083)	(1,083)
Sebuku PSC	–	–	–	–	–	–	–	–	64	64
Total	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**(1,019)**	**(1,019)**
Payments per Government										
Directorate General of Taxation, Ministry of Finance	–	–	–	–	–	–	–	–	–	–
Satuan Khusus Kegiatan Usaha Hulu Minyak dan Gas Bumi (SKK Migas)	–	–	–	–	–	–	–	–	(1,019)	(1,019)
Total	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**(1,019)**	**(1,019)**

In application of the regulation imposing a disclosure of the value of the total Payments, the table presented herebelow shows the sum of payments done in cash and in kind valuated as indicated in the footnotes

Indonesia (all payments (kusd) - including valuation of in-kind payments)										
Payments per Project										
Mahakam PSC	*5,103*	–	5,103	–	–	–	–	–	2,894[a]	7,997
Sebuku PSC	*1,917*	–	1,917	–	–	–	–	–	2,338[b]	4,255
Total	***7,020***	**–**	**7,020**	**–**	**–**	**–**	**–**	**–**	**5,232**	**12,252**
Payments per Government										
Directorate General of Taxation, Ministry of Finance	*7,020*	–	7,020	–	–	–	–	–	–	7,020
Satuan Khusus Kegiatan Usaha Hulu Minyak dan Gas Bumi (SKK Migas)	–	–	–	–	–	–	–	–	5,232[c]	5,232
Total	***7,020***	**–**	**7,020**	**–**	**–**	**–**	**–**	**–**	**5,232**	**12,252**

(a) Corresponds to the valuation for 7,645 kusd of 147 kboe at net-back price and for -4,751 kusd of -1,230 kboe as per the settlement terms agreed end 2023 following Mahakam PSC exit in 2017.
(b) Corresponds to the valuation at net-back price of 64 kboe for production entitlements.
(c) Corresponds to the valuation at net-back price for 9,983 kusd of 211 kboe and for -4,751 kusd of -1,230 kboe as per the settlement terms agreed end 2023 following Mahakam PSC exit in 2017.

	Income Taxes	*Other Taxes*	Taxes (Total)	Royalties	License fees	License bonuses	Dividends	Infrastructure improvements	Production entitlements	Total of Payments
Iraq (paid in cash (kusd))										
Payments per Project										
GGIP	–	–	–	–	2,986	–	–	–	–	2,986
Halfaya	–	–	–	–	–	–	–	–	–	–
Total	**–**	**–**	**–**	**–**	**2,986**	**–**	**–**	**–**	**–**	**2,986**
Payments per Government										
Basra Oil Company	–	–	–	–	2,986	–	–	–	–	2,986
Iraqi General Commision for Tax-Corporate Division, via Iraqi Ministery of Oil	–	–	–	–	–	–	–	–	–	–
Ministry of Finance, General Commission of Taxation	–	–	–	–	–	–	–	–	–	–
Total	**–**	**–**	**–**	**–**	**2,986**	**–**	**–**	**–**	**–**	**2,986**
Iraq (paid in kind (kboe))										
Payments per Project										
GGIP	*259*	–	259	2,416	–	–	–	–	–	2,675
Halfaya	*321*	–	321	–	–	–	–	–	–	321
Total	***580***	**–**	**580**	**2,416**	**–**	**–**	**–**	**–**	**–**	**2,996**
Payments per Government										
Basra Oil Company	–	–	–	–	–	–	–	–	–	–
Iraqi General Commision for Tax-Corporate Division, via Iraqi Ministery of Oil	*259*	–	259	2,416	–	–	–	–	–	2,675
Ministry of Finance, General Commission of Taxation	*321*	–	321	–	–	–	–	–	–	321
Total	***580***	**–**	**580**	**2,416**	**–**	**–**	**–**	**–**	**–**	**2,996**

In application of the regulation imposing a disclosure of the value of the total Payments, the table presented herebelow shows the sum of payments done in cash and in kind valuated as indicated in the footnotes

Iraq (all payments (kusd) - including valuation of in-kind payments)										
Payments per Project										
GGIP	*20,593*[a]	–	20,593	183,322[b]	2,986	–	–	–	–	206,901
Halfaya	*24,697*[c]	–	24,697	–	–	–	–	–	–	24,697
Total	***45,290***	**–**	**45,290**	**183,322**	**2,986**	**–**	**–**	**–**	**–**	**231,598**
Payments per Government										
Basra Oil Company	–	–	–	–	2,986	–	–	–	–	2,986
Iraqi General Commision for Tax-Corporate Division, via Iraqi Ministery of Oil	*20,593*[a]	–	20,593	183,322[b]	–	–	–	–	–	203,915
Ministry of Finance, General Commission of Taxation	*24,697*[c]	–	24,697	–	–	–	–	–	–	24,697
Total	***45,290***	**–**	**45,290**	**183,322**	**2,986**	**–**	**–**	**–**	**–**	**231,598**

(a) Corresponds to the valuation of 259 kboe based on official prices for Income taxes.
(b) Corresponds to the valuation of 2,416 kboe based on official prices for royalties.
(c) Corresponds to the valuation of 321 kboe based on official prices for Income taxes.

Italy (paid in cash (kusd))										
Payments per Project										
Gorgoglione Unified License	*6,971*	*58,643*[a]	65,614	–	1,844	–	–	–	–	67,458
Total	***6,971***	***58,643***	**65,614**	**–**	**1,844**	**–**	**–**	**–**	**–**	**67,458**
Payments per Government										
Regione Basilicata	–	*41,304*[a]	41,304	–	1,245	–	–	–	–	42,549
Agenzia delle Entrate	*6,971*	–	6,971	–	–	–	–	–	–	6,971
Comune Corleto Perticara	–	*3,896*	3,896	–	212	–	–	–	–	4,108
Comune Gorgoglione	–	*599*	599	–	4	–	–	–	–	603
Ministero dell'Economia e delle Finanze	–	–	–	–	383	–	–	–	–	383
Tesoreria dello Stato	–	*12,844*	12,844	–	–	–	–	–	–	12,844
Total	***6,971***	***58,643***	**65,614**	**–**	**1,844**	**–**	**–**	**–**	**–**	**67,458**

(a) Includes payment for the domestic gas supply obligation.

	Income Taxes	*Other Taxes*	Taxes (Total)	Royalties	License fees	License bonuses	Dividends	Infrastructure improvements	Production entitlements	Total of Payments
Kazakhstan (paid in cash (kusd))										
Payments per Project										
Kashagan	–	*63,693*	63,693	–	332	–	–	3,736	–	67,761
Total	**–**	***63,693***	**63,693**	**–**	**332**	**–**	**–**	**3,736**	**–**	**67,761**
Payments per Government										
Atyrau and Mangistau regions c/o North Caspian Operating Company b.v.	–	–	–	–	332	–	–	–	–	332
Atyrau region c/o North Caspian Operating Company b.v.	–	–	–	–	–	–	–	1,574	–	1,574
Mangistau region c/o North Caspian Operating Company b.v.	–	–	–	–	–	–	–	2,162	–	2,162
Ministry of Finance	–	*63,693*	63,693	–	–	–	–	–	–	63,693
Ministry of Energy	–	–	–	–	–	–	–	–	–	–
Total	**–**	***63,693***	**63,693**	**–**	**332**	**–**	**–**	**3,736**	**–**	**67,761**
Kazakhstan (paid in kind (kboe))										
Payments per Project										
Kashagan	–	–	–	–	–	–	–	–	534	534
Total	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**534**	**534**
Payments per Government										
Atyrau and Mangistau regions c/o North Caspian Operating Company b.v.	–	–	–	–	–	–	–	–	–	–
Atyrau region c/o North Caspian Operating Company b.v.	–	–	–	–	–	–	–	–	–	–
Mangistau region c/o North Caspian Operating Company b.v.	–	–	–	–	–	–	–	–	–	–
Ministry of Finance	–	–	–	–	–	–	–	–	–	–
Ministry of Energy	–	–	–	–	–	–	–	–	534	534
Total	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**534**	**534**

In application of the regulation imposing a disclosure of the value of the total Payments, the table presented herebelow shows the sum of payments done in cash and in kind valuated as indicated in the footnotes.

Kazakhstan (all payments (kusd) - including valuation of in-kind payments)										
Payments per Project										
Kashagan	–	*63,693*	63,693	–	332	–	–	3,736	31,751[(a)]	99,512
Total	**–**	***63,693***	**63,693**	**–**	**332**	**–**	**–**	**3,736**	**31,751**	**99,512**
Payments per Government										
Atyrau and Mangistau regions c/o North Caspian Operating Company b.v.	–	–	–	–	332	–	–	–	–	332
Atyrau region c/o North Caspian Operating Company b.v.	–	–	–	–	–	–	–	1,574	–	1,574
Mangistau region c/o North Caspian Operating Company b.v.	–	–	–	–	–	–	–	2,162	–	2,162
Ministry of Finance	–	*63,693*	63,693	–	–	–	–	–	–	63,693
Ministry of Energy	–	–	–	–	–	–	–	–	31,751[(a)]	31,751
Total	**–**	***63,693***	**63,693**	**–**	**332**	**–**	**–**	**3,736**	**31,751**	**99,512**

(a) Corresponds to the valuation of 534 kboe at average net-back prices for production entitlements.

Kenya (paid in cash (kusd))										
Payments per Project										
10BA	–	–	–	–	33	–	–	–	–	33
10BB	–	–	–	–	263	–	–	–	–	263
13T	–	–	–	–	161	–	–	–	–	161
Total	**–**	**–**	**–**	**–**	**457**	**–**	**–**	**–**	**–**	**457**
Payments per Government										
Kenya Ministry of Finance and Economic Planning	–	–	–	–	457	–	–	–	–	457
Total	**–**	**–**	**–**	**–**	**457**	**–**	**–**	**–**	**–**	**457**

	Income Taxes	*Other Taxes*	Taxes (Total)	Royalties	License fees	License bonuses	Dividends	Infrastructure improvements	Production entitlements	Total of Payments
Lebanon (paid in cash (kusd))										
Payments per Project										
Block 9	–	–	–	–	138	–	–	–	–	138
Total	**–**	**–**	**–**	**–**	**138**	**–**	**–**	**–**	**–**	**138**
Payments per Government										
Lebanese Petroleum Administration (LPA)	–	–	–	–	138	–	–	–	–	138
Total	**–**	**–**	**–**	**–**	**138**	**–**	**–**	**–**	**–**	**138**
Libya (paid in cash (kusd))										
Payments per Project										
Areas 15, 16 & 32 (Al Jurf)	–	–	–	–	7,312	–	–	–	–	7,312
Areas 129 & 130	–	–	–	–	5,067	–	–	–	–	5,067
Areas 130 & 131	–	–	–	–	1,627	–	–	–	–	1,627
Waha	–	*1,337,179*	1,337,179	–	82	–	–	1,031	–	1,338,292
Total	**–**	***1,337,179***	**1,337,179**	**–**	**14,088**	**–**	**–**	**1,031**	**–**	**1,352,298**
Payments per Government										
National Oil Corporation	–	–	–	–	14,006	–	–	1,031	–	15,037
Ministry of Finance c/o National Oil Corporation	–	–	–	–	–	–	–	–	–	–
Ministry of Oil and Gas	–	*1,337,179*	1,337,179	–	82	–	–	–	–	1,337,261
Total	**–**	***1,337,179***	**1,337,179**	**–**	**14,088**	**–**	**–**	**1,031**	**–**	**1,352,298**
Libya (paid in kind (kboe))										
Payments per Project										
Areas 15, 16 & 32 (Al Jurf)	*1,460*	*164*	1,624	–	–	–	–	–	1,765	3,389
Areas 129 & 130	*3,198*	*321*	3,519	–	–	–	–	–	10,435	13,954
Areas 130 & 131	*953*	*109*	1,063	–	–	–	–	–	4,122	5,185
Waha	–	–	–	–	–	–	–	–	–	–
Total	***5,612***	***594***	**6,206**	**–**	**–**	**–**	**–**	**–**	**16,322**	**22,528**
Payments per Government										
National Oil Corporation	–	–	–	–	–	–	–	–	16,322	16,322
Ministry of Finance c/o National Oil Corporation	*5,612*	*594*	6,206	–	–	–	–	–	–	6,206
Ministry of Oil and Gas	–	–	–	–	–	–	–	–	–	–
Total	***5,612***	***594***	**6,206**	**–**	**–**	**–**	**–**	**–**	**16,322**	**22,528**

In application of the regulation imposing a disclosure of the value of the total Payments, the table presented herebelow shows the sum of payments done in cash and in kind valuated as indicated in the footnotes.

Libya (all payments (kusd) - including valuation of in-kind payments)										
Payments per Project										
Areas 15, 16 & 32 (Al Jurf)	*117,627*[a]	*13,231*[b]	130,858	–	7,312	–	–	–	142,147[c]	280,317
Areas 129 & 130	*258,500*[d]	*25,908*[e]	284,408	–	5,067	–	–	–	843,449[f]	1,132,924
Areas 130 & 131	*77,267*[g]	*8,865*[h]	86,132	–	1,627	–	–	–	334,131[i]	421,890
Waha	–	*1,337,179*	1,337,179	–	82	–	–	1,031	–	1,338,292
Total	***453,394***	***1,385,183***	**1,838,577**	**–**	**14,088**	**–**	**–**	**1,031**	**1,319,727**	**3,173,423**
Payments per Government										
National Oil Corporation	–	–	–	–	14,006[j]	–	–	1,031	1,319,727[k]	1,334,764
Ministry of Finance c/o National Oil Corporation	*453,394*[l]	*48,004*[m]	501,398	–	–	–	–	–	–	501,398
Ministry of Oil and Gas	–	*1,337,179*	1,337,179	–	82	–	–	–	–	1,337,261
Total	***453,394***	***1,385,183***	**1,838,577**	**–**	**14,088**	**–**	**–**	**1,031**	**1,319,727**	**3,173,423**

(a) Corresponds to the valuation of 1,460 kboe at official selling prices and applying the fiscal terms of the profit sharing agreements.
(b) Corresponds to the valuation of 164 kboe at official selling prices and applying the fiscal terms of the profit sharing agreements.
(c) Corresponds to the valuation of 1,765 kboe at official selling prices and applying the profit sharing agreements, including the share of National Oil Corporation, as partner.
(d) Corresponds to the valuation of 3,198 kboe at official selling prices and applying the fiscal terms of the profit sharing agreements.
(e) Corresponds to the valuation of 321 kboe at official selling prices and applying the fiscal terms of the profit sharing agreements.
(f) Corresponds to the valuation of 10,435 kboe at official selling prices and applying the profit sharing agreements, including the share of National Oil Corporation, as partner.
(g) Corresponds to the valuation of 953 kboe at official selling prices and applying the fiscal terms of the profit sharing agreements.
(h) Corresponds to the valuation of 109 kboe at official selling prices and applying the fiscal terms of the profit sharing agreements.
(i) Corresponds to the valuation of 4,122 kboe at official selling prices and applying the profit sharing agreements, including the share of National Oil Corporation, as partner.
(j) Includes payments for 11.3 MS related to ARO obligations (Areas 15, 16, 32, 129, 130 and 131).
(k) Corresponds to the valuation of 16,322 kboe at official selling prices and applying the profit sharing agreements, including the share of National Oil Corporation, as partner.
(l) Corresponds to the valuation of 5,612 kboe at official selling prices and applying the fiscal terms of the profit sharing agreements.
(m) Corresponds to the valuation of 594 kboe at official selling prices and applying the fiscal terms of the profit sharing agreements.

	Income Taxes	*Other Taxes*	Taxes (Total)	Royalties	License fees	License bonuses	Dividends	Infrastructure improvements	Production entitlements	Total of Payments
Malaysia (paid in cash (kusd))										
Payments per Project										
DW2E	–	–	–	–	3,600	–	–	–	–	3,600
SK310	*1,279*	*69*	1,348	–	9	–	–	–	–	1,357
SK408	*4,771*	*1,015*	5,786	–	137	–	–	–	–	5,923
Malaysia (non-attributable)	*3*	–	3	–	–	–	–	–	–	3
Total	***6,053***	***1,084***	**7,137**	**–**	**3,746**	**–**	**–**	**–**	**–**	**10,883**
Payments per Government										
Ketua Pengarah Hasil Dalam Negeri	*6,053*	–	6,053	–	–	–	–	–	–	6,053
Petronas	–	*1,084*	1,084	–	146	–	–	–	–	1,230
TGS c/o Petronas	–	–	–	–	3,600	–	–	–	–	3,600
Total	***6,053***	***1,084***	**7,137**	**–**	**3,746**	**–**	**–**	**–**	**–**	**10,883**
Malaysia (paid in kind (kboe))										
Payments per Project										
DW2E	–	–	–	–	–	–	–	–	–	–
SK310	–	–	–	13	–	–	–	–	37	50
SK408	–	–	–	123	–	–	–	–	197	320
Malaysia (non-attributable)	–	–	–	–	–	–	–	–	–	–
Total	**–**	**–**	**–**	**137**	**–**	**–**	**–**	**–**	**234**	**370**
Payments per Government										
Ketua Pengarah Hasil Dalam Negeri	–	–	–	–	–	–	–	–	–	–
Petronas	–	–	–	137	–	–	–	–	234	370
TGS c/o Petronas	–	–	–	–	–	–	–	–	–	–
Total	**–**	**–**	**–**	**137**	**–**	**–**	**–**	**–**	**234**	**370**

In application of the regulation imposing a disclosure of the value of the total Payments, the table presented herebelow shows the sum of payments done in cash and in kind valuated as indicated in the footnotes.

Malaysia (all payments (kusd) - including valuation of in-kind payments)										
Payments per Project										
DW2E	–	–	–	–	3,600	–	–	–	–	3,600
SK310	*1,279*	*69*	1,348	342[a]	9	–	–	–	973[b]	2,672
SK408	*4,771*	*1,015*	5,786	3,471[c]	137	–	–	–	5,801[d]	15,195
Malaysia (non-attributable)	*3*	–	3	–	–	–	–	–	–	3
Total	***6,053***	***1,084***	**7,137**	**3,813**	**3,746**	**–**	**–**	**–**	**6,774**	**21,470**
Payments per Government										
Ketua Pengarah Hasil Dalam Negeri	*6,053*	–	6,053	–	–	–	–	–	–	6,053
Petronas	–	*1,084*	1,084	3,813[e]	146	–	–	–	6,774[f]	11,817
TGS c/o Petronas	–	–	–	–	3,600	–	–	–	–	3,600
Total	***6,053***	***1,084***	**7,137**	**3,813**	**3,746**	**–**	**–**	**–**	**6,774**	**21,470**

(a) Corresponds to the valuation of 13 kboe at average contractual price and applying the contractual terms for the royalties.
(b) Corresponds to the valuation of 37 kboe at average contractual price and applying the contractual terms for production entitlements.
(c) Corresponds to the valuation of 123 kboe at average contractual price and applying the contractual terms for the Royalties.
(d) Corresponds to the valuation of 197 kboe at average contractual price and applying the contractual terms for production entitlements.
(e) Corresponds to the valuation of 137 kboe at average contractual price and applying the contractual terms for the Royalties.
(f) Corresponds to the valuation of 234 kboe at average contractual price and applying the contractual terms for production entitlements.

Mexico (paid in cash (kusd))										
Payments per Project										
AS-CS-06 (B33)	–	*301*	301	–	553	–	–	–	–	854
Block 15	–	*251*	251	–	493	–	–	–	–	744
Total	**–**	***552***	**552**	**–**	**1,046**	**–**	**–**	**–**	**–**	**1,598**
Payments per Government										
Servicio de Administracion Tributaria	–	*552*	552	–	–	–	–	–	–	552
Fondo Mexicano del Petroleo	–	–	–	–	1,046	–	–	–	–	1,046
Total	**–**	***552***	**552**	**–**	**1,046**	**–**	**–**	**–**	**–**	**1,598**

Mozambique (paid in cash (kusd))										
Payments per Project										
Area 1 Golfino-Atum	–	–	–	–	–	–	–	3,472	–	3,472
Total	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**3,472**	**–**	**3,472**
Payments per Government										
Ministerio da Economia e Financas	–	–	–	–	–	–	–	3,472	–	3,472
Total	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**3,472**	**–**	**3,472**

	Income Taxes	*Other Taxes*	Taxes (Total)	Royalties	License fees	License bonuses	Dividends	Infrastructure improvements	Production entitlements	Total of Payments
Namibia (paid in cash (kusd))										
Payments per Government										
Block 2912	–	–	–	–	67	–	–	–	–	67
Block 2913B	–	–	–	–	75	–	–	–	–	75
Total	**–**	**–**	**–**	**–**	**142**	**–**	**–**	**–**	**–**	**142**
Payments per Government										
Petrofund	–	–	–	–	142	–	–	–	–	142
Total	**–**	**–**	**–**	**–**	**142**	**–**	**–**	**–**	**–**	**142**
Netherlands (paid in cash (kusd))										
Payments per Project										
Offshore Blocks	–	–	–	–	728	–	–	–	–	728
Non-attributable	*343,231*[a]	–	343,231	–	–	–	–	–	–	343,231
Total	***343,231***	**–**	**343,231**	**–**	***728***	**–**	**–**	**–**	**–**	**343,959**
Payments per Government										
Belastingdienst Nederland	*343,231*[a]	–	343,231	–	728	–	–	–	–	343,959
Total	***343,231***	**–**	**343,231**	**–**	***728***	**–**	**–**	**–**	**–**	**343,959**
Nigeria (paid in cash (kusd))										
Payments per Project										
OML58 (joint-venture with NNPC, operated)	*46,478*	–	46,478	–	–	–	–	–	–	46,478
OML99 (joint-venture with NNPC, operated)	*90,758*	–	90,758	–	–	–	–	–	–	90,758
OML100 (joint-venture with NNPC, operated)	*14,099*	–	14,099	–	–	–	–	–	–	14,099
OML102 (joint-venture with NNPC, operated)	*141,900*	–	141,900	–	–	–	–	–	–	141,900
OML118 (Bonga)	*4,631*	–	4,631	–	220	–	–	3,795	–	8,646
OML138 (Usan)	*2,612*	–	2,612	–	3,846	–	–	3,379	–	9,837
PMLs 2/3/4 & PPL 261 PSA (Akpo & Egina)	*260,348*	*81,993*	342,341	–	2,121	–	–	8,799	–	353,261
Joint-ventures with NNPC, operated - Non-attributable	–	–	–	–	3,351	–	–	12,470	–	15,821
Joint-ventures with NNPC, non operated - Non-attributable	*102,812*	–	102,812	–	4,485	–	–	6,793	–	114,090
Non-attributable	*317,395*	–	317,395	–	8,479	–	–	–	–	325,874
Total	***981,033***	***81,993***	**1,063,026**	**–**	**22,502**	**–**	**–**	**35,236**	**–**	**1,120,764**
Payments per Government										
Federal Inland Revenue Service	*584,986*	–	584,986	–	8,479	–	–	–	–	593,465
Niger Delta Development Commission	–	–	–	–	–	–	–	35,236	–	35,236
Nigerian Maritime Administration & Safety Agency, Federal Government of Nigeria	–	–	–	–	1,254	–	–	–	–	1,254
Nigerian National Petroleum Corporation	–	–	–	–	–	–	–	–	–	–
Nigerian Upstream Petroleum Regulatory Commission	*396,047*	*81,993*	478,040	–	12,769	–	–	–	–	490,809
Nigerian Upstream Petroleum Regulatory Commission c/o Nigerian National Petroleum Corporation Ltd	–	–	–	–	–	–	–	–	–	–
Federal Inland Revenue Service c/o Nigerian National Petroleum Corporation	–	–	–	–	–	–	–	–	–	–
Total	***981,033***	***81,993***	**1,063,026**	**–**	**22,502**	**–**	**–**	**35,236**	**–**	**1,120,764**

(a) Includes 134 M$ of windfall taxes (European Solidarity Contribution).

	Income Taxes	*Other Taxes*	Taxes (Total)	Royalties	License fees	License bonuses	Dividends	Infrastructure improvements	Production entitlements	Total of Payments
Nigeria (paid in kind (kboe))										
Payments per Project										
OML58 (joint-venture with NNPC, operated)	–	–	–	–	–	–	–	–	–	–
OML99 (joint-venture with NNPC, operated)	–	–	–	–	–	–	–	–	–	–
OML100 (joint-venture with NNPC, operated)	–	–	–	–	–	–	–	–	–	–
OML102 (joint-venture with NNPC, operated)	–	–	–	–	–	–	–	–	–	–
OML118 (Bonga)	*958*	*676*	1,634	–	0	–	–	–	997	2,631
OML138 (Usan)	–	*230*	230	–	0	–	–	–	175	405
PMLs 2/3/4 & PPL 261 PSA (Akpo & Egina)	–	–	–	–	–	–	–	–	–	–
Joint-ventures with NNPC, operated - Non-attributable	–	–	–	–	–	–	–	–	–	–
Joint-ventures with NNPC, non operated - Non-attributable	–	–	–	–	–	–	–	–	–	–
Non-attributable	–	–	–	–	–	–	–	–	–	–
Total	***958***	***906***	**1,864**	**–**	**0**	**–**	**–**	**–**	**1,172**	**3,036**
Payments per Government										
Federal Inland Revenue Service	–	–	–	–	–	–	–	–	–	–
Niger Delta Development Commission	–	–	–	–	–	–	–	–	–	–
Nigerian Maritime Administration & Safety Agency, Federal Government of Nigeria	–	–	–	–	–	–	–	–	–	–
Nigerian National Petroleum Corporation	–	–	–	–	–	–	–	–	1,172	1,172
Nigerian Upstream Petroleum Regulatory Commission	–	–	–	–	–	–	–	–	–	–
Nigerian Upstream Petroleum Regulatory Commission c/o Nigerian National Petroleum Corporation Ltd	–	*906*	906	–	0	–	–	–	–	906
Federal Inland Revenue Service c/o Nigerian National Petroleum Corporation	*958*	–	958	–	–	–	–	–	–	958
Total	***958***	***906***	**1,864**	**–**	**0**	**–**	**–**	**–**	**1,172**	**3,036**

	Income Taxes	*Other Taxes*	Taxes (Total)	Royalties	License fees	License bonuses	Dividends	Infrastructure improvements	Production entitlements	Total of Payments

In application of the regulation imposing a disclosure of the value of the total Payments, the table presented herebelow shows the sum of payments done in cash and in kind valuated as indicated in the footnotes.

Nigeria (all payments (kusd) - including valuation of in-kind payments)										
Payments per Project										
OML58 (joint-venture with NNPC, operated)	*46,478*	–	46,478	–	–	–	–	–	–	46,478
OML99 (joint-venture with NNPC, operated)	*90,758*	–	90,758	–	–	–	–	–	–	90,758
OML100 (joint-venture with NNPC, operated)	*14,099*	–	14,099	–	–	–	–	–	–	14,099
OML102 (joint-venture with NNPC, operated)	*141,900*	–	141,900	–	–	–	–	–	–	141,900
OML118 (Bonga)	*82,673*[a]	*55,168*[b]	137,841	–	228[c]	–	–	3,795	81,244[d]	223,108
OML138 (Usan)	*2,612*	*18,436*[e]	21,048	–	3,856[f]	–	–	3,379	13,993[g]	42,276
PMLs 2/3/4 & PPL 261 PSA (Akpo & Egina)	*260,348*	*81,993*	342,341	–	2,121	–	–	8,799	–	353,261
Joint-ventures with NNPC, operated - Non-attributable	–	–	–	–	3,351	–	–	12,470	–	15,821
Joint-ventures with NNPC, non operated - Non-attributable	*102,812*	–	102,812	–	4,485	–	–	6,793	–	114,090
Non-attributable	*317,395*[h]	–	317,395	–	8,479	–	–	–	–	325,874
Total	***1,059,075***	***155,597***	**1,214,672**	**–**	**22,520**	**–**	**–**	**35,236**	**95,237**	**1,367,665**
Payments per Government										
Federal Inland Revenue Service	*584,986*	–	584,986	–	8,479	–	–	–	–	593,465
Niger Delta Development Commission	–	–	–	–	–	–	–	35,236	–	35,236
Nigerian Maritime Administration & Safety Agency, Federal Government of Nigeria	–	–	–	–	1,254	–	–	–	–	1,254
Nigerian National Petroleum Corporation	–	–	–	–	–	–	–	–	95,237[i]	95,237
Nigerian Upstream Petroleum Regulatory Commission	*396,047*	*81,993*	478,040	–	12,769	–	–	–	–	490,809
Nigerian Upstream Petroleum Regulatory Commission c/o Nigerian National Petroleum Corporation Ltd	–	*73,604*[j]	73,604	–	18[k]	–	–	–	–	73,622
Federal Inland Revenue Service c/o Nigerian National Petroleum Corporation	*78,042*[l]	–	78,042	–	–	–	–	–	–	78,042
Total	***1,059,075***	***155,597***	**1,214,672**	**–**	**22,520**	**–**	**–**	**35,236**	**95,237**	**1,367,665**

(a) Includes the valuation for 78,042 kS of 958 kboe at average entitlement price and applying the fiscal terms of the profit sharing agreements.
(b) Corresponds to the valuation for 676 kboe at average entitlement price and applying the terms of the profit sharing agreements.
(c) Includes the valuation for 8 k$ of 104 boe at average entitlement price of the period of barrels allocation and applying the terms of the profits sharing agreements.
(d) Corresponds to the valuation for 997 kboe at average entitlement price and applying the terms of the profit sharing agreements.
(e) Corresponds to the valuation for 230 kboe at average entitlement price and applying the terms of the profit sharing agreements.
(f) Includes the valuation for 10 k$ of 127 boe at average entitlement price of the period of barrels allocation and applying the terms of the profits sharing agreements.
(g) Corresponds to the valuation for 175 kboe at average entitlement price and applying the terms of the profit sharing agreements.
(h) This amount includes the tax implications of the provisions of the Modified Carry Agreement (MCA). Under the MCA, TotalEnergies EP Nigeria is entitled to recover 85% of the Carry Capital Cost through claims of capital allowance, described in the MCA as "Carry Tax Relief". The balance of 15% is to be recovered from NNPC's share of crude oil produced.
(i) Corresponds to the valuation for 1,172 kboe at average entitlement price and applying the terms of the profit sharing agreements.
(j) Corresponds to the valuation for 906 kboe at average entitlement price and applying the fiscal terms of the profit sharing agreements.
(k) Corresponds to the valuation for 231 boe at average entitlement price of the period of barrels allocation and applying the terms of the profits sharing agreements.
(l) Corresponds to the valuation for 958 kboe at average entitlement price and applying the fiscal terms of the profit sharing agreements.

	Income Taxes	*Other Taxes*	Taxes (Total)	Royalties	License fees	License bonuses	Dividends	Infrastructure improvements	Production entitlements	Total of Payments
Norway (paid in cash (kusd))										
Payments per Project										
Åsgard area	–	*6,291*	6,291	–	467	–	–	–	–	6,758
Ekofisk area	–	*24,900*	24,900	–	1,504	–	–	–	–	26,404
Heimdal area	–	*292*	292	–	202	–	–	–	–	494
Johan Sverdrup	–	*61*	61	–	16	–	–	–	–	77
Oseberg area	–	*11,353*	11,353	–	662	–	–	–	–	12,015
PL018C	–	–	–	–	34	–	–	–	–	34
Snøhvit area	–	*12,828*	12,828	–	274	–	–	–	–	13,102
Troll area	–	*1,738*	1,738	–	104	–	–	–	–	1,842
Non-attributable	*3,547,847*	–	3,547,847	–	–	–	–	–	–	3,547,847
Total	***3,547,847***	***57,463***	**3,605,310**	–	**3,263**	–	–	–	–	**3,608,573**
Payments per Government										
Norwegian Tax Administration	*3,547,847*	*57,463*	3,605,310	–	–	–	–	–	–	3,605,310
Norwegian Petroleum Directorate	–	–	–	–	3,263	–	–	–	–	3,263
Total	***3,547,847***	***57,463***	**3,605,310**	–	**3,263**	–	–	–	–	**3,608,573**
Oman (paid in cash (kusd))										
Payments per Project										
Block 6	–	*471,930*	471,930	–	–	–	–	–	–	471,930
Block 10	*7,411*	–	7,411	–	–	–	–	–	–	7,411
Block 12	–	–	–	–	215	–	–	–	–	215
Total	***7,411***	***471,930***	**479,341**	–	**215**	–	–	–	–	**479,556**
Payments per Government										
Oman Ministry of Finance	–	*471,930*	471,930	–	125	–	–	–	–	472,055
Oman Tax Authority	*7,411*	–	7,411	–	–	–	–	–	–	7,411
Ministry of Energy and Minerals	–	–	–	–	90	–	–	–	–	90
Total	***7,411***	***471,930***	**479,341**	–	**215**	–	–	–	–	**479,556**
Oman (paid in kind (kboe))										
Payments per Project										
Block 6	–	–	–	–	–	–	–	–	–	–
Block 10	–	–	–	1,063	–	–	–	–	–	1,063
Block 12	–	–	–	–	–	–	–	–	–	–
Total	–	–	–	**1,063**	–	–	–	–	–	**1,063**
Payments per Government										
Oman Ministry of Finance	–	–	–	–	–	–	–	–	–	–
Oman Tax Authority	–	–	–	–	–	–	–	–	–	–
Ministry of Energy and Minerals	–	–	–	1,063	–	–	–	–	–	1,063
Total	–	–	–	**1,063**	–	–	–	–	–	**1,063**

In application of the regulation imposing a disclosure of the value of the total Payments, the table presented herebelow shows the sum of payments done in cash and in kind valuated as indicated in the footnotes.

	Income Taxes	*Other Taxes*	Taxes (Total)	Royalties	License fees	License bonuses	Dividends	Infrastructure improvements	Production entitlements	Total of Payments
Oman (all payments (kusd) - including valuation of in-kind payments)										
Payments per Project										
Block 6	–	*471,930*	471,930	–	–	–	–	–	–	471,930
Block 10[a]	*7,411*	–	7,411	54,621[b]	–	–	–	–	–	62,032
Block 12	–	–	–	–	215	–	–	–	–	215
Total	***7,411***	***471,930***	**479,341**	**54,621**	**215**	–	–	–	–	**534,177**
Payments per Government										
Oman Ministry of Finance	–	*471,930*	471,930	–	125	–	–	–	–	472,055
Oman Tax Authority	*7,411*	–	7,411	–	–	–	–	–	–	7,411
Ministry of Energy and Minerals	–	–	–	54,621[b]	90	–	–	–	–	54,711
Total	***7,411***	***471,930***	**479,341**	**54,621**	**215**	–	–	–	–	**534,177**

(a) Payments related to the period from January to April 2024 due to treatment of Marsa LNG as equity affiliate as from May 2024.
(b) Corresponds to the valuation for 1,063 kboe for royalties at the official selling price for condensates and at average price for gas.

	Income Taxes	*Other Taxes*	Taxes (Total)	Royalties	License fees	License bonuses	Dividends	Infrastructure improvements	Production entitlements	Total of Payments
Papua New Guinea (paid in cash (kusd))										
Payments per Project										
PPL-576	–	–	–	–	17	–	–	–	–	17
PRL-15	–	–	–	–	177	–	–	–	–	177
Total	**–**	**–**	**–**	**–**	**194**	**–**	**–**	**–**	**–**	**194**
Payments per Government										
Conservation & Environment Protection Authority	–	–	–	–	194	–	–	–	–	194
Total	**–**	**–**	**–**	**–**	**194**	**–**	**–**	**–**	**–**	**194**
Qatar (paid in cash (kusd))										
Payments per Project										
Al Khalij	*81,092*	*27,855*	108,947	–	–	–	–	–	–	108,947
Dolphin	–	–	–	–	–	–	–	–	–	–
Total	***81,092***	***27,855***	**108,947**	**–**	**–**	**–**	**–**	**–**	**–**	**108,947**
Payments per Government										
QatarEnergy	–	–	–	–	–	–	–	–	–	–
Qatar Ministry of Finance	*81,092*	*27,855*	108,947	–	–	–	–	–	–	108,947
Total	***81,092***	***27,855***	**108,947**	**–**	**–**	**–**	**–**	**–**	**–**	**108,947**
Qatar (paid in kind (kboe))										
Payments per Project										
Al Khalij	–	–	–	–	–	–	–	–	–	–
Dolphin	*3,318*	–	3,318	–	–	–	–	–	30,350	33,669
Total	***3,318***	**–**	**3,318**	**–**	**–**	**–**	**–**	**–**	**30,350**	**33,669**
Payments per Government										
QatarEnergy	–	–	–	–	–	–	–	–	30,350	30,350
Qatar Ministry of Finance	*3,318*	–	3,318	–	–	–	–	–	–	3,318
Total	***3,318***	**–**	**3,318**	**–**	**–**	**–**	**–**	**–**	**30,350**	**33,669**

In application of the regulation imposing a disclosure of the value of the total Payments, the table presented herebelow shows the sum of payments done in cash and in kind valuated as indicated in the footnotes.

	Income Taxes	*Other Taxes*	Taxes (Total)	Royalties	License fees	License bonuses	Dividends	Infrastructure improvements	Production entitlements	Total of Payments
Qatar (all payments (kusd) - including valuation of in-kind payments)										
Payments per Project										
Al Khalij	*81,092*	*27,855*	108,947	–	–	–	–	–	–	108,947
Dolphin	*78,264*[(a)]	–	78,264	–	–	–	–	–	715,927[(b)]	794,191
Total	***159,356***	***27,855***	**187,211**	**–**	**–**	**–**	**–**	**–**	**715,927**	**903,138**
Payments per Government										
QatarEnergy	–	–	–	–	–	–	–	–	715,927[(b)]	715,927
Qatar Ministry of Finance	*159,356*[(c)]	*27,855*	187,211	–	–	–	–	–	–	187,211
Total	***159,356***	***27,855***	**187,211**	**–**	**–**	**–**	**–**	**–**	**715,927**	**903,138**

(a) Corresponds to the valuation of 3,318 kboe based on the average price of production entitlements and as per the fiscal terms of the profit sharing agreements.
(b) Corresponds to the valuation of 30,350 kboe based on the average price of production entitlements.
(c) Includes the valuation for 78,264 kS of 3,318 kboe based on the average price of production entitlements and as per the fiscal terms of the profit sharing agreements.

	Income Taxes	*Other Taxes*	Taxes (Total)	Royalties	License fees	License bonuses	Dividends	Infrastructure improvements	Production entitlements	Total of Payments
Republic of the Congo (paid in cash (kusd))										
Payments per Project										
CPP Andromède (MTPS)	–	–	–	–	260	–	–	–	–	260
CPP Cassiopée (MTPS)	–	–	–	–	142	–	–	–	–	142
CPP Haute Mer - Zone A	–	*18,459*	18,459	–	1,386	–	–	–	–	19,845
CPP Haute Mer - Zone B	–	*2,286*	2,286	–	486	–	–	–	–	2,772
CPP Haute Mer - Zone D	–	–	–	–	14,458	–	–	808	–	15,266
CPP Persée (MTPS)	–	–	–	–	51	–	–	–	–	51
CPP Pointe Noire Grands Fonds (PNGF)	–	–	–	–	1,261	–	–	–	–	1,261
Lianzi	*346*	–	346	–	–	–	–	–	–	346
Marine XX	–	–	–	–	311	–	–	–	–	311
Pegase Nord (ex MTPS)	–	–	–	–	181	–	–	–	–	181
Total	***346***	***20,745***	**21,091**	**–**	**18,536**	**–**	**–**	**808**	**–**	**40,435**
Payments per Government										
Ministère des hydrocarbures	–	–	–	–	968	–	–	808	–	1,776
Trésor Public	–	*20,745*	20,745	–	17,568	–	–	–	–	38,313
Société Nationale des Pétroles Congolais	*346*	–	346	–	–	–	–	–	–	346
Total	***346***	***20,745***	**21,091**	**–**	**18,536**	**–**	**–**	**808**	**–**	**40,435**

	Income Taxes	*Other Taxes*	Taxes (Total)	Royalties	License fees	License bonuses	Dividends	Infrastructure improvements	Production entitlements	Total of Payments
Republic of the Congo (paid in kind (kboe))										
Payments per Project										
CPP Andromède (MTPS)	–	–	–	–	–	–	–	–	–	–
CPP Cassiopée (MTPS)	–	–	–	–	–	–	–	–	–	–
CPP Haute Mer - Zone A	*222*	–	222	–	–	–	–	–	–	222
CPP Haute Mer - Zone B	*86*	–	86	–	–	–	–	–	–	86
CPP Haute Mer - Zone D	*885*	*2,527*	3,412	–	–	–	–	–	–	3,412
CPP Persée (MTPS)	–	–	–	–	–	–	–	–	–	–
CPP Pointe Noire Grands Fonds (PNGF)	*438*	*156*	595	–	–	–	–	–	–	595
Lianzi	–	–	–	–	–	–	–	–	6	6
Marine XX	–	–	–	–	–	–	–	–	–	–
Pegase Nord (ex MTPS)	–	–	–	–	–	–	–	–	–	–
Total	***1,631***	***2,684***	**4,314**	–	–	–	–	–	**6**	**4,320**
Payments per Government										
Ministère des hydrocarbures	*1,631*	*2,684*	4,314	–	–	–	–	–	–	4,314
Trésor Public	–	–	–	–	–	–	–	–	–	–
Société Nationale des Pétroles Congolais	–	–	–	–	–	–	–	–	6	6
Total	***1,631***	***2,684***	**4,314**	–	–	–	–	–	**6**	**4,320**

In application of the regulation imposing a disclosure of the value of the total Payments, the table presented herebelow shows the sum of payments done in cash and in kind valuated as indicated in the footnotes.

Republic of the Congo (all payments (kusd) - including valuation of in-kind payments)										
Payments per Project										
CPP Andromède (MTPS)	–	–	–	–	260	–	–	–	–	260
CPP Cassiopée (MTPS)	–	–	–	–	142	–	–	–	–	142
CPP Haute Mer - Zone A	*17,070*[(a)]	*18,459*	35,529	–	1,386	–	–	–	–	36,915
CPP Haute Mer - Zone B	*6,780*[(b)]	*2,286*	9,066	–	486	–	–	–	–	9,552
CPP Haute Mer - Zone D	*68,794*[(c)]	*196,556*[(d)]	265,350	–	14,458	–	–	808	–	280,616
CPP Persée (MTPS)	–	–	–	–	51	–	–	–	–	51
CPP Pointe Noire Grands Fonds (PNGF)	*33,503*[(e)]	*11,942*[(f)]	45,445	–	1,261	–	–	–	–	46,706
Lianzi	*346*	–	346	–	–	–	–	–	477[(g)]	823
Marine XX	–	–	–	–	311	–	–	–	–	311
Pegase Nord (ex MTPS)	–	–	–	–	181	–	–	–	–	181
Total	***126,493***	***229,243***	**355,736**	–	**18,536**	–	–	**808**	**477**	**375,557**
Payments per Government										
Ministère des hydrocarbures	*126,147*[(h)]	*208,498*[(i)]	334,645	–	968	–	–	808	–	336,421
Trésor Public	–	*20,745*	20,745	–	17,568	–	–	–	–	38,313
Société Nationale des Pétroles Congolais	*346*	–	346	–	–	–	–	–	477[(g)]	823
Total	***126,493***	***229,243***	**355,736**	–	**18,536**	–	–	**808**	**477**	**375,557**

(a) Corresponds to the valuation of 222 kboe at official fiscal prices and applying the fiscal terms of the profit sharing agreements.
(b) Corresponds to the valuation of 86 kboe at official fiscal prices and applying the fiscal terms of the profit sharing agreements.
(c) Corresponds to the valuation of 885 kboe at official fiscal prices and applying the fiscal terms of the profit sharing agreements.
(d) Corresponds to the valuation of 2,527 kboe at official fiscal prices and applying the fiscal terms of the profit sharing agreements.
(e) Corresponds to the valuation of 438 kboe at official fiscal prices and applying the fiscal terms of the profit sharing agreements.
(f) Corresponds to the valuation of 156 kboe at official fiscal prices and applying the fiscal terms of the profit sharing agreements.
(g) Corresponds to the valuation of 6 kboe at official fiscal prices and applying the fiscal terms of the profit sharing agreements.
(h) Corresponds to the valuation of 1,631 kboe at official fiscal prices and applying the fiscal terms of the profit sharing agreements.
(i) Corresponds to the valuation of 2,684 kboe at official fiscal prices and applying the fiscal terms of the profit sharing agreements.

São Tomé and Principe (paid in cash (kusd))										
Payments per Project										
Block 1	–	–	–	–	2,161	–	–	–	–	2,161
Block 2	–	–	–	–	–	2,500	–	–	–	2,500
Total	–	–	–	–	**2,161**	**2,500**	–	–	–	**4,661**
Payments per Government										
Agenc. Nac. Petroleo de Sao Tome e Principe c/o Alliance Française	–	–	–	–	1,742	–	–	–	–	1,742
Agenc. Nac. Petroleo de Sao Tome e Principe c/o Universidade de STP	–	–	–	–	419	2,500	–	–	–	2,919
Total	–	–	–	–	**2,161**	**2,500**	–	–	–	**4,661**

	Income Taxes	*Other Taxes*	Taxes (Total)	Royalties	License fees	License bonuses	Dividends	Infrastructure improvements	Production entitlements	Total of Payments
Senegal (paid in cash (kusd))										
Payments per Project										
ROP	–	–	–	–	2,304	–	–	–	–	2,304
UDO	–	–	–	–	273	–	–	–	–	273
Total	**–**	**–**	**–**	**–**	**2,577**	**–**	**–**	**–**	**–**	**2,577**
Payments per Government										
Société des Pétroles du Sénégal	–	–	–	–	2,577	–	–	–	–	2,577
Total	**–**	**–**	**–**	**–**	**2,577**	**–**	**–**	**–**	**–**	**2,577**
Suriname (paid in cash (kusd))										
Payments per Project										
Block 6	–	–	–	–	81	–	–	–	–	81
Block 8	–	–	–	–	83	–	–	–	–	83
Block 58	–	–	–	–	57	–	–	–	–	57
Block 64	–	–	–	–	6	–	–	–	–	6
Total	**–**	**–**	**–**	**–**	**227**	**–**	**–**	**–**	**–**	**227**
Payments per Government										
Staatsolie-Various associations	–	–	–	–	227	–	–	–	–	227
Total	**–**	**–**	**–**	**–**	**227**	**–**	**–**	**–**	**–**	**227**
Thailand (paid in cash (kusd))										
Payments per Project										
Bongkot	*22,532*	–	22,532	–	–	–	–	–	–	22,532
G12/48	*1,926*	*393*	2,319	–	–	–	–	–	–	2,319
Total	***24,458***	***393***	**24,851**	**–**	**–**	**–**	**–**	**–**	**–**	**24,851**
Payments per Government										
Revenue Department	*24,458*	–	24,458	–	–	–	–	–	–	24,458
Department of Mineral Fuels, Ministry Of Energy	–	*393*	393	–	–	–	–	–	–	393
Total	***24,458***	***393***	**24,851**	**–**	**–**	**–**	**–**	**–**	**–**	**24,851**
Uganda (paid in cash (kusd))										
Payments per Project										
Block CA-1	–	–	–	–	2,264	–	–	–	–	2,264
Block CA-3A	–	–	–	–	495	–	–	–	–	495
Block LA-2	–	–	–	–	334	–	–	–	–	334
Total	**–**	**–**	**–**	**–**	**3,093**	**–**	**–**	**–**	**–**	**3,093**
Payments per Government										
Ministry of Energy and Mineral Development	–	–	–	–	1,169	–	–	–	–	1,169
Ministry of Water and Environment	–	–	–	–	373	–	–	–	–	373
Ministry of Wildlife, Tourism and Antiquities, UWA	–	–	–	–	1,551	–	–	–	–	1,551
Total	**–**	**–**	**–**	**–**	**3,093**	**–**	**–**	**–**	**–**	**3,093**

	Income Taxes	Other Taxes	Taxes (Total)	Royalties	License fees	License bonuses	Dividends	Infrastructure improvements	Production entitlements	Total of Payments
United Arab Emirates (paid in cash (kusd))										
Payments per Project										
ADNOC Gas Processing	–	*307,646*	307,646	–	2,344	–	–	–	–	309,990
ADNOC Onshore	–	*5,035,883*	5,035,883	–	5,871	–	–	–	–	5,041,754
Lower Zakum	–	*446,413*	446,413	–	537	–	–	–	–	446,950
Umm Lulu & SARB	–	*1,028,657*	1,028,657	–	1,075	–	–	–	–	1,029,732
Umm Shaif Nasr	–	*1,645,414*	1,645,414	–	2,149	–	–	–	–	1,647,563
Total	**–**	***8,464,013***	**8,464,013**	**–**	**11,976**	**–**	**–**	**–**	**–**	**8,475,989**
Payments per Government										
Abu Dhabi Fiscal Authorities	–	*8,228,018*	8,228,018	–	1,075	–	–	–	–	8,229,093
Abu Dhabi National Oil Company	–	*235,995*	235,995	–	10,901	–	–	–	–	246,896
Total	**–**	***8,464,013***	**8,464,013**	**–**	**11,976**	**–**	**–**	**–**	**–**	**8,475,989**

	Income Taxes	Other Taxes	Taxes (Total)	Royalties	License fees	License bonuses	Dividends	Infrastructure improvements	Production entitlements	Total of Payments
United Kingdom (paid in cash (kusd))										
Payments per Project										
Central Graben Area	–	–	–	–	512	–	–	–	–	512
Culzean	–	–	–	–	113	–	–	–	–	113
Eastern North Sea	–	–	–	–	1,143	–	–	–	–	1,143
Greater Laggan Area	–	–	–	–	1,218	–	–	–	–	1,218
Markham Area	–	–	–	–	102	–	–	–	–	102
Northern North Sea	–	–	–	–	2,860	–	–	–	–	2,860
Non-attributable	*1,293,637*[a]	–	1,293,637	–	132	–	–	–	–	1,293,769
Total	***1,293,637***	**–**	**1,293,637**	**–**	**6,080**	**–**	**–**	**–**	**–**	**1,299,717**
Payments per Government										
HM Revenue & Customs	*1,293,637*[a]	–	1,293,637	–	–	–	–	–	–	1,293,637
Crown Estate	–	–	–	–	132	–	–	–	–	132
North Sea Transition Authority	–	–	–	–	5,948	–	–	–	–	5,948
Total	***1,293,637***	**–**	**1,293,637**	**–**	**6,080**	**–**	**–**	**–**	**–**	**1,299,717**

(a) Includes 599 M$ of windfall taxes (Energy Profit Levy).

	Income Taxes	*Other Taxes*	Taxes (Total)	Royalties	License fees	License bonuses	Dividends	Infrastructure improvements	Production entitlements	Total of Payments
United States (paid in cash (kusd))										
Payments per Project										
Barnett Shale	–	*18,042*	18,042	10,295	–	–	–	–	–	28,337
Gulf of Mexico	–	–	–	–	645	–	–	–	–	645
Jack	–	–	–	22,870	–	–	–	–	–	22,870
Tahiti	–	–	–	34,925	–	–	–	–	–	34,925
Total	**–**	***18,042***	**18,042**	**68,090**	**645**	**–**	**–**	**–**	**–**	**86,777**
Payments per Government										
Dallas County Tax Assessor	–	*247*	247	–	–	–	–	–	–	247
Office of Natural Resources Revenue	–	–	–	57,795	645	–	–	–	–	58,440
Johnson County Tax Assessor	–	*2,163*	2,163	–	–	–	–	–	–	2,163
Tarrant County Tax Assessor	–	*13,068*	13,068	–	–	–	–	–	–	13,068
Texas State Comptroller's Office	–	*2,460*	2,460	–	–	–	–	–	–	2,460
City of Fort Worth	–	–	–	2,822	–	–	–	–	–	2,822
Dallas / Fort Worth International Airport Board	–	–	–	2,385	–	–	–	–	–	2,385
City of Arlington	–	–	–	1,414	–	–	–	–	–	1,414
Tarrant Regional Water District	–	–	–	441	–	–	–	–	–	441
State of Texas	–	–	–	357	–	–	–	–	–	357
City of Richland Hills	–	–	–	107	–	–	–	–	–	107
City of North Richland Hills	–	–	–	307	–	–	–	–	–	307
Fort Worth Independent School District	–	–	–	265	–	–	–	–	–	265
Burleson Independent School District	–	–	–	143	–	–	–	–	–	143
Arlington Independent School District	–	–	–	314	–	–	–	–	–	314
Birdville Independent School District	–	–	–	556	–	–	–	–	–	556
Tarrant County College	–	–	–	158	–	–	–	–	–	158
City of Grand Prairie	–	–	–	143	–	–	–	–	–	143
Kennedale Independent School District	–	–	–	108	–	–	–	–	–	108
Grapevine-Colleyville Tax Office	–	*104*	104	–	–	–	–	–	–	104
City of Cleburne	–	–	–	131	–	–	–	–	–	131
City of Burleson	–	–	–	150	–	–	–	–	–	150
Mansfield Independent School District	–	–	–	358	–	–	–	–	–	358
White Settlement Independent School District	–	–	–	136	–	–	–	–	–	136
Total	**–**	***18,042***	**18,042**	**68,090**	**645**	**–**	**–**	**–**	**–**	**86,777**

9.4 Reporting of payments to governments for purchases of oil, gas and minerals (EITI reporting)

PURPOSE OF THE REPORTING

In September 2020, the Extractive Industries Transparency Initiative, or EITI, published its "Reporting Guidelines for Companies Buying Oil, Gas and Minerals from Governments." Those Guidelines are intended for companies that purchase oil, gas and/or minerals from governments, to guide them for the disclosure of payments made to governments. They aim to ensure the consistent disclosure of payments made to the state or state-owned enterprises (SOEs)[1] where oil, gas or minerals are being sold on behalf of the state, where EITI requirements are applicable and relevant, or where there is commitment to transparency in commodity sales.

These reporting guidelines were developed by the EITI Working Group on Transparency in Commodity Trading, and documented by the discussions at the OECD Thematic Dialogue on Commodity Trading Transparency. They are part of the implementation of Requirement 4.2 of the applicable EITI Standard, which aims to ensure transparency in how the state is selling oil, gas and minerals by requiring disclosures by SOEs and/or other relevant government agencies concerning the sale of the state's share of production or other revenues collected in kind. Correspondingly, the Standard encourages companies buying oil, gas and/or mineral resources from the state or SOEs to disclose information regarding the volumes received from the state or SOE and payments made for the purchase of oil, gas and mineral resources.

Companies that purchase these commodities disclose this data on a voluntary basis. The Guidelines aim to identify:

1. Who is buying the product.
2. Who is selling the product.
3. What product is being purchased.
4. What the buyer pays to the seller for the product.

DEFINITIONS

Applicable purchases: under the Guidelines, purchases of oil, petroleum products, metals and minerals should be reported. Oil and petroleum products may be categorized as "crude oil," "refined products" or "natural gas." For this 2024 reporting, TotalEnergies is disclosing its purchases of oil and petroleum products made during fiscal year 2024 by TotalEnergies SE's fully consolidated companies.

Selling entities and purchases to be covered: EITI recommends that the disclosures cover:

- purchases of the state's share of production and other in-kind revenues from EITI countries where the selling entity is a government agency or SOE or a third party appointed to sell on their behalf (i.e., where EITI Requirement 4.2 is applicable),
- purchases from SOEs in non-EITI countries that have explicitly or publicly stated their support to the initiative.

REPORTING PRINCIPLES

TotalEnergies reporting follows the EITI recommendations mentioned hereabove.

From the reporting models suggested by EITI regarding the level of disaggregation, TotalEnergies has chosen model 1, in which disclosures of both volumes and values (amounts paid) are aggregated by individual seller (where the seller is any company that is wholly or majority owned by the state) for purchases of commodities delivered in 2024.

TotalEnergies follows the EITI recommendation with regards to obtaining the prior consent of the concerned countries before the publication of the procurement data concerning them. Therefore, TotalEnergies discloses under the category "Other Countries", aggregate data on its purchases from (i) SOEs in EITI countries that have not given such consent or to which Requirement 4.2 is not applicable by virtue of the systematic transparency implemented by their governments (Norway) and (ii) in non-EITI Countries, whether those countries have supported the transparency initiative or not (Abu Dhabi, Algeria, Angola, Bahrain, Belgium, Chile, China, Côte d'Ivoire, Denmark, Egypt, France, Hong Kong, India, Jamaica, Kuwait, Libya, Malaysia, Oman, Qatar, Saudi Arabia, Singapore, South Korea, Taiwan, Turkey, United Arab Emirates, Vietnam).

(1) For the purpose of EITI implementation, a "state-owned enterprise (SOE) is a wholly or majority government-owned company that is engaged in extractives activities on behalf of the government." EITI Requirement 2.6.a.i.

DISCLOSURE OF VOLUMES AND VALUE BY INDIVIDUAL SELLER

Crude oil - Refined products

1. Who is selling the product			2. Who is buying the product		3. What product is being bought		4. What does the buyer pay to the seller for the product
Core Information		Additional Information	Core Information	Additional Information	Core Information		Core Information
Name of Country of Seller of Government Share of Production	Name of SOE or seller of the state share of production	Counterparty state owned %	Buying Entity	Beneficial Ownership	Product Type	Volumes Purchased (barrel)	Amounts paid (kUSD)
Iraq	SOMO	100	TOTSA TotalEnergies Trading SA	TotalEnergies SE	Crude oil	2,027,571	156,504
Mexico	PMI Comercio Internacional SA de CV	100	Atlantic Trading & Marketing Inc	TotalEnergies SE	Crude oil	3,042,102	203,583
Colombia	Ecopetrol	100	Atlantic Trading & Marketing Inc	TotalEnergies SE	Crude oil	487,449	34,426
Other Countries			TOTSA TotalEnergies Trading SA	TotalEnergies SE	Crude oil	66,387,648	5,381,451
Other Countries			TotalEnergies Trading Asia Pte Ltd	TotalEnergies SE	Crude oil	29,560,141	2,366,124
Colombia	Refineria de Cartagena	100	Atlantic Trading & Marketing Inc	TotalEnergies SE	Refined products	694,022	65,375
Germany	EBV	100	TOTSA TotalEnergies Trading SA	TotalEnergies SE	Refined products	314,699	31,081
Other Countries			TOTSA TotalEnergies Trading SA	TotalEnergies SE	Refined products	107,978,063	9,828,438
Other Countries			TotalEnergies Trading Asia Pte Ltd	TotalEnergies SE	Refined products	24,973,252	2,251,351
Other Countries			Attlantic Trading & Marketing Inc	TotalEnergies SE	Refined products	396,957	39,133

Natural Gas - LNG - Sulphur - Petcoke

1. Who is selling the product			2. Who is buying the product		3. What product is being bought			4. What does the buyer pay to the seller for the product
Core Information		Additional Information	Core Information	Additional Information	Core Information			Core Information
Name of Country of Seller of Government Share of Production	Name of SOE or seller of the state share of production	Counterparty state owned %	Buying Entity	Beneficial Ownership	Product Type	Volumes Purchased (Mbtu)	Volumes Purchased (ton)	Amounts paid (kUSD)
Germany	Uniper Global Commodities SE	100	TotalEnergies Gas & Power Limited	TotalEnergies SE	LNG	20,149,000		209,808
Germany	SEFE Marketing & Trading Ltd	100	TotalEnergies Gas & Power Limited	TotalEnergies SE	LNG	785,000		6,852
Germany	Uniper Global Commodities SE	100	TotalEnergies Gas & Power Limited	TotalEnergies SE	Natural gas	29,955,000		320,908
Germany	SEFE Marketing & Trading Ltd	100	TotalEnergies Gas & Power Limited	TotalEnergies SE	Natural gas	152,000		1,908
Germany	EWE VERTRIEB GmbH	74	TotalEnergies Gas & Power Limited	TotalEnergies SE	Natural gas	66,000		867
Germany	Stadtwerke Bietigheim-Bissingen GmbH	100	TotalEnergies Gas & Power Limited	TotalEnergies SE	Natural Gas	35,000		447
Indonesia	PT Pertamina (Persero)	100	TotalEnergies Gas & Power Asia Pte Ltd	TotalEnergies SE	LNG	26,125,000		373,174
Other Countries			TotalEnergies Gas & Power Limited	TotalEnergies SE	LNG	249,660,000		3,077,429
Other Countries			TotalEnergies Gas & Power Limited	TotalEnergies SE	Natural gas	20,867,000		219,251
Other Countries			TotalEnergies Gas & Power Limited	TotalEnergies SE	Petcoke		1,043,000	71,254
Other Countries			TotalEnergies Gas & Power Limited	TotalEnergies SE	Sulphur		38,000	3,465
Other Countries			TotalEnergies Gas & Power Asia Pte Ltd	TotalEnergies SE	LNG	87,251,000		1,227,393
Other Countries			TotalEnergies Gas & Power Asia Pte Ltd	TotalEnergies SE	Sulphur		11,000	1,891

LPG

1. Who is selling the product		2. Who is buying the product		3. What product is being bought			4. What does the buyer pay to the seller for the product
Core Information	Additional Information	Core Information	Additional Information	Core Information			Core Information
Name of Country of Seller of Government Share of Production	Counterparty state owned %	Buying Entity	Beneficial Ownership	Product Type	Volumes Purchased (barrel)		Amounts paid (kUSD)
Other Countries		TOTSA TotalEnergies Trading SA	TotalEnergies SE	LPG	4,899,314		243,076
Other Countries		TotalEnergies Trading Asia Pte Ltd	TotalEnergies SE	LPG	1,106,971		56,886

10 Statutory financial statements of TotalEnergies SE

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10.1 Statutory auditors' report on the financial statements

This is a translation into English of the statutory auditors' report on the financial statements of TotalEnergies SE issued in French and it is provided solely for the convenience of English-speaking users. This statutory auditors' report includes information required by European regulations and French law, such as information about the appointment of the statutory auditors or verification of the management report and other documents provided to the shareholders.

This report should be read in conjunction with, and construed in accordance with, French law and professional auditing standards applicable in France.

To the Annual General Meeting of TotalEnergies SE,

OPINION

In compliance with the engagement entrusted to us by your Annual General Meeting, we have audited the accompanying financial statements of TotalEnergies SE (hereafter the "Company") for the year ended December 31, 2024.

In our opinion, the financial statements give a true and fair view of the assets and liabilities and of the financial position of the Company as at December 31, 2024 and of the results of its operations for the year then ended in accordance with French accounting principles.

The audit opinion expressed above is consistent with our report to the Audit Committee.

BASIS FOR OPINION

Audit Framework

We conducted our audit in accordance with professional standards applicable in France. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Our responsibilities under those standards are further described in the Statutory Auditors' Responsibilities for the Audit of the Financial Statements section of our report.

Independence

We conducted our audit engagement in compliance with the independence requirements of the French Commercial Code *(Code de commerce)* and the French Code of Ethics for Statutory Auditors *(Code de déontologie de la profession de commissaire aux comptes)* for the period from January 1, 2024 to the date of our report, and specifically we did not provide any prohibited non-audit services referred to in Article 5(1) of Regulation (EU) No. 537/2014.

JUSTIFICATION OF ASSESSMENTS – KEY AUDIT MATTERS

In accordance with the requirements of Articles L. 821-53 and R. 821-180 of the French Commercial Code (*Code de commerce*) relating to the justification of our assessments, we inform you of the key audit matters relating to risks of material misstatement that, in our professional judgment, were of most significance in our audit of the financial statements of the current period, as well as how we addressed those risks.

These matters were addressed in the context of our audit of the financial statements as a whole and in forming our opinion thereon, and we do not provide a separate opinion on specific items of the financial statements.

Valuation of investments in and loans to subsidiaries and affiliates

Risk identified	Our response
Investments in and loans to subsidiaries and affiliates, recorded in the balance sheet as at December 31, 2024 for a net amount of €109.9 billion, represent approximately 90% of total assets. Investments in subsidiaries and affiliates are accounted for at their acquisition cost, and loans to subsidiaries and affiliates are stated at their nominal value. As indicated in the "Investments and loans to consolidated subsidiaries and equity affiliates" paragraph of the "Accounting policies" note 1 to the annual financial statements, these investments and loans are valued as follows: – For exploration and production activities: – in the absence of a decision to develop, allowances are recorded against investments and loans for an amount corresponding to the exploration costs incurred; – when the existence of proved reserves is established, the value of investments and loans is limited to discounted future cash flows assessed at year-end; – For other segments, valuation allowances on investments and loans are determined taking into account the financial performance of the subsidiaries, change in results or anticipated market value. Your Company relies notably on future cash flow forecasts resulting from the long-term plan of the subsidiaries and affiliates. The long-term plan assumptions include, in particular, price scenarios (hydrocarbons and CO_2), estimates of hydrocarbon reserves, future produced and sold volumes, representing the Company's best estimate of all economic and technical conditions during the remaining life of the assets. The recoverable value of investments in subsidiaries and affiliates may be impacted by various risk factors, notably commodity prices, market supply and demand, planned production volumes and developments related to climate change and energy transition. The estimates and assumptions used by management are determined in specialized internal Company's departments and take into account economic conditions and analysis from external experts. Given the materiality of the investments in and loans to subsidiaries and affiliates in your Company's annual financial statements and the judgment required to assess their value in use and the determination of certain assumptions, notably the likelihood of achieving the forecasts, we considered the valuation of those investments in and loans to subsidiaries and affiliates to be a key audit matter.	Our audit procedures mainly consisted in: – testing the effectiveness of the key controls part of the process to determine the value in use of investments in and loans to subsidiaries and affiliates; – assessing the compliance of the valuation methods applied by the Company with the applicable accounting principles and their consistency with prior year for the related investments and loans; – for a sample of investments in and loans to subsidiaries and affiliates, assessing the implementation of those methods by performing the main following work, as appropriate: – assessing the consistency of the main assumptions used with the economic environment, budgets and forecasts approved by management as part of the strategic plan of the Company; – comparing the net equity used for valuation with the net equity resulting from the accounts of the related entities subject to an audit or analytical procedures when applicable, and analyzing the adjustments made, if any, on the net equity and the underlying supporting documentation. We also assessed the information presented in the "Investments and loans to consolidated subsidiaries and equity affiliates" paragraph of the "Accounting policies" note 1 to the annual financial statements.

SPECIFIC VERIFICATIONS

We have also performed, in accordance with professional standards applicable in France, the specific verifications required by laws and regulations.

Information given in the management report and in the other documents with respect to the financial position and the financial statements provided to the shareholders

We have no matters to report as to the fair presentation and the consistency with the financial statements of the information given in the Board of Directors' management report and in the other documents with respect to the financial position and the financial statements provided to the shareholders.

We attest the fair presentation and the consistency with the financial statements of the information relating to payment deadlines mentioned in Article D. 441-6 of the French Commercial Code (*Code de commerce*).

Report on Corporate Governance

We attest that the Board of Directors' report on Corporate Governance sets out the information required by Articles L. 225-37-4, L. 22-10-10 and L. 22-10-9 of the French Commercial Code (*Code de commerce*).

Concerning the information given in accordance with the requirements of Article L. 22-10-9 of the French Commercial Code (*Code de commerce*) relating to the remuneration and benefits received by, or allocated to the directors and any other commitments made in their favor, we have verified its consistency with the financial statements, or with the underlying information used to prepare these financial statements and, where applicable, with the information obtained by your Company from companies controlled thereby, included in the consolidation scope. Based on these procedures, we attest the accuracy and fair presentation of this information.

With respect to the information relating to items that your Company considered likely to have an impact in the event of a takeover bid or exchange offer, provided pursuant to Article L. 22-10-11 of the French Commercial Code (*Code de commerce*), we have agreed this information to the source documents communicated to us. Based on these procedures, we have no observations to make on this information.

Other information

In accordance with French law, we have verified that the required information relating to the identity of the shareholders and holders of voting rights has been properly disclosed in the management report.

REPORT ON OTHER LEGAL AND REGULATORY REQUIREMENTS

Format of preparation of the financial statements intended to be included in the annual financial report

We have also verified, in accordance with the professional standard applicable in France relating to the procedures performed by statutory auditors regarding the annual and consolidated financial statements prepared in the European single electronic format, that the preparation of the financial statements intended to be included in the annual financial report mentioned in Article L. 451-1-2, I of the French Monetary and Financial Code (*Code monétaire et financier*), prepared under the Chairman and Chief Executive Officer's responsibility, complies with the single electronic format defined in Commission Delegated Regulation (EU) No. 2019/815 of December 17, 2018.

On the basis of our work, we conclude that the preparation of the financial statements intended to be included in the annual financial report complies, in all material respects, with the European single electronic format.

We have no responsibility to verify that the financial statements that will ultimately be included by your Company in the annual financial report filed with the AMF (*Autorité des marchés financiers*) agree with those on which we have performed our work.

Appointment of the Statutory Auditors

We were appointed as statutory auditors of TotalEnergies SE by the Annual General Meeting held on May 25, 2022 for PricewaterhouseCoopers Audit and on May 14, 2004 for ERNST & YOUNG Audit.

As at December 31, 2024, PricewaterhouseCoopers Audit and ERNST & YOUNG Audit were respectively in the 3rd and 21st year of uninterrupted engagement.

RESPONSABILITIES OF MANAGEMENT AND THOSE CHARGED WITH GOVERNANCE FOR THE FINANCIAL STATEMENT

Management is responsible for the preparation and fair presentation of the financial statements in accordance with French accounting principles and for such internal control as Management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, Management is responsible for assessing the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless it is expected to liquidate the Company or to cease operations.

The Audit Committee is responsible for monitoring the financial reporting process and the effectiveness of internal control and risk management systems and where applicable, its internal audit, regarding the accounting and financial reporting procedures.

The financial statements were approved by the Board of Directors.

STATUTORY AUDITORS' RESPONSIBILITIES FOR THE AUDIT OF THE FINANCIAL STATEMENTS

Objectives and audit approach

Our role is to issue a report on the financial statements. Our objective is to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with professional standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users made on the basis of these financial statements.

As specified in Article L. 821-55 of the French Commercial Code (*Code de commerce*), our statutory audit does not include assurance on the viability of the Company or the quality of management of the affairs of the Company.

As part of an audit conducted in accordance with professional standards applicable in France, the statutory auditor exercises professional judgment throughout the audit and furthermore:

- identifies and assesses the risks of material misstatement of the financial statements, whether due to fraud or error, designs and performs audit procedures responsive to those risks, and obtains audit evidence considered to be sufficient and appropriate to provide a basis for his opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control;
- obtains an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the internal control;
- evaluates the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by Management in the financial statements;
- assesses the appropriateness of Management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. This assessment is based on the audit evidence obtained up to the date of his audit report. However, future events or conditions may cause the Company to cease to continue as a going concern. If the statutory auditor concludes that a material uncertainty exists, there is a requirement to draw attention in the audit report to the related disclosures in the financial statements or, if such disclosures are not provided or inadequate, to modify the opinion expressed therein;
- evaluates the overall presentation of the financial statements and assesses whether these statements represent the underlying transactions and events in a manner that achieves fair presentation.

Report to the Audit Committee

We submit to the Audit Committee a report which includes in particular a description of the scope of the audit and the audit program implemented, as well as the results of our audit. We also report significant deficiencies, if any, in internal control regarding the accounting and financial reporting procedures that we have identified.

Our report to the Audit Committee includes the risks of material misstatement that, in our professional judgment, were of most significance in the audit of the financial statements of the current period and which are therefore the key audit matters that we are required to describe in this report.

We also provide the Audit Committee with the declaration provided for in Article 6 of Regulation (EU) No. 537/2014, confirming our independence within the meaning of the rules applicable in France as set out in particular in Articles L. 821-27 to L. 821-34 of the French Commercial Code (*Code de commerce*) and in the French Code of Ethics for Statutory Auditors (*Code de déontologie de la profession de commissaire aux comptes*). Where appropriate, we discuss with the Audit Committee the risks that may reasonably be thought to bear on our independence, and the related safeguards.

Neuilly-sur-Seine and Paris-La Défense, March 31, 2025

The Statutory Auditors
French original signed by

PricewaterhouseCoopers Audit		ERNST & YOUNG Audit	
Oliver Lotz	Cécile Saint-Martin	Yvon Salaün	Stéphane Pédron

10.2 Statutory Financial Statements of TotalEnergies SE as parent company

10.2.1 Statement of income

As of December 31, *(M€)*		2024	2023	2022
Sales	(note 13)	7,020	7,246	7,669
Net operating expenses	(note 14)	(7,594)	(7,712)	(7,853)
Operating depreciation, amortization and provisions	(note 15)	(52)	(56)	(142)
Operating income		**(626)**	**(522)**	**(326)**
Financial expenses and income	(note 16)	(1,378)	(828)	(850)
Dividends	(note 17)	15,190	11,625	9,736
Net financial allowances and reversals	(note 18)	1,435	448	(1,251)
Other financial expenses and income	(note 19)	130	6	146
Financial income		**15,377**	**11,251**	**7,781**
Current income		**14,751**	**10,729**	**7,455**
Gains (Losses) on sales of investments and loans		2	–	–
Gains (Losses) on sales of fixed assets		–	–	237
Non-recurring items		(6)	(9)	–
Net non-recurring allowances and reversals		28	24	59
Non-recurring income	(note 20)	**24**	**15**	**296**
Employee profit-sharing plan		(29)	(32)	(40)
Taxes	(note 21)	529	520	124
Net income		15,275	11,232	7,835

10.2.2 Balance sheet

ASSETS

As of December 31, *(M€)*		2024	2023	2022
Non-current assets				
Intangible assets		935	875	893
Depreciation, depletion, amortization and valuation allowances		(740)	(676)	(654)
Intangible assets, net	(note 2)	**195**	**199**	**239**
Property, plant and equipment		417	396	382
Depreciation, depletion, amortization and valuation allowances		(325)	(318)	(312)
Property, plant and equipment, net	(note 2)	**92**	**78**	**70**
Subsidiaries and affiliates: investments and loans	(note 3)	118,702	119,721	115,296
Valuation allowances on investments and loans	(note 3)	(8,787)	(8,802)	(7,997)
Other non-current assets	(note 4)	8,743	3,528	6,777
Investments and other non-current assets, net		**118,658**	**114,447**	**114,076**
Total non-current assets		**118,945**	**114,724**	**114,385**
Current assets				
Inventories		1	2	2
Accounts receivable	(note 5)	1,961	1,910	2,849
Marketable securities	(note 6)	462	237	482
Cash/cash equivalents and short-term deposits		–	1	–
Total current assets		**2,424**	**2,150**	**3,333**
Prepaid expenses		13	13	18
Currency translation adjustments	(note 12)	417	135	440
Total assets		121,799	117,022	118,176

LIABILITIES

As of December 31, *(M€)*		2024	2023	2022
Shareholders' equity	(note 7)			
Share capital		5,994	6,031	6,548
Paid-in surplus		23,345	24,385	35,098
Reserves	(note 7.2)	3,930	3,931	3,932
Retained earnings		16,179	12,007	13,620
Net income		15,275	11,232	7,835
Interim dividends		(5,359)	(5,258)	(7,670)
Total shareholders' equity		**59,364**	**52,328**	**59,363**
Provisions	(notes 8 and 9)	8,089	9,493	10,728
Debts				
Long-term financial debt	(note 10)	46,198	46,181	17,760
Short-term financial debt	(note 10)	2,698	3,845	24,713
Accounts payable	(note 11)	5,031	4,898	5,033
Total debts		**53,927**	**54,924**	**47,506**
Accrued income		2	16	2
Currency translation adjustments	(note 12)	417	261	577
Total liabilities and Shareholders' equity		**121,799**	**117,022**	**118,176**

10.2.3 Statement of cash flow

As of December 31, *(M€)*	2024	2023	2022
Cash flow from operating activities			
Net income	15,275	11,232	7,835
Depreciation, depletion and amortization	71	28	74
Valuation allowances on investments and loans	(15)	805	1,958
Other provisions	(1,406)	(1,235)	(688)
Funds generated from operations	**13,925**	**10,830**	**9,179**
(Gains) Losses on disposal of assets	364	373	717
(Increase) Decrease in working capital	(10)	768	1,905
Other, net	(37)	24	(36)
Cash flow from operating activities	**14,242**	**11,995**	**11,765**
Cash flow used in investing activities			
Purchase of property, plant and equipment and intangible assets	(44)	(20)	(13)
Investments in equity shares and increase in long-term loans	(1,115)	(4,265)	(4,329)
Investments	**(1,159)**	**(4,285)**	**(4,342)**
Proceeds from disposals of property, plant and equipment and intangible assets	–	–	323
Proceeds from disposal of equity shares and repayment of loans	2,979	308	585
Total divestitures	**2,979**	**308**	**908**
Cash flow used in investing activities	**1,820**	**(3,977)**	**(3,434)**
Cash flow from financing activities			
Capital increase	482	354	338
Share buybacks	(7,364)	(8,462)	(7,371)
Cash dividends paid related to the previous year	(5,285)	(5,206)	(5,127)
Cash interim dividends paid related to current year	(1,802)	(1,776)	(4,242)
Increase (Decrease) in financial debt and bank overdrafts	(2,093)	7,073	8,071
Cash flow used in financing activities	**(16,062)**	**(8,017)**	**(8,331)**
Increase (Decrease) in cash and cash equivalents	**(1)**	**1**	**–**
Cash and cash equivalents at beginning of year	**1**	**–**	**–**
Cash and cash equivalents at year-end	**–**	**1**	**–**

10.2.4 Statement of changes in shareholders' equity

(M€)	Common shares issued			General reserves and retained earnings	Revaluation reserve	Total
	Number	Amount	Premiums			
As of January 1, 2022	**2,640,429,329**	**6,601**	**36,030**	**19,214**	**3**	**61,848**
Balance of cash dividends paid[(a)]	–	–	–	(1,664)	–	(1,664)
Net income 2022	–	–	–	7,835	–	7,835
Cash interim dividends paid for 2022[(b)(b')(b'')]	–	–	–	(7,670)	–	(7,670)
Capital increase reserved for employees	9,367,482	24	315	(1)	–	338
Expenses related to the capital increase reserved for employees	–	–	(1)	–	–	(1)
Capital reduction by cancellation of treasury shares[(c)]	(30,665,526)	(77)	(1,246)	–	–	(1,323)
As of December 31, 2022	**2,619,131,285**	**6,548**	**35,098**	**17,714**	**3**	**59,363**
Balance of cash dividends paid[(d)]	–	–	–	(1,778)	–	(1,778)
Net income 2023	–	–	–	11,232	–	11,232
Cash interim dividends paid for 2023[(e)(e')]	–	–	–	(5,258)	–	(5,258)
Capital increase reserved for employees	8,002,155	20	335	(1)	–	354
Expenses related to the capital increase reserved for employees	–	–	(1)	–	–	(1)
Capital reduction by cancellation of treasury shares[(c)]	(214,881,605)	(537)	(11,047)	–	–	(11,584)
As of December 31, 2023	**2,412,251,835**	**6,031**	**24,385**	**21,909**	**3**	**52,328**
Balance of cash dividends paid[(f)]	–	–	–	(1,802)	–	(1,802)
Net income 2024	–	–	–	15,275	–	15,275
Cash interim dividends paid for 2024[(g)(g')]	–	–	–	(5,359)	–	(5,359)
Capital increase reserved for employees	10,833,187	27	455	(1)	–	481
Expenses related to the capital increase reserved for employees	–	–	–	–	–	–
Capital reduction by cancellation of treasury shares[(c)]	(25,405,361)	(64)	(1,495)	–	–	(1,559)
As of December 31, 2024	**2,397,679,661**	**5,994**	**23,345**	**30,022**	**3**	**59,364**

(a) Balance of the 2021 dividend: including €1,695 million (€0.66 per share) paid in cash decreased by €31 million adjustment for the exact number of eligible shares, according to the Shareholders' meeting on May 25, 2022.
(b) Balance Interim dividend paid in 2022 for the 1st quarter 2022: €1,745 million (€0.69 per share) paid in cash.
(b') Exceptional interim dividend paid in 2022 for €2,497 million (1€ per share), paid in cash.
(b'') Interim dividend not paid in 2022 for the 2nd and 3rd quarters 2022: €1,711 million (€0.69 per share) for the 2nd quarter paid in January 2023 and €1,717 million (€0.69 per share) for the 3rd quarter.
(c) Refer to note 7.
(d) Balance of the 2022 dividend: including €1,800 million (€0.74 per share) paid in cash decreased by €22 million adjustment for the exact number of eligible shares, according to the Shareholders' meeting on May 26, 2023.
(e) Interim dividend paid in 2023 for the 1st quarter 2023: €1,776 million (€0.74 per share), paid in cash.
(e') Interim dividend not paid in 2023 for the 2nd and 3rd quarters 2023: €1,739 million (€0.74 per share) for the 2nd quarter and paid in January 2024 and €1,743 million (€0.74 per share) for the 3rd quarter paid in April 2024.
(f) Balance of the 2023 dividend: including €1,827 million (€0.79 per share) paid in cash decreased by €25 million adjustment for the exact number of eligible shares, according to the Shareholders' meeting on May 24, 2024.
(g) Interim dividend paid in 2024 for the 1st quarter 2024: €1,802 million (€0.79 per share), paid in cash.
(g') Interim dividend not paid in 2024 for the 2nd and 3rd quarters 2024: €1,776 million (€0.79 per share) for the 2nd quarter and payable in January 2025 and €1,782 million (€0.79 per share) for the 3rd quarter and payable in April 2025.

10.3 Notes to the statutory financial statements

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Note 1 Accounting policies

The 2024 financial statements have been prepared in accordance with French Generally Accepted Accounting Principles ("French GAAP") currently in force (ANC 2014-03 regulation).

Accounting principles retained for the preparation of the financial statements of the 2024 financial year are identical to those of 2023.

Property, plant and equipment

Property, plant and equipment are carried at cost. They are depreciated according to the straight-line method over their estimated useful life, as follows:

Buildings	20-30 years
Furniture and fixtures	5-10 years
Transportation equipment	2-5 years
Office equipment and furniture	5-10 years
Computer equipment	3-5 years

Intangible assets

These items include essentially:

- purchase prices or production cost of software, amortized over their useful life which is generally between 1 and 3 years.
- proved mineral interests corresponding to the costs of the exploration wells which result in proved reserves. The other costs relate essentially to entrance fees bonuses giving access to proved reserves. When production starts, capitalized exploration wells are depreciated using the unit-of-production method based on proved developed reserves.

Investments and loans to consolidated subsidiaries and equity affiliates

Investments in consolidated subsidiaries and equity affiliates are accounted for at the acquisition cost, or the appraised value for investments affected by the 1976 legal revaluation.

Loans to consolidated subsidiaries and equity affiliates are stated at their nominal value.

For exploration and production activities, in the absence of a decision to develop, allowances are recorded against investments and loans for an amount corresponding to the exploration costs incurred. When the existence of proved reserves is established, the value of investments and loans is limited to discounted future cash flows assessed at year-end.

For other segments, valuation allowances on investments and loans are based on their financial performance, results or market value.

The Company notably takes into account discounted expected future cash flows from the long-term plan of subsidiaries and affiliates. The assumptions used in the strategic plan include price scenarios (hydrocarbons and carbon), estimates of hydrocarbon reserves, future volumes produced and marketed, representing the Company's management's best estimate of all economic and technical conditions over the residual life of the assets.

The recoverable amount of investments may be influenced by various risk factors, including commodity prices, market supply and demand, forecast production volumes and developments related to climate change and the energy transition. The estimates and assumptions used by the Executive Management are determined by specialised internal departments, taking into account economic conditions and the analyses of external experts.

Other long-term financial investments are accounted for at the acquisition cost. They are depreciated if the market value of the asset is lower than the net book value.

Inventories

Cost for crude oil and refined product inventories are determined according to the First-In, First-Out (FIFO) method. Inventories are valued at either the historical cost or the market value, whichever is lower.

Receivables and payables

Receivables and payables are stated at nominal value. Allowances for doubtful debts are recorded when the actual value is lower than the net book value.

Provisions and other non-current liabilities

A provision is recognized when TotalEnergies SE has a present obligation, legal or constructive, as a result of a past event for which it is probable that an outflow of resources will be required and when a reliable estimate can be made regarding the amount of the obligation. The amount of the liability corresponds to the best possible estimate.

Foreign currency transactions

Receivables and payables in foreign currency are converted into euros at the year-end exchange rate. Unrealized foreign exchange gains or losses are recognized in the balance sheet as "Currency translation adjustment asset or liability". A provision for risk is recorded only for unrealized foreign exchange losses, generated by individual positions.

Financial instruments

TotalEnergies SE uses financial instruments for hedging purposes only in order to manage its exposure to changes in interest rates and foreign exchange rates.

As part of this policy, the Company may use interest rate swap agreements and forward transactions. The difference between interest to be paid and interest to be received on these swaps or premiums and discounts on these forward transactions is recognized as interest expense or interest income on a prorated basis, over the life of the instruments.

Branches

TotalEnergies SE holds foreign branches, which are deemed autonomous under French accounting regulations, and have their own independent set of accounts.

Turnover

Sales of hydrocarbons and oil products are recorded at the time of delivery.

Re-billing of services and other charges (Technical Support Fees) are recorded at the time the service is rendered.

Note 2 Intangible assets and property, plant and equipment

As of December 31, (M€)	2024 Gross amount	2024 Depreciation, depletion, amortization and valuation allowances	2024 Net	2023 Net
Headquarters	**326**	**(253)**	**73**	**56**
– Software	163	(161)	2	6
– Proved mineral interests	99	(73)	26	29
– Other intangible assets	38	(19)	19	21
– Work in progress	26	–	26	–
Branch (A.D.G.I.L.)[a]	**609**	**(487)**	**122**	**143**
– Proved mineral interests	598	(487)	111	132
– Unproved mineral interests	11	–	11	11
Total intangible assets	**935**	**(740)**	**195**	**199**
Land	34	–	34	34
Buildings	95	(94)	1	2
Other	288	(231)	57	42
Total property, plant and equipment	**417**	**(325)**	**92**	**78**
Total[b]	**1,352**	**(1,065)**	**287**	**277**

(a) Branches amortization related to commercial activity is accounted for as purchase cost of goods sold.
(b) As of December 31, 2023, gross amount, and depreciation, depletion, amortization and valuation allowances amounted to €1,271 million and €994 million, respectively.

Note 3 Subsidiaries and affiliates: investments and loans

3.1 Changes in investments and loans

As of December 31, (M€)	Gross amount at beginning of year	2024 Increases Monetary	2024 Increases Non monetary	2024 Decreases Monetary	2024 Decreases Non monetary	2024 Currency translation adjustment	2024 Gross amount at year-end
Investments[a]	108,366	1	188	(2)	(188)	–	108,365
Loans[b]	11,355	1,379	46	(2,975)	(46)	578	10,337
Total	119,721	1,380	234	(2,977)	(234)	578	118,702
Analysis by segment							
Exploration & Production	9,350	71	–	(1)	–	10	9,430
Integrated LNG	3,982	4	2	(5)	(232)	–	3,751
Integrated Power	5,813	–	–	–	–	–	5,813
Marketing & Services	6,344	–	–	–	–	–	6,344
Refining & Chemicals	27,505	62	–	(14)	(2)	–	27,551
Corporate	66,727	1,243	232	(2,957)	–	568	65,813
Total	119,721	1,380	234	(2,977)	(234)	578	118,702

(a) The variation of investments in 2024 is mainly due to asset reorganization transactions of TotalEnergies Company's affiliates.
(b) Changes in loans mainly relate to the financing flows with TotalEnergies Finance and TotalEnergies Treasury.

3.2 Changes in depreciation on investments and loans

	2024				
As of December 31, *(M€)*	Beginning of year	Allowances	Reversals	Currency translation adjustment	Year-end
Investments	8,093	157	(242)	–	8,008
Loans	709	73	(4)	1	779
Total	8,802	230	(246)	1	8,787
Analysis by segment					
Exploration & Production	2,009	69	(1)	1	2,078
Integrated LNG	2,755	1	(151)	–	2,605
Integrated Power	95	–	(93)	–	2
Marketing & Services	–	–	–	–	–
Refining & Chemicals	3,919	9	(1)	–	3,927
Corporate	24	151	–	–	175
Total	8,802	230	(246)	1	8,787

3.3 Net investments and loans

	2024			2023
As of December 31, *(M€)*	Gross amount	Net allowances	Net	Net
Investments	108,365	(8,008)	100,357	100,273
Loans[a][b]	10,337	(779)	9,558	10,646
Total	118,702	(8,787)	109,915	110,919
Analysis by segment				
Exploration & Production	9,430	(2,078)	7,352	7,341
Integrated LNG	3,751	(2,605)	1,146	1,227
Integrated Power	5,813	(2)	5,811	5,718
Marketing & Services	6,344	–	6,344	6,344
Refining & Chemicals	27,551	(3,927)	23,624	23,586
Corporate	65,813	(175)	65,638	66,703
Total	118,702	(8,787)	109,915	110,919

(a) As of December 31, 2024, the gross amount includes €10,337 million related to affiliates.
(b) As of December 31, 2024, the gross amount is split by maturity as follows: less than one year for €3,241 million and more than one year for €7,096 million.

Note 4 Other non-current assets

	2024						
		Increases		Decreases			
As of December 31, *(M€)*	Gross amount at beginning of year	Monetary	Non monetary	Monetary	Non monetary	Currency translation adjustment	Gross amount at year-end
Investment portfolio[a]	3,501	7,364	–	–	(2,149)	–	8,716
Other non-current assets	22	10	–	(9)	–	–	23
Deposits and guarantees	5	–	–	(1)	–	–	4
Total	3,528	7,374	–	(10)	(2,149)	–	8,743

(a) Additions to the investment portfolio correspond to the treasury shares acquired with the intention to cancel them.
As of December 31, 2024, TotalEnergies SE holds 142,098,559 treasury shares for a gross amount of €8,715 million.

Note 5 Accounts receivable

	2024			2023
As of December 31, *(M€)*	Gross amount	Net allowances	Net	Net
Accounts receivable	1,223	(2)	1,221	1,192
Other operating receivables	742	(2)	740	718
Total	1,965[a][b]	(4)	1,961	1,910

(a) Including €1,403 million related to affiliates as of December 31, 2024.
(b) Including €194 million invoices to be issued.

Note 6 Marketable securities

As of December 31st, 2024, TotalEnergies SE holds 7,431,259 treasury shares for a gross amount of €462 million. Those shares are allocated to share performance plans or intended to be allocated to new share performance or purchase options plans.

Note 7 Shareholders' equity

7.1 Share capital variation

The variation of the number of shares composing the share capital is as follows:

As of December 31, 2021		**2,640,429,329**
	Capital reduction by cancellation of treasury shares	(30,665,526)
	Deferred contribution pursuant to the 2017 capital increase reserved for employees	9,471
	2022 Capital increase reserved for employees	9,358,011
As of December 31, 2022		**2,619,131,285**
	Capital reduction by cancellation of treasury shares	(214,881,605)
	2023 Capital increase reserved for employees	8,002,155
As of December 31, 2023		**2,412,251,835**
	Capital reduction by cancellation of treasury shares	(25,405,361)
	2024 Capital increase reserved for employees	10,833,187
As of December 31, 2024		2,397,679,661

Capital increase reserved for employees

The Extraordinary Shareholders' Meeting ("ESM") of May 24, 2024, in its twenty-second resolution, granted the authority to the Board of Directors to carry out, a capital increase, in one or more occasions within a maximum period of twenty-six months, reserved to members (employees and retirees) of a company or group savings plan ("ESOP").

In fiscal year 2024, the Board of Directors of October 30, 2024, by virtue of the twenty-second resolution above-mentioned, decided to proceed with a capital increase reserved for employees and retirees within the limit of 18 million shares and has granted all powers to the Chairman and Chief Executive Officer to determine, in particular, the terms and conditions of subscription, the opening and closing dates of the subscription period and the subscription price to be issued. This capital increase is expected to be completed after the Shareholders' Meeting of May 23, 2025.

During the fiscal years 2024, 2023 and 2022, the Corporation completed the following ESOP, which terms are set out below:

Fiscal year	2024	2023	2022
Date of the ESOP	June 6, 2024	June 7, 2023	June 8, 2022
By virtue of	16th resolution of the ESM of May 26, 2023	22nd resolution of the ESM of May 25, 2022	17th resolution of the ESM of May 28, 2021
Subscriptions			
Number of shares subscribed	10,251,337	7,760,062	9,130,380
Subscription price	46.90 euros	45.60 euros	37.00 euros
Free shares			
Number of shares granted	581,850	242,093	227,631

Number of treasury shares held by TotalEnergies SE

As of December 31,	2024	2023	2022
Number of treasury shares held by TotalEnergies SE	149,529,818	60,543,213	137,187,667
Percentage of share capital	6.24%	2.51%	5.24%

Share cancellation

Pursuant to the authorization granted by the Extraordinary Shareholders' Meetings on May 26, 2017 and May 25, 2022, the Board of Directors is authorized to cancel, on one or more occasions, the shares of the Company within the limit of 10% of the existing capital on the date of the operation per period of 24 months, in accordance with the provisions of Articles L. 225-209 (became L. 22-10-62) and L. 225-213 of the French Commercial Code.

The Board of Directors has proceeded with the following cancellation of TotalEnergies shares:

Fiscal year	Board of Directors' decision date	Number of shares bought back and cancelled for the purpose of the shareholders policy	Percentage of the share capital cancelled[a]
2024	February 6, 2024[b]	25,405,361 shares bought back between August 25 and October 26, 2023	1.05%
2023	September 21, 2023[c]	86,012,344 shares bought back between January 2 and August 24, 2023	3.44%
2023	February 7, 2023	128,869,261 shares bought back between February 11 and December 15, 2022	4.92%
2022	February 9, 2022	30,665,526 shares bought back between November 8 and December 22, 2021	1.16%

(a) Percentage of the share capital that the cancelled shares represented on the operations' date.
(b) With effect from February 12, 2024.
(c) With effect from September 25, 2023.

7.2 Reserves

As of December 31, (M€)	2024	2023	2022
Revaluation reserves	3	3	3
Legal reserves	740	740	740
Untaxed reserves	2,808	2,808	2,808
Other reserves	379	380	381
Total	3,930	3,931	3,932

Note 8 Provisions

		2024				
As of December 31, (M€)	Gross amount at beginning of year	Reversals: Allowances	Reversals: Used	Reversals: Unused	Currency translation adjustment	Gross amount at year-end
Provisions for financial risks	**8,632**	**1,051**	**(9)**	**(2,462)**	–	**7,212**
Guarantee of the subsidiaries of Exploration & Production activity	7,256	999	–	(2,462)[a]	–	5,793
Provisions for risks linked to loans and investments	1,376	52	(9)	–	–	1,419
Provisions for operating risks and compensation expenses	**831**	**358**	**(316)**	–	**2**	**875**
Provisions for pensions benefits, and other benefits[b]	157	14	(5)	–	–	166
Provisions for long-service medals	6	1	–	–	–	7
Provisions for compensation expenses	598	342	(290)	–	–	650
Other operating provisions	70	1	(21)	–	2	52
Provisions for non-recurring items[c]	**30**	–	**(28)**	–	–	**2**
Provisions for restructuring	30	–	(28)	–	–	2
Total	9,493	1,409	(353)	(2,462)	2	8,089

(a) Mainly due to asset reorganization operations of TotalEnergies Company's affiliates.
(b) Refer to Note 9.
(c) Refer to Note 20.

Note 9 Employee benefits obligations

TotalEnergies SE participates in death-disability, pension, early retirement and severance pay plans. Expenses for defined contribution and multi-employer plans correspond to the contributions paid.

TotalEnergies SE recorded €166 million as a provision for pension benefits and other benefits as of December 31, 2024, and €157 million as of December 31, 2023.

For defined benefit plans, commitments are determined using a prospective methodology called "projected unit credit method". The commitment actuarial value depends on various parameters such as the length of service, the life expectancy, the employee turnover rate and the salary increase and discount rate assumptions.

The actuarial assumptions used as of December 31, are the following:

	2024	2023
Discount rate	3.47%	3.29%
Average expected rate of salary increase	3.12%	3.24%
Average residual life expectancy of operations	10-20 years	10-20 years

TotalEnergies SE records a provision in its accounts for the net actuarial liability of the plan assets and the deferred gains and losses to be amortized when this sum represents a pension liability.

Actuarial gains and losses resulting from changes in actuarial assumptions are amortized using the straight-line method over the estimated remaining length of service of employees involved.

The reconciliation between the total commitment for pension plans not covered through insurance companies and the provision booked is as follows:

(M€)	2024	2023
Actuarial liability as of December 31,	72	75
Deferred gains and losses to be amortized	31	31
Provision for pension benefits and other benefits as of December 31,	**103**	**106**

The Company's commitment for pension plans covered through insurance companies amounts to:

(M€)	2024	2023
Actuarial liability as of December 31,	396	408
Plan assets	(363)	(372)
Net commitment as of December 31,	**33**	**36**
Provision for pension benefits and other benefits as of December 31,	**63**	**51**

Note 10 Financial debt

Due dates as of December 31, (M€)	2024	Within one year	1 to 5 years	More than 5 years	2023
Bonds[a]					
€2,500 million 2.625% Perpetual Non-Call 02/2025	1,082	–	–	1,082	2,500
€1,500 million 1.75% Perpetual Non-Call 5 year 04/2024	–	–	–	–	1,500
€1,500 million 3.369% Perpetual Non-Call 10/2026	1,500	–	–	1,500	1,500
€1,000 million 2.0% Perpetual Non-Call 09/2030	1,000	–	–	1,000	1,000
€1,500 million 2.125% Perpetual Non-Call 01/2033	1,500	–	–	1,500	1,500
€1,500 million 1.625% Perpetual Non-Call 01/2028	1,500	–	–	1,500	1,500
€1,000 million 2.0% Perpetual Non-Call 04/2027	1,000	–	–	1,000	1,000
€750 million 3.25% Perpetual Non-Call 01/2037	750	–	–	750	750
€1,250 million 4.12% Perpetual Non-Call 02/2030	1,250	–	–	1,250	–
€1,250 million 4.5% Perpetual Non-Call 11/2034	1,250	–	–	1,250	–
Accrued interest	145	145	–	–	184
Total Bonds	**10,977**	**145**	**–**	**10,832**	**11,434**
Other loans[b]	35,423	57	35,366	–	36,504
Current accounts[c]	2,496	2,496	–	–	2,088
Total	**48,896**	**2,698**	**35,366**	**10,832**	**50,026**

(a) The subordinated notes were issued for an indefinite period, they are considered to be long-term financial debt and are included in the category "more than 5 years" in the absence of exercise of option for reimbursement before the balance sheet date.
(b) Including €35,418 million as of December 31, 2024 and €36,496 million as of December 31, 2023 related to affiliates.
(c) Including €2,496 million as of December 31, 2024 and €2,088 million as of December 31, 2023 related to affiliates.

Over the year 2024, TotalEnergies SE has fully redeemed on April 4, 2024 the nominal amount of €1,500 million of perpetual deeply subordinated notes carrying a coupon of 1.750%, issued in April 2019, at first call date. On November 19, 2024, TotalEnergies SE issued €2,500 million of perpetual deeply subordinated notes in two tranches. On 22 November 2024, TotalEnergies SE partially redeemed €1,418 million out of a nominal amount of €2,500 million of perpetual deeply subordinated notes carrying a coupon of 2.625% issued in February 2015, with a first call date on February 26, 2025.

Note 11 Accounts payable

As of December 31, *(M€)*	2024	2023
Suppliers	830[a]	717[b]
Other operating liabilities	4,201	4,181
Total[c][d]	**5,031**	**4,898**

(a) Excluding invoices not yet received (€423 million), the outstanding liability amounts to €407 million, of which:
- €290 million for invoices of foreign suppliers to foreign branches for which the payment schedule is as follows: €252 million within 1 month and €38 million payable no later than 6 months;
- €17 million issued to non-TotalEnergies entities for which the payment schedule is as follows: €14 million due on December 31, 2024, and €3 million payable no later than January 31, 2025;
- €100 million issued to TotalEnergies affiliates for which the payment schedule is as follows: €8 million due on December 31, 2024, and €92 million payable no later than January 31, 2025.

(b) Excluding invoices not yet received (€415 million), the outstanding liability amounts to €301 million, of which:
- €252 million for invoices of foreign suppliers to foreign branches for which the payment schedule is as follows: €229 million within 1 month and €23 million payable no later than 6 months;
- €13 million issued to non-TotalEnergies entities for which the payment schedule is as follows: €10 million due on December 31, 2023, and €3 million payable no later than January 31, 2024;
- €36 million issued to TotalEnergies affiliates for which the payment schedule is as follows: €11 million due on December 31, 2023, and €25 million payable no later than January 31, 2024.

(c) Including €521 million in 2024 and €463 million in 2023 related to affiliates.
(d) Fully concerns maturities within one year.

Note 12 Currency translation adjustments

The application of the foreign currency translation method outlined in Note 1, currency translation adjustment assets and liabilities as of December 31, 2024, correspond respectively to unrealized foreign exchange losses and gains, mainly arising from the conversion of loans and borrowings denominated in US dollars into euros.

Note 13 Sales

(M€)	France	Rest of Europe	North America	Africa	Middle East & Rest of the world	Total
Fiscal year ended December 31, 2024	**583**	**3,409**	**49**	**957**	**2,022**	**7,020**
Hydrocarbon and oil products	–	2,776	–	–	1,149	3,925
Technical support fees	583	633	49	957	873	3,095
Fiscal year ended December 31, 2023	**571**	**4,164**	**86**	**862**	**1,563**	**7,246**
Hydrocarbon and oil products	–	3,622	–	–	729	4,351
Technical support fees	571	542	86	862	834	2,895

Note 14 Net operating expenses

(M€)	2024	2023
Purchase cost of goods sold	(3,336)	(3,762)
Other purchases and external expenses	(3,070)	(2,780)
Taxes	(46)	(52)
Personnel expenses	(1,142)	(1,118)
Total	**(7,594)**	**(7,712)**

Note 15 Operating depreciation, amortization, and provisions

(M€)	2024	2023
Depreciation, amortization and provisions on		
– Property, plant and equipment and intangible assets	(12)	(12)
– Employee benefits	(357)	(353)
Subtotal 1	**(369)**	**(365)**
Reversals		
– Employee benefits	295	302
– Other operating expenses	22	7
Subtotal 2	**317**	**309**
Total (1+2)	(52)	(56)

Note 16 Financial expenses and income

(M€)	2024	2023
Financial expenses		
Interest expenses and other[a]	(1,925)	(1,683)
Losses on investments and loans to subsidiaries and affiliates	–	(108)
Total financial expenses	**(1,925)**	**(1,791)**
Financial income		
Net gain on sales of marketable securities and interest on loans to subsidiaries and affiliates	–	–
Interest on short-term deposits and other	547	963
Total financial income[b]	**547**	**963**
Total	**(1,378)**	**(828)**

(a) Including €(1,660) million as of December 31, 2024 and €(1,393) million as of December 31, 2023 related to affiliates.
(b) Including €475 million as of December 31, 2024 and €888 million as of December 31, 2023 related to affiliates.

Note 17 Dividends

(M€)	2024	2023
Exploration & Production	–	9
Integrated LNG	35	29
Integrated Power	194	130
Marketing & Services	404	817
Refining & Chemicals	7,193	7,034
Corporate	7,364	3,606
Total	**15,190**	**11,625**

Note 18 Net financial allowances and reversals

(M€)	2024	2023
Exploration & Production	(68)	(101)
Integrated LNG	–	1,152
Integrated Power	93	–
Marketing & Services	–	–
Refining & Chemicals	(53)	(611)
Corporate	1,463	8
Total	**1,435**	**448**

Note 19 Other financial expenses and income

This net profit of €130 million is composed of foreign exchange results.

Note 20 Non-recurring income

Non-recurring income is a gain of €24 million mainly composed of reversals of restructuring provisions, of €28 million corresponding to costs incurred during the financial year. This was done under the collective conventional termination agreement of February 16, 2021 relating to the transformation of employment within TotalEnergies Corporation.

Note 21 Basis of taxation

TotalEnergies SE is subject to French corporation tax according to the ordinary rules of law, i.e. based on the principle of territoriality of tax stipulated in the French Tax Code (Article 209-I). It is also taxed outside France on income from its direct operations abroad.

TotalEnergies SE has elected the 95%-owned French subsidiaries tax regime provided for by Articles 223 A et seq. of the French Tax Code (*Régime de l'intégration fiscale*). In accordance with the integration agreement signed between TotalEnergies SE and its consolidated subsidiaries, the losses realized by these subsidiaries during the consolidation period are definitively acquired by the parent company.

The tax group consists of the parent Company and 212 subsidiaries owned for more than 95% whose main contributors to the consolidated taxable income at December 31, 2024 are:

- TotalEnergies SE,
- TotalEnergies Marketing Services,
- TotalEnergies Marketing France,
- TotalEnergies Treasury,
- TotalEnergies Finance,
- TotalEnergies Holdings,
- TotalEnergies Renewables,
- TotalEnergies Electricité & Gaz France,
- Global LNG SAS,
- TotalEnergies - Centrale Electrique Saint-Avold,
- TotalEnergies Petrochemicals France,
- TotalEnergies Raffinage France.

The French tax rate consists of the standard corporation tax rate (25%) plus additional contributions applicable in 2024, which brings the overall income tax rate to 25.83%.

The international tax reform Pillar 2, applicable in France from January 1, 2024, introduces a minimum tax rate of 15% on the profits of companies in each of their operating countries. Given the high tax rates in the Company's operating countries and the increases in countries with lower rates, the application of this minimum tax will not result in the payment in France of additional tax for 2024.

TotalEnergies SE does not record deferred tax in its statutory financial statements; however, the main temporary differences are as follows:

As of December 31, *(M€)*	2024	2023
Pension, benefits and other benefits	157	157
Net currency translation adjustment	–	126
Other, net	40	48
Total (assets) net liabilities	**197**	**331**

Note 22 Foreign exchange and counterparty risk

The foreign exchange positions, notably from commercial activity, are systematically hedged by the purchase or sale of the corresponding currencies, mainly through spot transactions and sometimes on forward markets. Regarding long-term assets in foreign currencies, TotalEnergies SE tries to reduce the corresponding exchange risk by associating them, as far as possible, with financing in the same currency.

An independent department from the dealing room monitors the status of the financial instruments, especially through marked-to-market valuations and sensitivity estimations. Counterparty risk is monitored on a regular basis against limits set by the Company's Executive management.

Note 23 Off-balance sheet commitments

As of December 31, *(M€)*	2024	2023
Commitments given		
Guarantees on custom duties	1,136	1,136
Bank guarantees	18,482	15,747
Guarantees given on other commitments[a]	18,670	20,033
Guarantees related to confirmed lines of credit	32	25
Short-term financing plan[b]	19,751	18,599
Bond issue plan[b]	32,771	30,970
Total of commitments given	**90,842**	**86,510**
Commitments received		
Guarantees related to confirmed lines of credit	9,966	9,556
Other commitments received	36	–
Total of commitments received	**10,002**	**9,556**

(a) This item mainly includes the following commitments: shareholder agreements, financing guarantees, payment guarantees, and reservation of oil and gas transport and storage capacity guarantees.

(b) Guarantees of bond issues and short-term financing plans incurred by TotalEnergies Capital, TotalEnergies Capital International & TotalEnergies Capital Canada. On the overall plan amount of €52,522 million, €36,567 million were incurred as of December 31, 2024, compared with €30,905 million as of December 31, 2023.

Note 24 Number of employees

As of December 31,	2024	2023
Managers	3,146	2,934
Supervisors	573	633
Technical and administrative staff	7	14
Total	**3,726**	**3,581**

Note 25 Performance share plans

TotalEnergies performance shares plans

	2019	2020	2021	2022	2023[a]	2024[a]	Total
Date of the Shareholders' Meeting	6/1/2018	6/1/2018	6/1/2018	5/28/2021	5/26/2023	5/24/2024	
Award date	3/13/2019	3/18/2020	5/28/2021	3/16/2022	5/26/2023	5/24/2024	
Date of the final award (end of the vesting period)	3/14/2022	3/20/2023	5/29/2024	3/17/2025	5/27/2026	5/24/2027	
Transfer authorized as from	3/15/2024	3/21/2025	5/30/2026	3/17/2025	5/27/2026	5/24/2027	
Number of performance shares							
Outstanding as of January 1, 2023	–	**6,574,961**	**6,661,580**	**7,320,181**	–	–	**20,556,722**
Notified	–	–	–	–	7,985,203	–	7,985,203
Cancelled	–	(128,577)	(98,291)	(86,348)	(42,040)	–	(355,256)
Finally granted	–	(6,446,384)	(5,250)	(5,568)	(190)	–	(6,457,392)
Outstanding as of January 1, 2024	–	–	**6,558,039**	**7,228,265**	**7,942,973**	–	**21,729,277**
Notified	–	–	–	–	–	7,775,722	**7,775,722**
Cancelled	–	–	(498,045)	(77,209)	(61,731)	(12,871)	**(649,856)**
Finally granted	–	–	(6,059,994)	(2,811)	(3,134)	–	**(6,065,939)**
Outstanding as of December 31, 2024	–	–	–	**7,148,245**	**7,878,108**	**7,762,851**	**22,789,204**

(a) Includes 37,000 performance shares granted on December 13, 2023 to 4 executives recruited in 2023 in accordance with the decision of the Board of Directors on December 13, 2023 and the Shareholders' Meeting on May 26, 2023. For these performance shares, the vesting period begins on December 13, 2023 and the final grant date is December 14, 2026, subject to the conditions set (end of the vesting period).

The performance shares, which are bought back by TotalEnergies SE on the market, are finally granted to their beneficiaries after a 3-year vesting period, from the date of the grant. The final grant is subject to a continued employment condition as well as:

- three performance conditions for the 2019 Plan,
- four performance conditions for the 2020 Plan, and
- five performance conditions for the 2021, 2022, 2023 and 2024 Plans.

Moreover, the transfer of the performance shares finally granted under the 2018 to 2021 Plans will not be permitted until the end of a 2-year holding period from the date of the final grant.

2024 Plan

The Board of Directors granted performance shares, on May 24, 2024, to certain employees and executive directors of TotalEnergies SE or its subsidiaries, subject to the fulfilment of the continued employment condition of three years and five performance conditions.

The performance conditions apply differently depending on the capacity of the beneficiaries. If all shares granted to senior executives are subject to performance conditions, the grant of the first 150 shares to non-senior executives are not subject to the performance condition abovementioned, which will, nonetheless, apply to any shares granted above this threshold.

The applicable performance conditions are as follows:

- For 25% of the shares, the Corporation will be ranked against its peers (ExxonMobil, Shell, BP and Chevron) based on the Total Shareholder Return ("TSR") during the three vesting years (2024, 2025 and 2026). The TSR criterion considered is that of the last quarter of the year, the dividend being considered reinvested based on the closing price on the ex-dividend date.
- For 25% of the shares, the Corporation will be ranked against its peers (ExxonMobil, Shell, BP and Chevron) based on the annual variation in net cash flow per share criterion expressed in dollars during the three vesting years (2024, 2025 and 2026).
- For 20% of the shares, the level reached by the pre-dividend organic cash breakeven in view of the objective set for the three vesting years (2024, 2025 and 2026). The pre-dividend organic cash breakeven is defined as the Brent price for which the operating cash flow before working capital changes (MBA) covers the organic investments[1]. The ability of the Company to resist to the variations of the Brent barrel price is measured by this parameter.
- For 15% of the shares, the change in methane emissions on operated facilities in relation to the achievement of the target to reduce methane emissions set for 2026.
- For 15% of the shares, the criterion of the lifecycle carbon intensity of energy products sold to the Company's customers in relation to the achievement of the target to reduce this intensity set for 2026.

(1) Organic investments: net investments excluding acquisitions, asset sales and other operations with non-controlling interests.

TotalEnergies free shares grant

Worldwide Plan 2024

At its meeting on May 23, 2024, the Board of Directors decided to grant 100 shares of the Company to each employee and executive director (excluding the Chairman and CEO) of TotalEnergies SE or its subsidiaries, subject to the fulfilment of the continued employment condition of five years.

	2024	Total
Date of the Shareholders' Meeting	5/26/2023	
Award date	5/23/2024	
Date of the final award (end of the vesting period)	5/24/2029	
Transfer authorized as from	5/24/2029	
Number of performance shares		
Outstanding as of January 1, 2024	–	–
Notified	10,666,900	**10,666,900**
Cancelled	(337,500)	**(337,500)**
Finally granted	–	–
Outstanding as of December 31, 2024	**10,329,400**	**10,329,400**

Note 26 Others

Compensation for the administration and management bodies

The aggregated amount of direct and indirect compensation accounted by the French and foreign affiliates of the Company, for all executive officers of TotalEnergies SE as of December 31 and for the members of the Board of Directors who are employees of TotalEnergies, is detailed below.

As of December 31, 2024, TotalEnergies SE Executive Officers are the members of the Executive Committee, i.e. nine people and there are three employees as members of the Board of Directors. As of December 31, 2023, TotalEnergies SE Executive Officers were the members of the Executive Committee, i.e. eight people and there were three employees as members of the Board of Directors.

For the year ended December 31, (M€)	2024	2023
Number of people	12	11
Direct or indirect compensation	14.92[a]	12.82

(a) Including €14.62 million for the members of the Executive Committee. The variable bonus has represented 50.03% of this overall amount of €14.62 million.

The benefits provided for Executive Officers of the Company and the members of the Board of Directors who are employees of the Company include severance to be paid upon retirement, supplementary pension schemes and insurance plans, which represent a commitment of €69.9 million as of December 31, 2024 (against €75 million as of December 31, 2023 and €60.3 million as of December 31, 2022). The decrease of the commitment is mainly due to the increase in the discount rate despite the changes among the number executives (two new entries and one retirement).

The compensation allocated to members of the Board of Directors for directors' fees totaled €1.95 million in 2024 against €1.85 million in 2023.

Legal proceedings

Disputes relating to Climate

The Corporation was summoned in January 2020 before Nanterre's Civil Court of Justice by certain associations and local communities in order to oblige the Company to complete its Vigilance Plan, by identifying in detail risks relating to a global warming above 1.5 °C, as well as indicating the expected amount of future greenhouse gas emissions related to the Company's activities and its product utilization by third parties and in order to obtain an injunction ordering the Corporation to cease exploration and exploitation of new oil or gas fields, to reduce its oil and gas production by 2030 and 2050, and to reduce its net direct and indirect CO_2 emissions by 40% in 2040 compared with 2019. This action was declared inadmissible on July 6, 2023, by the Paris Civil Court of Justice to which the case was transferred following a new procedural law. Following the appeal filed by the claimants, the Paris Court of Appeal, in a judgment of June 18, 2024, considered the action initiated admissible in particular on the basis of the law on the duty of vigilance transferring the case for trial on the merits before the Paris Civil Court of Justice, while strucking out 17 of the 22 applicants as well as declining to awards any provisional measures. TotalEnergies SE considers that it has fulfilled its obligations under the French law on the vigilance duty. A new action against the Corporation, with similar requests for injunction, has started in March 2024 before the commercial court of Tournai in Belgium.

Some associations brought civil and criminal actions against TotalEnergies SE, with the purpose of proving that since May 2021 – after the change of name of TotalEnergies – the Corporation's corporate communication and its publicity campaign contain environmental claims that are either false or misleading for the consumer. TotalEnergies considers that these accusations are unfounded.

On July 4, 2023, nine shareholders (two companies and 7 individuals holding a small number of the Corporation's shares) brought an action against the Corporation before the Nanterre Commercial Court, seeking the annulment of resolution no. 3 passed by the Corporation's Annual Shareholders' Meeting on May 26, 2023, recording the results for fiscal year 2022 and setting the amount of the dividend to be distributed for fiscal year 2022. The plaintiffs essentially allege an insufficient provision for impairment of TotalEnergies' assets in the financial statements for the fiscal year 2022, due to the insufficient consideration of future risks and costs related to the consequences of greenhouse gas emissions emitted by its customers (scope 3) and carbon cost assumptions presented as too low. The Corporation considers this action to be unfounded.

Mozambique

Victims and heirs of deceased persons filed a complaint against the Company in October 2023 with the Nanterre Prosecutor, following the events perpetrated by terrorists in the city of Palma in March 2021. This complaint would allege that the Corporation is liable for "unvoluntary manslaughter" and, "failure to assist people in danger". The Corporation considers these accusations as unfounded in both law and fact[1].

Note 27 Post closing events

There was no post closing event.

(1) Refer to the press release published by the Company on October 11, 2023 contesting the accusations.

10.4 Other financial information concerning the parent company

10.4.1 Subsidiaries and affiliates

As of December 31, 2024 (M€)	% of share capital owned by the Company	Share capital	Other shareholders' equity	Book value of investments gross	Book value of investments net	Loans & advances	Sales	Net income	Dividends allocated	Commitments & contingencies
Subsidiaries										
CSSA - Chartering and Shipping Services S.A.	100.0	13	484	92	92	–	3,194	172	–	–
Omnium Reinsurance Company S.A.	100.0	39	2,190	114	114	–	–	231	–	–
Saft Groupe S.A.S.	100.0	27	866	975	975	–	1,251	(6)	22	–
Septentrion Participations	100.0	22	(29)	66	–	–	–	(3)	–	–
TotalEnergies (China) Investment Co Ltd	100.0	170	117	140	140	–	430	10	–	–
Total E&P Angola Block 39	100.0	149	(149)	148	–	–	–	–	–	–
TotalEnergies EP Nigeria Deepwater G Ltd	100.0	–	5	147	–	–	–	–	–	–
TotalEnergies EP Nigeria Deepwater H Ltd	100.0	–	6	63	–	–	–	–	–	–
Total Eren	31.0	644	588	778	778	–	4	61	–	–
Total Eren Holding	100.0	526	(5)	1,454	1,454	–	–	(8)	–	–
TotalEnergies Gas Holdings Andes	100.0	–	–	148	1	–	–	–	–	–
TotalEnergies Carbon Solutions	100.0	3	(64)	137	–	1	2	(23)	–	–
TotalEnergies - Centrale Electrique Pont-sur-Sambre	100.0	30	69	126	126	–	178	56	81	–
TotalEnergies - Centrale Electrique Toul	100.0	35	77	98	98	–	196	58	73	–
TotalEnergies EP Australia	100.0	3,329	(1,469)	3,212	1,125	–	205	4	–	–
TotalEnergies EP Ichthys Holdings	100.0	347	(756)	314	–	–	–	(80)	–	–
TotalEnergies EP Iraq	100.0	16	99	67	67	–	341	26	–	–
TotalEnergies Electricité et Gaz France	92.3	5	599	2,002	2,002	–	8,050	618	–	–
TotalEnergies EP Angola Block 25	100.0	271	(283)	228	–	–	–	–	–	–
TotalEnergies EP Angola Block 40	100.0	271	(291)	228	–	–	–	–	–	–
TotalEnergies EP Danmark A/S	100.0	29	2,430	4,339	4,229	–	–	623	–	–
TotalEnergies EP Maroc	100.0	81	–	75	–	–	–	–	–	–
TotalEnergies EP Nurmunai	100.0	120	(120)	120	–	–	–	–	–	–
TotalEnergies EP Qatar	100.0	–	715	2,855	2,855	–	–	757	–	–
TotalEnergies Gestion USA	100.0	4,759	568	4,759	4,759	–	–	(382)	–	–
TotalEnergies Holdings	100.0	2,889	31,818	46,905	46,905	1	–	8,472	3,500	–
TotalEnergies Holdings Europe	53.2	65	15,661	4,446	4,446	–	–	5,852	3,829	–
TotalEnergies Marketing Services	100.0	324	2,716	6,204	6,204	–	48	552	404	80
TotalEnergies Raffinage Chimie	100.0	934	12,852	13,171	13,171	–	–	3,095	3,753	–
TotalEnergies Raffinage France	60.2	191	(683)	3,790	–	–	22,502	(654)	–	212
TotalEnergies Refining & Chemicals Arabia	100.0	80	430	80	80	283	4	129	–	–
TotalEnergies Renewables	100.0	255	(614)	365	365	–	–	(209)	–	–
TOTSA	100.0	6	6,999	9,900	9,900	–	99,040	2,279	3,207	–
TotalEnergies Ventures International	100.0	45	20	186	39	–	–	(1)	–	–
Others [a][c]	–	–	–	633	432	10,052[a]	–	–	321	71,879[b]
Total				**108,365**	**100,357**	**10,337**			**15,190**	**72,171**

(a) Including TotalEnergies Finance for €5,846 million and TotalEnergies Treasury for €3,240 million.
(b) (Including €52,522 million concerning TotalEnergies Capital, TotalEnergies Capital International and TotalEnergies Capital Canada for bond issue and short-term financing plans.
(c) This item covers subsidiaries and affiliates whose gross value does not exceed 1% of the share capital.

10.4.2 Five-year financial data

Share capital at year-end (M€)	2024	2023	2022	2021	2020
Share capital	5,994	6,031	6,548	6,601	6,633
Number of common shares outstanding	2,397,679,661	2,412,251,835	2,619,131,285	2,640,429,329	2,653,124,025
Number of future shares to issue:					
– share subscription options	–	–	–	–	–

Operation and income for the year (M€)	2024	2023	2022	2021	2020
Net commercial sales	3,925	4,343	5,011	2,508	1,903
Employee profit sharing	33	37	38	36	49
Net income	15,275	11,232	7,835	6,868	7,238
Retained earnings before appropriation	16,179	12,007	13,620	13,622	13,332
Income available for appropriation	31,454	23,239	21,455	20,490	20,570
Dividends (including interim dividends)	7,292	7,120	9,509	6,939	6,984
Retained earnings	24,162	16,119	11,946	13,551	13,586

Earnings per share (€)	2024	2023	2022	2021	2020
Income after tax, before depreciation, amortization and provisions[a]	6.11	4.56	3.66	3.28	3.18
Income after tax and depreciation, amortization and provisions[a]	6.73	4.73	3.13	2.61	2.73
Net dividend per share	3.22	3.01	2.81	2.64	2.64

Employees (M€)	2024	2023	2022	2021	2020
Number of employees As of December 31,[b]	3,726	3,581	3,565	6 078	6 321
Total payroll for the year	891	882	792	881	935
Social security and other staff benefits	256	239	231	327	334

(a) Earnings per share are calculated based on the fully-diluted weighted-average number of common shares outstanding during the year, excluding treasury shares and shares held by subsidiaries.
(b) Including employees on end-of-career leave or taking early retirement (dispensations from work, 151 in 2020, 201 in 2021, 217 in 2022, 152 in 2023, and 41 in 2024).

10.4.3 Proposed allocation of 2024 income

(Net dividend proposed: €3.22 per share) (€)	
Income for the year	15,274,710,026
Retained earnings before appropriation	16,178,960,261
Total available for allocation	**31,453,670,287**
2024 dividends: €3.22 per share	7,291,717,846
Retained earnings	24,161,952,441
Total allocated	**31,453,670,287**

10.4.4 Statement of changes in share capital for the past five years

For the year ended (M€)		Cash contributions		Successive amounts of nominal capital	Cumulative number of common shares of the Company
		Par value	Premiums		
2020	**Changes in capital**				
	Capital increase reserved for Employees	33	306	6,538	2,615,060,337
	Capital increase by dividend paid in shares	95	1,001	6,633	2,653,124,025
2021	**Changes in capital**				
	Capital increase reserved for Employees	26	291	6,659	2,663,713,738
	Capital reduction by cancellation of treasury shares	(58)	(982)	6,601	2,640,429,329
2022	**Changes in capital**				
	Capital increase reserved for Employees	24	315	6,625	2,649,796,811
	Capital reduction by cancellation of treasury shares	(77)	(1,247)	6,548	2,619,131,285
2023	**Changes in capital**				
	Capital increase reserved for Employees	20	335	6,568	2,627,133,440
	Capital reduction by cancellation of treasury shares	(537)	(11,047)	6,031	2,412,251,835
2024	Changes in capital				
	Capital increase reserved for Employees	27	455	6,058	2,423,085,022
	Capital reduction by cancellation of treasury shares	(64)	(1,495)	5,994	2,397,679,661

10.4.5 Payment terms for TotalEnergies SE (Article D. 441-6 of the French Commercial Code)

The payment terms of invoices from suppliers and customers of TotalEnergies SE as of December 31, 2024, presented in the table below pursuant to the provisions of Article D. 441-6 of the French Commercial Code, are established within the boundaries of the parent company, and not TotalEnergies and therefore include invoices issued and received between TotalEnergies SE and its subsidiaries.

	SUPPLIERS						CUSTOMERS					
	Invoices received and outstanding at the closing date of the previous fiscal year						Invoices issued and outstanding at the closing date of the previous fiscal year					
As of December 31, 2024 (M€)	0 day (provisional)	1 to 30 days	31 to 60 days	61 to 90 days	91 days or more	Total (1 day or more)	0 day (provisional)	1 to 30 days	31 to 60 days	61 to 90 days	91 days or more	Total (1 day or more)
(A) Late payment brackets												
Number of invoices involved	222					583	427					21,658
Total value of invoices involved (including tax)	98	0	0	0	6	6	113	2	264	75	442	783[a]
Percentage of the total value of purchases for the fiscal year (including tax)	1.5%	0.0%	0.0%	0.0%	0.1%	0.1%						
Percentage of sales for the fiscal year (including tax)							1.9%	0.0%	4.5%	1.3%	7.4%	13.2%
(B) Invoices excluded from (A) relating to disputed or unrecorded liabilities and receivables												
Number of invoices excluded	None						None					
Total value of invoices excluded	None						None					
(C) Reference payment terms used (contractual or legal – Article L. 441-6 or Article L. 443-1 of the French Commercial Code)												
Payment terms used for late payment penalties	Legal payment terms						Legal payment terms					

(a) The customer invoices due at the closing date of the fiscal year are mainly due to subsidiaries of the Company.

A significant portion of the invoices issued by TotalEnergies SE relates to internal services re-invoiced to the companies of the Company. Most of these companies are included in the scope of consolidation. Thus, 94% of the outstanding customer invoices due at the balance sheet date (i.e. 94% of the total amount including VAT) relate to consolidated companies.

In order to present only the invoices issued to non-consolidated companies or third parties, the table below has been restated for invoices issued and received by consolidated companies.

	SUPPLIERS (non-consolidated compagnies or third parties)						CUSTOMERS (non-consolidated compagnies or third parties)					
	Invoices received and outstanding at the closing date of the previous fiscal year						Invoices issued and outstanding at the closing date of the previous fiscal year					
As of December 31, 2024 *(M€)*	0 day (provisional)	1 to 30 days	31 to 60 days	61 to 90 days	91 days or more	Total (1 day or more)	0 day (provisional)	1 to 30 days	31 to 60 days	61 to 90 days	91 days or more	Total (1 day or more)
Late payment brackets												
Number of invoices involved	187					491	67					1,342
Total value of invoices involved (including tax)	97	0	0	0	4	4	1	1	1	7	40	49
Percentage of the total value of purchases for the fiscal year (including tax)	12.5%	0.0%	0.0%	0.0%	0.5%	0.5%						
Percentage of sales for the fiscal year (including tax)							0.6%	0.7%	0.4%	3.3%	19.9%	24.3%

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Additional reporting information

11.1 World Economic Forum Core extra-financial metrics 646

11.2 SASB Report 650

TotalEnergies considers transparency as a principle of action to provide a clear picture to investors, regulators and the public at large.

TotalEnergies also supports the World Economic Forum's initiative to propose common extra-financial metrics for all companies (refer to the white paper titled "Measuring Stakeholder Capitalism – Towards common metrics and consistent reporting" published in September 2020) and started to report on the WEF's proposed core metrics in 2020.

Furthermore, the Company has proposed an additional reporting according to the SASB standard, EM-EP Oil & Gas Exploration & Production since 2020.

11.1 World Economic Forum Core extra-financial metrics

The following table uses the core metrics proposed by the World Economic Forum in the white paper titled "Measuring Stakeholder Capitalism – Towards common metrics and consistent reporting" published in September 2020.

Sub-items, proposed metrics and disclosures	Reported	TotalEnergies' disclosures (2024)
PRINCIPLES OF GOVERNANCE		
Governing Purpose		
Setting purpose The company's stated purpose, as the expression of the means by which a business proposes solutions to economic, environmental and social issues. Corporate purpose should create value for all stakeholders, including shareholders.	Yes	TotalEnergies is a global integrated energy company that produces and markets energies: oil and biofuels, natural gas, biogas and low-carbon hydrogen, renewables and electricity. Our more than 100,000 employees are committed to provide as many people as possible with energy that is more reliable, more affordable and more sustainable. Active in about 120 countries, TotalEnergies places sustainability at the heart of its strategy, its projects and its operations. (Source: 2024 URD, §1.1.1)
Quality of Governing Body		
Board composition Composition of the highest governance body and its committees by: competencies relating to economic, environmental and social topics; executive or non-executive; independence; tenure on the governance body; number of each individual's other significant positions and commitments, and the nature of the commitments; gender; membership of under-represented social groups; stakeholder representation.	Partially	Information available in point 4.1 of chapter 4: "Administration and management bodies" and in point 5.1.2.1. "Role and composition of administration, management and supervisory bodies (GOV-1)". (Source: 2024 URD, §4.1 and 5.1.2.1)
Stakeholder Engagement		
Material issues impacting stakeholders A list of the topics that are material to key stakeholders and the company, how the topics were identified and how the stakeholders were engaged.	Partially	Information available in points 5.1.3.2 and 5.1.3.3 of chapter 5. (Source: 2024 URD, §5.1.3.2 and 5.1.3.3)
Ethical Behaviour		
Anti-corruption 1. Total percentage of governance body members, employees and business partners who have received training on the organization's anti-corruption policies and procedures, broken down by region a) Total number and nature of incidents of corruption confirmed during the current year, but related to previous years; and b) Total number and nature of incidents of corruption confirmed during the current year, related to this year. 2. Discussion of initiatives and stakeholder engagement to improve the broader operating environment and culture, in order to combat corruption.	Partially	Information available in points 3.6.8.1 (Human rights) and 5.4.2 (The fight against corruption) of chapters 3 and 5. (Source: 2024 URD, § 3.6.8.1 and 5.4.2)
Protected ethics advice and reporting mechanisms A description of internal and external mechanisms for: 1. seeking advice about ethical and lawful behaviour, and organizational integrity; 2. reporting concerns about unethical or unlawful behaviour, and organizational integrity.	Yes	Information available in points 5.4.1 (Business conduct policy and corporate culture) and 5.3.3.3 (Processes to remedy negative impacts and channels for affected communities to voice their concerns) of chapter 5, as well as in points 3.6.6 (Whistle-blowing mechanisms) of chapter 3. (Source: 2024 URD, §5.4.1, 5.3.3.3 and 3.6.6)

Sub-items, proposed metrics and disclosures	Reported	TotalEnergies' disclosures (2024)
Risk and Opportunity Oversight		
Integrating risk and opportunity into business process		
Company risk factor and opportunity disclosures that clearly identify the principal material risks and opportunities facing the company specifically (as opposed to generic sector risks), the company appetite in respect of these risks, how these risks and opportunities have moved over time and the response to those changes. These opportunities and risks should integrate material economic, environmental and social issues, including climate change and data stewardship.	Yes	Information available in points 3.1, 5.1.3.3 and 5.1.4. (Source: 2024 URD, §3.1, 5.1.3.3 and 5.1.4)
PLANET		
Climate change		
Greenhouse Gas (GHG) emissions		Information available in point 5.2.1.3 B of chapter5.
For all relevant greenhouse gases (e.g. carbon dioxide, methane, nitrous oxide, F gases etc.), report in metric tonnes of carbon dioxide equivalent (tCO_2e) GHG Protocol Scope 1 & Scope 2 emissions.		Indicators related to climate change[1]
Estimate and report material upstream and downstream (GHG Protocol Scope 3) emissions where appropriate.		

		Operated perimeter		
GHG emissions - Scope 1+2		2024	2023	2015
Scope 1 Direct GHG emissions	Mt CO_2e	**33**	**32**	**42**
Scope 2 Indirect emissions from energy use	Mt CO_2e	**1**	**2**	**4**
Scope 1+2	Mt CO_2e	**34**	**35**	**46**
of which oil & gas facilities	Mt CO_2e	29	30	46
of which CCGT	Mt CO_2e	5	4	–

		Operated perimeter		
GHG emissions - methane[a]		2024	2023	2020
Methane gross emissions	kt CH_4	29	34	64

(a) Excluding biogenic methane emissions, equal to around 1 kt CH_4 in 2024. Biogenic methane is nevertheless included in the calculation of Scope 1.

Other indirect GHG emissions		2024	2023	2015
Scope 3[a]	**Mt CO_2e**	**342**	**351**	**410**
Breakdown by products				
Oil	Mt CO_2e	218	227	350
Gas	Mt CO_2e	124	124	60

(a) Scope **3** GHG emissions - GHG Protocol - Category 11 (refer to the glossary for the definition).

Intensity indicators		2024	2023	2015
Lifecycle carbon intensity of energy products[a] (73 g CO_2e/MJ in 2015)	Base 100 in 2015	**83.5**	**87**	**100[b]**
Intensity of methane emissions from operated oil & gas facilities (Upstream)	%	0.10	0.11	0.23

(a) Lifecycle carbon intensity of energy products sold (refer to the glossary for the definition).
(b) Indicator developed in 2018, with 2015 as the baseline year.

Other indicators		2024	2023	2015
Flared gas[a] (Upstream oil & gas operations)	Mm^3/d	2.5	2.5	7.2
of which routine flaring	Mm^3/d	0.5	0.3	*2.3[b]*

(a) This indicator includes safety flaring, routine flaring and non-routine flaring.
(b) Volumes estimated upon historical data.

(Source: 2024 URD, §5.2.1.3)

(1) Refer to point 5.2.1 of the chapter 5 for the scope of reporting.

Sub-items, proposed metrics and disclosures	Reported	TotalEnergies' disclosures (2024)
Climate change		
TCFD implementation		
Fully implement the recommendations of the Task Force on Climate related Financial Disclosures (TCFD). If necessary, disclose a timeline of at most three years for full implementation. Disclose whether you have set, or have committed to set, GHG emissions targets that are in line with the goals of the Paris Agreement – to limit global warming to well below 2 °C above pre-industrial levels and pursue efforts to limit warming to 1.5 °C – and to achieve net zero emissions before 2050.	Yes	TotalEnergies has publicly supported the TCFD and its recommendations and has implemented them since its 2017 annual report. Starting in 2024, the TCFD recommendations have been adopted by the ISSB (International Sustainability Standards Board). In accordance with the European CSRD directive requirements TotalEnergies henceforth publishes a sustainability reporting under the CSRD and following ESRS standards (refer to point 5.2.1 of chapter 5). In May 2024, EFRAG and the IFRS foundation published interoperability guidelines between ESRS and ISSB standards.
Nature Loss		
Land use and ecological sensitivity		
Report the number and area (in hectares) of sites owned, leased or managed in or adjacent to protected areas and/or key biodiversity areas (KBA).	Yes	175 sites operated by the Company representing 6,769 hectares are located in or close to protected areas or key areas for biodiversity(1). (Source: 2024 URD, §.5.2.4.6)
Fresh Water Availability		
Water consumption and withdrawal in water stressed areas		**Operated sites ESRS Perimeter**
Report for operations where material: megalitres of water withdrawn, megalitres of water consumed and the percentage of each in regions with high or extremely high baseline water stress, according to WRI Aqueduct water risk atlas tool. Estimate and report the same information for the full value chain (upstream and downstream) where appropriate.	Yes	Freshwater withdrawal excluding open loop cooling water: 92 10^6 m^3 Freshwater withdrawal in Water Stress Area: 56 10^6 m^3 Freshwater consumption: 45 10^6 m^3 Freshwater consumption in Water Stress Area: 26 10^6 m^3 (Source: 2024 URD, §5.2.3.5)
PEOPLE		
Dignity and Equality		
Diversity and inclusion Percentage of employees per employee category, by age group, gender and other indicators of diversity (e.g. ethnicity).	Yes	Information available in point 5.3.1.3-D of chapter 5. N.B. Tables of employees available in points 5.3.1.1 and 5.3.1.3-D of chapter 5 including breakdowns by sex, by type of contract, by region, by age groups etc. Details of the data, as well as other breakdowns, are available with a five-year history on the TotalEnergies website, in the Indicators section of the Sustainability page.
Pay equality Ratio of the basic salary and remuneration for each employee category by significant locations of operation for priority areas of equality: women to men, minor to major ethnic groups, and other relevant equality areas.	Partially	Information available in points 5.3.1.3-C and D of chapter 5. N.B. Pay gap indicators are available in point 5.3.1.3-D.
Wage level 1. Ratios of standard entry level wage by gender compared to local minimum wage. 2. Ratio of the annual total compensation of the CEO to the median of the annual total compensation of all its employees, except the CEO.	Yes	Information available in points 5.3.1.3-C and D of chapter 5. N.B. Ratio of the lowest base salary (M/W) to the minimum salary guaranteed by local legislation, aggregated by geographical area, available in point 5.3.1.3-D. Chairman and Chief Executive Officer compensation ratio available in point 4.3.2.1 of chapter 4.
Risk for incidents of child, forced or compulsory labor An explanation of the operations and suppliers considered to have significant risk for incidents of child labour, forced or compulsory labour. Such risks could emerge in relation to: a) type of operation (such as manufacturing plant) and type of supplier; and b) countries or geographic areas with operations and suppliers.	Yes	Forced and child labor have been identified as risks of severe negative impacts of the Company's activities on human rights, notably in the supply chain, and mentioned as such in the Sustainability report – Workers in the value chain section. The supplier qualification process is presented in the Sustainability report – Supplier relationship management section. (Source: 2024 URD, §5.3.2 and 5.4.3)

(1) In accordance with the GRI reference framework.

Sub-items, proposed metrics and disclosures	Reported	TotalEnergies' disclosures (2024)
Health and well being		
Health and safety 1. The number and rate of fatalities as a result of work related injury; high consequence work related injuries (excluding fatalities); recordable work related injuries; main types of work related injury; and the number of hours worked. 2. An explanation of how the organization facilitates workers' access to non-occupational medical and healthcare services, and the scope of access provided for employees and workers.	Yes	Indicators Number of fatalities as a result of work related injury: **1** Rate of fatalities as a result of work related injury (per 100 million hours worked): **0.25** High consequence work related injuries (excluding fatalities): **10** Recordable work related injuries (per 1 million hours worked): **0.55** Main types of work related injury: In 2024, of the 219 occupational accidents reported, 210 were related to workplace accidents. 75% occurred while walking, handling loads or objects, using portable tools or working on an energized system. Number of hours worked: **400 million** (Source: 2024 URD, §5.3.1.2) The general occupational health policy is presented in point 5.3.1.2-E and the social protection system in point 5.3.1.3-C of chapter 5.
Skills for the future		
Training provided 1. Average hours of training per person that the organization's employees have undertaken during the reporting period, by gender and employee category (total number of trainings provided to employees divided by the number of employees). 2. Average training and development expenditure per full-time employee (total cost of training provided to employees divided by the number of employees).	Yes	Information available in point 5.3.1.3-B of chapter 5. N.B. Tables available in point 5.3.1.3-B of this document. Details of the data, as well as the average training cost per year and per employee are available with a five-year history on the TotalEnergies website, in the Indicators section of the Sustainability page.
PROSPERITY		
Employment and Wealth Generation		
Absolute number and rate of employment 1. Total number and rate of new employee hires during the reporting period, by age group, gender, other indicators of diversity and region. 2. Total number and rate of employee turnover during the reporting period, by age group, gender, other indicators of diversity and region.	Yes	To implement its balanced multi-energy strategy for the benefit of the energy transition, TotalEnergies has defined a people ambition for its employees. Deployed from 2019 under the name "Better Together", it aims to attract and develop talent all over the world, promote a management style that encourages team development and make the Company a good place to work together. (Source: 2024 URD, §5.3.1.3) N.B. Tables available in point 5.3.1.1 and point 5.3.1.3-D of chapter 5. Details of the data, as well as other breakdowns, are available with a five-year history on the TotalEnergies website, in the Indicators section of the Sustainability page.
Economic Contribution 1. Direct economic value generated and distributed (EVG&D), on an accruals basis, covering the basic components for the organization's global operations, ideally split out by: – Revenues – Operating costs – Employee wages and benefits – Payments to providers of capital – Payments to government – Community investment. 2. Financial assistance received from the government: total monetary value of financial assistance received by the organization from any government during the reporting period.	Partially	Calculation of EVG&G not done as such, but some elements are available. (Source: 2024 URD, §1.1.3, 1.9, 8.2 and 8.7)
Financial investment contribution Total capital expenditures (CapEx) minus depreciation, supported by narrative to describe the company's investment strategy. Share buybacks plus dividend payments, supported by narrative to describe the company's strategy for returns of capital to shareholders.	Yes	Information provided in the URD. (Source: 2024 URD, §1.5.1, 1.9, 5.2.6, 8.6 and 8.7)

Sub-items, proposed metrics and disclosures	Reported	TotalEnergies' disclosures (2024)
Innovation in better products and services		
Total R&D expenses Total costs related to research and development.	Yes	To prepare for the future, the Company has allocated more than $1 billion in R&D, industrial innovation and digitalization in 2024. The Company invested $805 million in 2024 in its own and its subsidiaries' R&D (compared to $774 million in 2023 and $762 million in 2022) with a dedicated workforce of more than 3,500 researchers. In support of its transition strategy, TotalEnergies has significantly reoriented its R&D in recent years. Compared to 28% in 2017, TotalEnergies has decided to devote 68% of the 2024 R&D budget to low-carbon energies (renewables, biomass, batteries, etc.) and to reducing the environmental footprint through CCUS and sustainable development programs. (Source: 2024 URD, §1.6.2)
Community and social vitality		
Total tax paid Total tax paid by the group, including corporate income taxes, property taxes, non creditable VAT and other sales taxes, employer paid payroll taxes, and other taxes that constitute costs to the company, by category of taxes.	Yes	The Company publishes, every year, a tax transparency report, which provides detailed information on the taxes paid in its main countries of operations on a country-by-country basis and on the total tax contribution, broken down by category of tax and by region. (Source: TotalEnergies' website) TotalEnergies also publishes in its URD an annual report covering the payments made by its extractive affiliates to governments, per country and per project, among which tax payments, with a specific breakdown on corporate income tax payments. (Source: 2024 URD, §9.3)

11.2 SASB Report

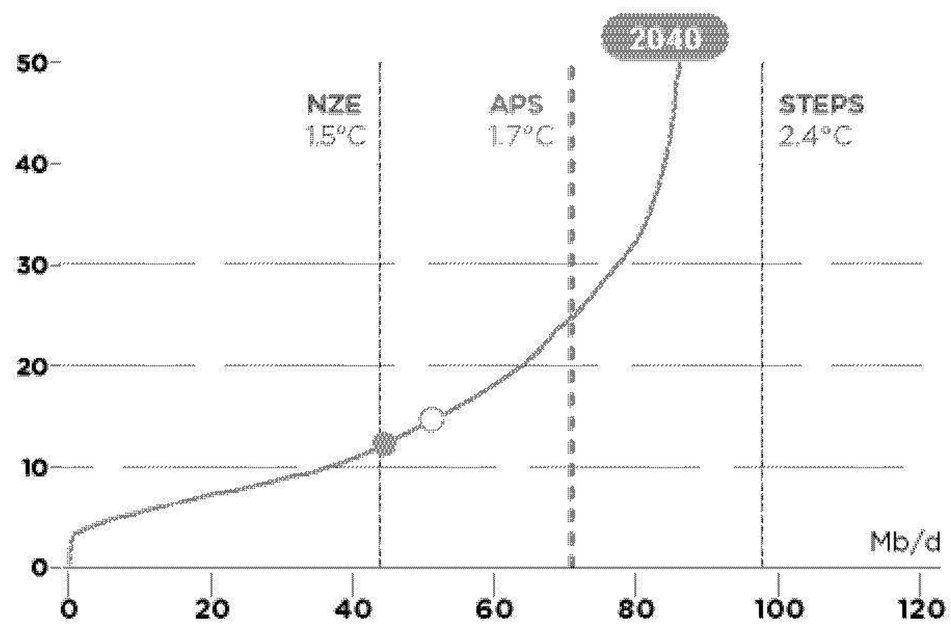
The reporting below presents a set of sustainable development indicators at Company level, based on the American SASB EM-EP standard (Oil & Gas – Exploration & Production). This report includes some of the elements of the Sustainability Report (chapter 5).

SASB code	Metrics	Reported	TotalEnergies' disclosures (2024)
Greenhouse Gas Emissions			
	Gross global Scope 1 emissions	Yes	**33 Mt CO_2e** (Source: 2024 URD, §5.2.1.3)
EM-EP-110a.1	Scope 1, percentage of methane	Yes	**0.8 Mt CO_2e (29 kt CH_4), *i.e.*, 3%** (Source: 2024 URD, §5.2.1.3)
	Scope 1, percentage covered under emissions-limiting regulations	Yes	**54%** (Source: 2024 URD, §5.2.1.3)
EM-EP-110a.2	Amount of gross global Scope 1 emissions from flared hydrocarbons	Yes	**3 Mt CO_2e**
	Amount of gross global Scope 1 emissions from other combustion	Yes	**25 Mt CO_2e**
	Amount of gross global Scope 1 emissions from process emissions	Yes	**4 Mt CO_2e**
	Amount of gross global Scope 1 emissions from other vented emissions	Yes	**0.5 Mt CO_2e**
	Amount of gross global Scope 1 emissions from fugitive emissions	Yes	**<0.1 Mt CO_2e**
EM-EP-110a.3	Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	Yes	TotalEnergies has set targets and introduced a number of indicators to steer its performance (refer to point 5.2.1 of chapter 5) (Source: 2024 URD, §5.2.1)
Air Quality			
EM-EP-120a.1	Air emissions of the following pollutants: NO_X (excluding N_2O)	Yes	**57 kt** (Source: 2024 URD, §5.2.2.3)
	Air emissions of the following pollutants: SO_X	Yes	**SO_2: 17 kt** (Source: 2024 URD, §5.2.2.3)
	Air emissions of the following pollutants: volatile organic compounds (VOCs)	Yes	**NMVOCs: 35 kt** (Source: 2024 URD, §5.2.2.3)
	Air emissions of the following pollutants: particulate matter (PM_{10})	Yes	**3 kt of total particulate matter** (Source: 2024 URD, §5.2.2.3)

SASB code	Metrics	Reported	TotalEnergies' disclosures (2024)
Water Management			
EM-EP-140a.1	Total fresh water withdrawn	Yes	**92,000 megaliters** (Source: 2024 URD, §5.2.3.5)
	Percentage of fresh water withdrawn in regions with High or Extremely High Baseline Water Stress	Yes	**61%** (Source: 2024 URD, §5.2.3.5)
	Total fresh water consumed	Yes	**45,000 megaliters** (Source: 2024 URD, §5.2.3.5)
	Percentage of fresh water consumed in regions with High or Extremely High Baseline Water Stress	Yes	**58%**
EM-EP-140a.2	Volume of produced water and flowback generated	Yes	**129,265 megaliters** (indicator for EP segment only)
	Percentage discharged	Yes	**53%** (indicator for EP segment only)
	Percentage injected	Yes	**47%** (indicator for EP segment only)
	Percentage recycled	Yes	**0%** (indicator for EP segment only)
	Hydrocarbon content in discharged water	Yes	**Offshore: 11.2 mg/l** **Onshore: 2.0 mg/l** (Source: 2024 URD, §5.2.2.3)
EM-EP-140a.3	Percentage of hydraulically fractured wells for which there is public disclosure of all fracturing fluid chemicals used	Yes	**79%**
EM-EP-140a.4	Percentage of hydraulic fracturing sites where ground or surface water quality deteriorated compared to a baseline	Yes	**0%**
Biodiversity Impacts			
EM-EP-160a.1	Description of environmental management policies and practices for active sites	Yes	Information is presented in point 5.2.4 of chapter 5. (Source: 2024 URD, §5.2.4)
EM-EP-160a.2	Number of hydrocarbon spills	Yes	**24** (Source: 2024 URD, §5.2.2.3)
	Volume of hydrocarbon spills	Yes	**600 m^3 (3,774 barrels)** (Source: 2024 URD, §5.2.2.3)
	Spills: volume in Arctic	Yes	**0 m^3**
	Volume impacting shorelines with ESI rankings 8-10	Yes	**0 m^3**
	Volume recovered	Yes	**28 m^3 (176 barrels)** (Source: 2024 URD, §5.2.2.3)
EM-EP-160a.3	Percentage of (1) proved and (2) probable reserves in or near sites with protected conservation status or endangered species habitat	Yes	**10.1%** of proved reserves are operated reserves located in or near sites with protected conservation status or endangered species habitat
Security, Human Rights & Rights of Indigenous Peoples			
EM-EP-210a.1	Percentage of (1) proved and (2) probable reserves in or near areas of conflict	Yes	**12.2%** (proved reserves)
EM-EP-210a.2	Percentage of (1) proved and (2) probable reserves in or near indigenous land	Yes	**1.9%** of proved reserves are operated reserves located in or near indigenous land Information available in points 3.6, 5.3.1.5 and 5.3.3.3. (Source: 2024 URD, §3.6, 5.3.1.5 and 5.3.3.3)
EM-EP-210a.3	Discussion of engagement processes and due diligence practices with respect to human rights, indigenous rights, and operation in areas of conflict	Yes	The Company published a Human Rights Briefing Paper in 2016, updated in 2018, in accordance with the recommendations of the United Nations Guiding Principles Reporting Framework, which is available on its website. TotalEnergies was then the first company in the oil and gas industry to do this. The third edition of this Briefing Paper was released in January 2024.
Community Relations			
EM-EP-210b.1	Discussion of process to manage risks and opportunities associated with community rights and interests	Yes	Information available in point 5.3.3.3 of chapter 5. (Source: 2024 URD, §5.3.3.3)

SASB code	Metrics	Reported	TotalEnergies' disclosures (2024)
Community Relations			
EM-EP-210b.2	Number and duration of non-technical delays	No	Not aggregated at Company level.
Health & Safety for everyone			
EM-EP-320a.1	Total recordable incident rate (TRIR)	Yes	TRIR: number of recorded injuries per million hours worked – All Personnel **0.55** Company employees 0.44 Contractors' personnel 0.67 Which corresponds to: TRIR All personnel: **0.11** (per 200,000 hours worked) TRIR Company employees: **0.09** (per 200,000 hours worked) TRIR Contractors' employees: **0.13** (per 200,000 hours worked) Note: these rates do not include work-related illnesses (Source: 2024 URD, §5.3.1.2)
	Fatality rate	Yes	Number of occupational illnesses recorded in 2024 for Company employees: **170** (Source: 2024 URD, §5.3.1.2) **0.25** (per 100 million hours worked) Which corresponds to: **0.0005** (per 200,000 hours worked) (Source: 2024 URD, §5.3.1.2)
	Near miss frequency rate (NMFR)	Yes	Number of near miss and anomalies reported: **close to 1,000,000** Number of hours worked: **400 million** Which correspond to a NMFR (per 200,000 hours worked) of around: **500** (Source: 2024 URD, §5.3.1.2)
	Average hours of health, safety, and emergency response training for full-time employees	Yes	Number of average training days per employee: **4.1** (excluding on the job training) Percentage of training dedicated to HSE: **24%** (Source: 2024 URD, §5.3.1.3.B)
	Average hours of health, safety, and emergency response training for contract employees	No	Not available. We don't define training needs by individual contract status and categories of employees.
	Average hours of health, safety, and emergency response training for short-service employees	No	Not available. We don't define training needs by individual contract status and categories of employees.
	Discussion of management systems used to integrate a culture of safety throughout the exploration and production lifecycle	Yes	Information available in point 5.3.1.2. (Source: 2024 URD, §5.3.1.2)
Reserves Valuation & Capital Expenditures			
EM-EP-420a.1	Sensitivity of hydrocarbon reserve levels to future price projection scenarios that account for a price on carbon emissions	Yes	Resilience of the organization's strategy TotalEnergies has strengthened the resilience of its portfolio through very active portfolio management in recent years: the Upstream portfolio has seen a 50% portfolio change since 2015, ensuring an oil reserves replacement ratio above 100% over 2015-2024. The portfolio has a low breakeven point, in line with the Company's strategic objective of keeping it below $30/b (the Company's organic cash breakeven point before dividends is $25.4/b in 2024), which ensures the competitiveness of its resources. In particular, for its Upstream Oil & Gas assets in 2024, TotalEnergies has the lowest production cost per barrel of around $4.9/boe among its peers(1) and its GHG emissions intensity (Scope 1+2) is falling to 17 kg CO_2e/boe in 2024(2). Furthermore, the average life of the Company's proved and probable Oil & Gas reserves is 18.5 years, and the discounted value of its Upstream Oil & Gas assets of more than 18.5 years represents less than 15% of their total value.

(1) Peers: BP, Chevron, ExxonMobil, Shell.
(2) Oil & Gas Upstream intensity is calculated excluding integrated LNG assets.

SASB code	Metrics	Reported	TotalEnergies' disclosures (2024)
Reserves Valuation & Capital Expenditures			
EM-EP-420a.1	Sensitivity of hydrocarbon reserve levels to future price projection scenarios that account for a price on carbon emissions	Yes	**Risks of stranded assets** In June 2020, TotalEnergies determined that among its Upstream assets, only the Fort Hills and Surmont oil sands projects in Canada could be classified as stranded assets, meaning assets with reserves beyond 20 years and high production costs, whose overall reserves might therefore not be produced by 2050. TotalEnergies has sold these assets in 2023. This portfolio management approach allows TotalEnergies to mitigate the risk of stranded assets in the future if the risks of a structural decline in demand for Oil & Gas materialize faster than estimated as a result of stricter global environmental regulations and constraints and the resulting changes in consumer preferences. As shown on the merit order curve of production costs for 2040, compared to the demand expected under various IEA scenarios, TotalEnergies' portfolio of Upstream Oil & Gas projects has an average technical cost that places it among the 50 Mb/d lowest-cost for these horizons, thanks in particular to long plateau oil & gas assets with low production costs. **Merit Curve of Global Oil Production Cost**(1) **Technical cost, $/b**  **Sensitivity to CO_2, Oil & Gas prices** TotalEnergies assesses the robustness of its portfolio, including new material investments, based on relevant scenarios and sensitivity tests. Each material investment, including in the exploration, acquisition or development of Oil & Gas resources, as well as in other energies and technologies, is reviewed taking into account a Brent price scenario at $50/b and Henry Hub at $3/Mbtu, i.e. prices lower than those of the IEA APS scenario deemed to be compatible with the objectives of the Paris Agreement; every new investment enhances the resilience of the Company's portfolio. Even though CO_2 pricing does not currently apply in all the countries where the Company operates, TotalEnergies includes as base case in its investment criteria a minimum CO_2 price of $100/t (or the prevailing price in a given country, if higher) and beyond 2030, the CO_2 price is increased by 2%/year. Assuming a CO_2 price of $200/ton from 2024 and an annual increase of 2% beyond 2030, i.e. an increase of $100/ton compared to the base case scenario, TotalEnergies estimates a negative impact of around 15% on the discounted present value of all its assets (Upstream and Downstream).

(1) Source: Rystad, IEA WEO 2024 scenarios.

SASB code	Metrics	Reported	TotalEnergies' disclosures (2024)
Reserves Valuation & Capital Expenditures			
			Compared with the reference scenario used to evaluate investments (Brent at $50/b), TotalEnergies evaluated the impact on the present value of its assets (Upstream and Downstream) of using the NZE price scenario published by the IEA(1) in 2024. Such a scenario would reduce the present value of all of the Company's assets (Upstream and Downstream) by around 10% compared to its reference scenario used to assess its investments. **Impairment of Upstream assets** In addition, to ensure robust accounting of its assets in the balance sheet, the Company calculates the impairment of its Upstream assets on the basis of an oil price trajectory that remains sustained at 70_{2024}$/b until 2030, then decreases linearly to reach 50_{2024}$/b in 2040, and then decreases from 2040 onwards to the price adopted in 2050 by the IEA's NZE scenario, i.e. 25.8_{2024}$/b. Gas prices retained in Europe and Asia decline and stabilise from 2027 until 2040 at respectively 8_{2024}$/MBtu and 9_{2024}$/MBtu at levels lower than current prices; the Henry Hub remaining at 3_{2024}$/MBtu over the period 2025-2040. They then all converge towards the prices in the IEA's NZE scenario in 2050. (Source: 2024 URD, §5.2.1.1 B)
EM-EP-420a.1	Sensitivity of hydrocarbon reserve levels to future price projection scenarios that account for a price on carbon emissions	Yes	**Unconventional Oil & Gas** Unconventional Oil *&* Gas are defined by the EIA (United States)(2) as hydrocarbons that are "*produced by means that do not meet the criteria for conventional production*" ie "*by a well drilled into a geologic formation in which the reservoir and fluid characteristics permit the oil and natural gas to readily flow to the wellbore*." According to UNFC(3), "*examples include CBM, low permeability deposits such as tight gas (including shale gas) and tight oil (including shale oil), gas hydrates and natural bitumen*". In 2024, these non-conventional hydrocarbons, essentially gas, accounted for 7% of the Company's production and less than 5% of it consolidated turnover. In addition, TotalEnergies no longer produces oil from tar sands since the divestment of its Surmont and Fort Hills Canadian assets at the end of 2023. In line with its integration strategy in the LNG chain, TotalEnergies acquired stakes in 2024 in fields of the Eagle Ford Basin in the United States, including the Dorado field. The latter displays an emission intensity of around 10 kg CO_2e/boe.
EM-EP-420a.2	Estimated carbon dioxide emissions embedded in proved hydrocarbon reserves	Yes	**3.6 Gt CO_2e**
EM-EP-420a.3	Amount invested in renewable energy, revenue generated by renewable energy sales	Yes	Data are available in chapter 5.2.6.3 of 2024 URD for the three financial indicators: turnover ("Turnover"), capital expenditures ("CapEx") and operating expenditures ("OpEx"), within the meaning of the Taxonomy regulation, on the scope of entities exclusively controlled and consolidated by TotalEnergies SE, for the year 2024. Renewable energy related activities are considered to be the following: – renewable electricity generation (using solar photovoltaic technology / from wind power / from hydropower / storage): 4.1, 4.3, 4.5, 4.10, – manufacture of biogas/biofuels for use in transport, and of bioliquids: 4.13, – anaerobic digestion of bio-waste: 5.7, – installation, maintenance and repair of charging stations for electric vehicles in buildings and of renewable energy tech: 7.4, 7.6. Definition of financial indicators is given in chapter 5.2.6.1 of 2024 URD. (Source: 2024 URD, §5.2.6.1 and 5.2.6.3)

(1) World Energy Outlook 2024, Table 2.3 Wholesale fossil fuel prices by scenario (p. 90).
(2) Refer to the definition by the Energy Information Administration, a federal agency within the U.S. Department of Energy.
(3) Refer to United Nations Framework Classification for Resources to Petroleum, "Supplementary Specifications for the application of the United Nations Framework Classification for Resources to Petroleum" pages 8 and 22, points 9, 102, 103, 104.

SASB code	Metrics	Reported	TotalEnergies' disclosures (2024)
Reserves Valuation & Capital Expenditures			
EM-EP-420a.4	Discussion of how price and demand for hydrocarbons and/or climate regulation influence the capital expenditure strategy for exploration, acquisition, and development of assets	Yes	Refer to **EM-EP-420a.1** related to the resilience of the organization strategy.
Business Ethics & Transparency			
EM-EP-510a.1	Percentage of (1) proved and (2) probable reserves in countries that have the 20 lowest rankings in Transparency International's Corruption Perception Index	Yes	**6.8%** (proved reserves)
EM-EP-510a.2	Description of the management system for prevention of corruption and bribery throughout the value chain	Yes	Information available in point 5.4.2 (The fight against corruption). (Source: 2024 URD, §5.4.2)
Management of the Legal & Regulatory Environment			
EM-EP-530a.1	Discussion of corporate positions related to government regulations and/or policy proposals that address environmental and social factors affecting the industry	Partially	Collective initiative supported by TotalEnergies (Source: 2024 URD, §1.4)
Critical Incident Risk Management			
EM-EP-540a.1	Process Safety Event (PSE) rates for Loss of Primary Containment (LOPC) of greater consequence (Tier 1)	Yes	2024 / 2023 / 2022 Loss of primary containment (Tier 1): 14 / 19 / 11 Million of hours worked – All Personnel: 400 / 400 / 392 Tier 1 Process Safety Event rate per 200,000 hours worked is then equal to **0.007**. (Source: 2024 URD, §5.3.1.2)
EM-EP-540a.2	Description of management systems used to identify and mitigate catastrophic and tail-end risks	Yes	The information is available in point 5.3.1.2-C. (Source: 2024 URD, §5.3.1.2)
Activity Metrics			
EM-EP-000.A	Production of oil	Yes	**1,314 kb/d** (Source: 2024 URD, §2.1)
	Production of natural gas	Yes	**1,120 kboe/d** (Source: 2024 URD, §2.1)
	Production of synthetic oil	Yes	**0 boe/d**
	Production of synthetic gas	Yes	**0 boe/d**
EM-EP-000.B	Number of offshore sites	Yes	**54** (Assets with entitled production in 2024)
EM-EP-000.C	Number of terrestrial sites	Yes	**28** (Assets with entitled production in 2024)

11

Glossary

ABBREVIATIONS

€:	euro
$ or USD or dollar	US dollar
ADR:	American depositary receipt (evidencing an ADS)
ADS:	American depositary share (representing a share of a company)
AMF:	*Autorité des marchés financiers* (French Financial Markets Authority)
API:	American Petroleum Institute
CCS:	carbon capture and storage
CCUS:	carbon capture utilization and storage (refer to the definition of carbon capture and storage below)
CFFO	cash flow from operations excluding working capital
CNG:	compressed natural gas
CO_2:	carbon dioxide
CO_2e:	equivalent CO_2
CSR:	corporate and social responsibility
DACF:	debt adjusted cash flow (refer to the definition of debt adjusted cash flow below)
ERM:	indicator of European Refining Margin
EV:	electric vehicle
FLNG:	floating liquefied natural gas
FPSO:	floating production, storage and offloading
FSRU:	floating storage and regasification unit
GHG:	greenhouse gas
HSE:	health, safety and the environment
IEA:	International Energy Agency
IFRS:	International Financial Reporting Standards
IPIECA:	International Petroleum Industry Environmental Conservation Association
LNG:	liquefied natural gas
LPG:	liquefied petroleum gas
NGL:	natural gas liquids
NGV:	natural gas vehicle
OML:	oil mining lease
PPA:	Power Purchase Agreement (refer to the definition below)
ROACE:	return on average capital employed
ROE:	return on equity
SDG:	Sustainable development goal
SEC:	United States Securities and Exchange Commission
TCFD:	task force on climate-related financial disclosures
WHRS:	Worldwide Human Resources Survey (refer to point 5.3.1 of chapter 5 for the definition)

UNITS OF MEASUREMENT

b =	barrel[1]
B =	billion
Bcm =	billion of cubic meters
boe =	barrel of oil equivalent
btu =	British thermal unit
cf =	cubic feet
/d =	per day
Gt CO_2 =	billion of CO_2 tons
GW =	gigawatt
GWh =	gigawatt hour
k =	thousand
km =	kilometer
m =	meter
m^3 =	cubic meter[1]
M =	million
MW =	megawatt
PJ =	petajoule
t =	(Metric) ton
toe=	ton of oil equivalent
TWh =	terawatt hour
W =	watt
/y =	per year

CONVERSION TABLE

1 acre ≈	0.405 hectares	**1 m^3 ≈**	35.3 cf
1 b =	42 US gallons ≈ 159 liters	**1 Mt of LNG ≈**	48 Bcf of gas
1 b/d of crude oil ≈	50 t/y of crude oil	**1 Mt/y of LNG ≈**	131 Mcf/d of gas
1 Bcm/y ≈	0.1 Bcf/d	**1 t of oil ≈**	7.5 b of oil (assuming a specific gravity of 37° API)
1 km ≈	0.62 mile	**1 boe = 1 b of crude oil ≈**	5,424 cf of gas in 2024[2] (5,419 cf in 2023 and 5,387 cf in 2022)

(1) Liquid and gas volumes are reported at international standard metric conditions (15 °C and 1 atm).
(2) Natural gas is converted to barrels of oil equivalent using a ratio of cubic feet of natural gas per one barrel. This ratio is based on the actual average equivalent energy content of natural gas reserves during the applicable periods and is subject to change. The tabular conversion rate is applicable to TotalEnergies' natural gas reserves on a Company-wide basis.

A

acquisitions net of assets sales

Acquisitions net of assets sales is a non-GAAP financial measure and its most directly comparable IFRS measure is Cash flow used in investing activities. Acquisitions net of assets sales refer to acquisitions minus assets sales (including other operations with non-controlling interests). This indicator can be a valuable tool for decision makers, analysts and shareholders alike because it illustrates the allocation of cash flow used for growing the Company's asset base via external growth opportunities.

adjusted EBITDA (Earnings Before Interest, Tax, Depreciation and Amortization)

Adjusted EBITDA is a non-GAAP financial measure and its most directly comparable IFRS measure is Net Income. It refers to the adjusted earnings before depreciation, depletion and impairment of tangible and intangible assets and mineral interests, income tax expense and cost of net debt, i.e., all operating income and contribution of equity affiliates to net income. This indicator can be a valuable tool for decision makers, analysts and shareholders alike to measure and compare the Company's profitability with utility companies (energy sector).

adjusted net income (TotalEnergies share)

Adjusted net income (TotalEnergies share) is a non-GAAP financial measure and its most directly comparable IFRS measure is Net Income (TotalEnergies share). Adjusted Net Income (TotalEnergies share) refers to Net Income (TotalEnergies share) less adjustment items to Net Income (TotalEnergies share). Adjustment items are inventory valuation effect, effect of changes in fair value, and special items. This indicator can be a valuable tool for decision makers, analysts and shareholders alike to evaluate the Company's operating results and to understand its operating trends by removing the impact of non-operational results and special items.

adjusted net operating income

Adjusted net operating income is a non-GAAP financial measure and its most directly comparable IFRS measure is Net Income. Adjusted Net Operating Income refers to Net Income before net cost of net debt, i.e., cost of net debt net of its tax effects, less adjustment items. Adjustment items are inventory valuation effect, effect of changes in fair value, and special items. Adjusted Net Operating Income can be a valuable tool for decision makers, analysts and shareholders alike to evaluate the Company's operating results and understanding its operating trends, by removing the impact of non-operational results and special items and is used to evaluate the Return on Average Capital Employed (ROACE) as explained below.

adjusted results

Results using replacement cost, adjusted for special items, excluding the effect of changes in fair value.

aggregator

A company that aggregates different types of electricity production. In concrete terms, an aggregator buys volumes of renewable electricity from various small producers who do not have sufficient resources to market it.

API degree

Scale established by the American Petroleum Institute (API) to measure oil density. A high API degree indicates light oil from which a high yield of gasoline can be refined.

appraisal (delineation)

Work performed after a discovery for the purpose of determining the boundaries or extent of an oil or gas field or assessing its reserves and production potential.

aromatics

Base chemical products, derived from oil, used in the manufacture of polymers. Main aromatics are benzene, toluene and xylene.

asset retirement (site restitution)

Companies may have obligations related to well-abandonment, dismantlement of facilities, decommissioning of plants or restoration of the environment. These obligations generally result from international conventions, local regulations or contractual obligations.

associated gas

Gas released during oil production.

association/consortium/joint-venture

Terms used to generally describe a project in which two or more entities participate. For the principles and methods of consolidation applicable to different types of joint arrangements according to IFRS, refer to note 1 to the Consolidated Financial Statements.

B

barrel

Unit of measurement of volume of crude oil equal to 42 US gallons or 159 liters.

barrel of oil equivalent (boe)

Conventional unit for measuring the energy released by a quantity of fuel by relating it to the energy released by the combustion of a barrel of oil.

biochemical conversion

Conversion of carbonaceous resources through biological transformation (reactions involving living organisms). Fermentation of sugar into ethanol is an example.

biofuel

Liquid or gaseous fuel that can be used for transport, produced from biomass, and meeting criteria of reducing GHG compared to the fossil reference.

biogas

Renewable gas produced locally by the fermentation of organic matter from vegetable or animal origin. It can be used in cogeneration to produce combined heat and power. It can be purified to produce biomethane, which has the same properties as natural gas and it can therefore be injected into distribution networks or used as an alternative fuel for mobility (bioCNG or bioLNG).

biogas (power generation from)

Combustion of gas produced by the fermentation of non-fossil organic matter (biomass).

bioNGV

NGV composed of biomethane, available in bioCNG and bioLNG.

biomass

All organic matter from vegetal or animal sources.

biomethane

Purified biogas, with the same characteristics as natural gas, that can be injected into the transport networks.

bitumen

Petroleum in a solid or semi-solid state in natural deposits. It usually contains sulfur, heavy metals, and other non-hydrocarbons compounds. Unable to flow naturally in the reservoir because of its high viscosity (typically greater than 10,000 centipoise), its production requires unconventional extraction technologies.
In reference to marketing, bitumen is produced from the refining of crude oil and is used in the construction industry in particular as a component of asphalt pavements, e.g. for roads, airfields, cycle paths, etc. It is a visco-elastic, adhesive and waterproof material particularly suited to the needs of construction and road sealing products(1).

C

capacity of treatment

Annual crude oil treatment capacity of the atmospheric distillation units of a refinery.

capital employed

Capital employed is a non-GAAP financial measure. They are calculated at replacement cost and refer to capital employed (balance sheet) less inventory valuations effect. Capital employed (balance sheet) refers to the sum of the following items: (i) Property, plant and equipment, intangible assets, net, (ii) Investments & loans in equity affiliates, (iii) Other non-current assets, (iv) Working capital which is the sum of: Inventories, net, Accounts receivable, net, other current assets, Accounts payable, Other creditors and accrued liabilities, (v) Provisions and other non-current liabilities and (vi) Assets and liabilities classified as held for sale. Capital Employed can be a valuable tool for decision makers, analysts and shareholders alike to provide insight on the amount of capital investment used by the Company or its business segments to operate. Capital Employed is used to calculate the Return on Average Capital Employed (ROACE).

carbon capture, use and storage (CCUS)

Technologies designed to reduce GHG emissions by capturing (C) CO_2 and then compressing and transporting it either to use (U) it for various industrial processes (e.g., enhanced recovery of oil or gas, production of chemical products), or to permanently store (S) it in deep geological formations.

carbon sinks

Natural reservoir (e.g. vegetation, oceans) or artificial reservoir (e.g. CCUS) that stores carbon in different forms.

cash flow from operations excluding working capital (CFFO)

CFFO is a non-GAAP financial measure and its most directly comparable IFRS measure is Cash flow from operating activities. Cash Flow From Operations excluding working capital is defined as cash flow from operating activities before changes in working capital at replacement cost, excluding the mark-to-market effect of Integrated LNG and Integrated Power contracts, including capital gain from renewable projects sales and including organic loan repayments from equity affiliates. This indicator can be a valuable tool for decision makers, analysts and shareholders alike to help understand changes in cash flow from operating activities, excluding the impact of working capital changes across periods on a consistent basis and with the performance of peer companies in a manner that, when viewed in combination with the Company's results prepared in accordance with IFRS, provides a more complete understanding of the factors and trends affecting the Company's business and performance. This performance indicator is used by the Company as a base for its cash flow allocation and notably to guide on the share of its cash flow to be allocated to the distribution to shareholders.

catalysts

Substances that increase a chemical reaction speed. During the refining processes, they are used in conversion units (reformer, hydrocracker, catalytic cracker) and desulphurization units. Principal catalysts are precious metals (platinum) or other less noble metals such as nickel and cobalt.

Block

Area delimited geographically by a country on its territory, offshore or onshore, in the view to exploring for and /or producing hydrocarbons.

Brent

Quality of crude oil (38° API) produced in the North Sea, from Brent and neighboring fields.

brownfield project

Project concerning developed existing fields.

charger (for an electric vehicle)

Electric vehicles (100% electric or hybrid) are supplied with electricity through batteries. A charger is a fixed equipment dedicated to recharging these batteries, through a cable linking the vehicle to a charging point. A charger can include one or two charging points, each adjacent to a dedicated parking stall (and allow for two vehicles to be charged simultaneously according to the power the charger is capable of delivering). The charger is always equipped with an electricity metering system and communication, control and payment systems can be added.

charging point (for an electric vehicle)

Equipment from the charger supplying electricity to recharge the battery of a single electric vehicle at once, attached to a parking stall. The charging point can be equipped with a cable with a connector, to link the vehicle to the charger. In some instances, the cable isn't provided. The charging point then materializes through a socket (for a plug), that the driver can use to plug a charging cable. The terms charging point and recharging point can be used interchangeably.

CNG (compressed natural gas)

Natural gas compressed between 200 and 300 bars in gaseous form and which can be stored at ambient temperature.

cogeneration

Simultaneous generation of electrical and thermal energies from a combustible source (gas, fuel oil or coal).

coker (deep conversion unit)

Unit that produces light products (gas, gasoline, diesel) and coke through the cracking of distillation residues.

Combined Cycle with Gas Turbine (CCGT)

Thermal power plant that combines two types of turbines: a combustion turbine and a steam turbine. This technology makes it possible to produce up to 50% more electricity from the same amount of fuel compared to a traditional single-cycle plant.

commercial gas

Gas produced by the upstream facilities and sent directly or indirectly to the gas market.

concession contract

Exploration and production contract under which a host country grants to an oil and gas company (or a consortium) the right to explore a geographic area and develop and produce potential reserves. The oil and gas company (or consortium) undertakes the execution and financing, at its own risk, of all operations. In return, it is entitled to the entire production.

condensates

Light hydrocarbon products produced with natural gas that exist – either in a gaseous phase or in solution – in the oil and gas under the initial pressure and temperature conditions in the reservoir, and which are recovered in a liquid state in separators, on-site facilities or gas treatment units.

(1) Source: Eurobitume.

condensate splitter
Unit that distillates condensates upstream of refining or petrochemical units.

consortium
Refer to the definition above of "association/consortium/joint-venture".

conversion
Refining operation aiming at transforming heavy products (heavy fuel oil) into lighter or less viscous products (e.g., gasoline, jet fuels).

co-processing
Refers to the simultaneous conversion of biogenic residues and intermediate petroleum distillates in existing petroleum refineries to produce renewable fuels. In contrast to the blending of biofuels into the finished petroleum product, co-processing makes use of biomass within the processing of petroleum. Suitable feedstocks for co-processing are for example wood pyrolysis oil or triglycerides such as vegetable oils, used cooking oils etc.

D

debottlenecking
Change made to a facility to increase its production capacity.

debt adjusted cash flow (DACF)
DACF is a non-GAAP financial measure and its most directly comparable IFRS measure is Cash flow from operating activities. DACF is defined as Cash Flow From Operations excluding working capital (CFFO) without financial charges. This indicator can be a valuable tool for decision makers, analysts and shareholders alike because it corresponds to the funds theoretically available to the Company for investments, debt repayment and distribution to shareholders, and therefore facilitates comparison of the Company's results of operations with those of other registrants, independent of their capital structure and working capital requirements.

decarbonization
Actions aimed at reducing the carbon intensity of activities or products and/or greenhouse gas emissions from activities.

E

e-fuels (or synthetic carbonaceous fuels)
Fuels, compatible with combustion engines, obtained from the combination of green hydrogen and CO_2 captured from factories or air emissions. Where there were two uses that emitted CO_2 (the power plant, the transport that burns the fossil fuel in its engine), there is now only one use that emits CO_2 to the atmosphere (the transport that burns the synthetic fuel in its engine while emitting CO_2), that is to say a global reduction of 50%.

effective tax rate
(Tax on adjusted net operating income)/(adjusted net operating income – income from equity affiliates – dividends received from investments – impairment of goodwill + tax on adjusted net operating income).

effect of changes in fair value
The effect of changes in fair value presented as an adjustment item reflects, for trading inventories and storage contracts, differences between internal measures of performance used by TotalEnergies' Executive Committee and the accounting for these transactions under IFRS.

IFRS requires that trading inventories be recorded at their fair value using period-end spot prices. In order to best reflect the management of economic exposure through derivative transactions, internal indicators used to measure performance include valuations of trading inventories based on forward prices.

TotalEnergies, in its trading activities, enters into storage contracts, whose future effects are recorded at fair value in TotalEnergies' internal economic performance. IFRS precludes recognition of this fair value effect.

Furthermore, TotalEnergies enters into derivative instruments to risk manage certain operational contracts or assets. Under IFRS, these derivatives are recorded at fair value while the underlying operational transactions are recorded as they occur. Internal indicators defer the fair value on derivatives to match with the transaction occurrence.

enabled emissions reductions
Difference between the emissions associated to a reference electricity generation (alternative source) and the emissions associated with solution proposed by the Company, either electricity generated thanks to gas supplied by TotalEnergies (by regasifying LNG) or electricity generated by renewable power plants owned by the Company (solar and wind). For LNG sales, the Company has identified, for each LNG-receiving country or region, the likely source of competing flexible power generation (alternative source). When the final use for power generation is established and the alternative source of power is identified, the difference between emissions from the alternative fuel (fuel oil or coal) and natural gas has been calculated, by using power generation emission factors of each country or region[1] for each of these sources[2]. For the countries where the final use of LNG sales is not identified, this method is applied to LNG sales volumes weighed by the percentage of gas used for power generation in the overall local natural gas consumption[3]. For renewable power generation, the methodology compares emissions from the country's alternative non-renewable mix (alternative source according to IRENA's methodology) and the ones from solar or wind generation. The applied emission factors (published by IEA) cover the entire life cycle of power generation[4]. Non-renewable production mixes are based on IEA data[5] by country or continent[6]. Refer to 5.2.1.3 of chapter 5.

cost oil/gas
In a production sharing contract, the portion of the oil and gas production made available to the contractor (contracting group) and contractually reserved for reimbursement of exploration, development, operation and site restitution costs ("recoverable" costs). The reimbursement may be capped by a contractual cost stop that corresponds to the maximum share of production that may be allocated to the reimbursement of costs.

cracking
Refining process that entails converting the molecules of large, complex, heavy hydrocarbons into simpler, lighter molecules using heat, pressure and, in some cases, a catalyst. A distinction is made between catalytic cracking and steam cracking, which uses heat instead of a catalyst. Cracking then produces ethylene and propylene, in particular.

crude oil
A mixture of compounds (mainly pentanes and heavier hydrocarbons) that exists in a liquid phase at original reservoir temperature and pressure and remains liquid at atmospheric pressure and ambient temperature.

desulphurization unit
Unit in which sulphur and sulphur compounds are eliminated from mixtures of gaseous or liquid hydrocarbons.

development
Operations carried out to access the proved reserves and set up the technical facilities for extraction, processing, transportation and storage of the oil and gas: drilling of development or injection wells, platforms, pipelines, etc.

distillates
Products obtained through the atmospheric distillation of crude oil or through vacuum distillation. Includes medium distillate such as aviation fuel, diesel fuel and heating oil.

(1) France, Luxembourg, Belgium, the Netherlands and Germany are considered as a single electricity and gas network.
(2) Emission factors associated with combustion published in September 2024 by IEA for the year 2022, except for France where the emission factors published by RTE France were used.
(3) Distribution of gas use and electricity production mix for 2023 provided by Enerdata.
(4) Combustion and upstream emission factors published in September 2024 by IEA for the year 2022.
(5) STEPS scenario of the World Energy Outlook 2024.
(6) Europe is considered as a single electricity network.

energy mix
The various energy sources used to meet the demand for energy.

energy mix of sales
Energy mix calculated by taking into account electricity sales, marketable gas production from Exploration & Production and LNG sales, sales of petroleum products (from Marketing & Services and bulk refining sales) and distribution of biofuels, biomass and H2 sales. Electricity is placed on an equal footing with fossil fuels, taking into account average capacity factors and average efficiency ratios.

ESRS perimeter
Same scope of consolidation as that used for the financial statements excluding equity affiliates, as well as companies controlled by the Company that are not financially consolidated but are material from a sustainability point of view.

F

fair value
Fair value is the price that would be received to sell an asset or paid to transfer a liability in a transaction under normal conditions between market participants at the measurement date.

farmdown
Partial sale to a third party of an interest in an asset.

farm-in (or farm-out)
Acquisition (or sale) of all or part of a participating interest in an oil and gas mining property by way of an assignment of rights and obligations in the corresponding permit or license and related contracts.

farnesene
A hydrocarbon molecule containing 15 carbon atoms, which can be used to produce fuel or chemical compounds.

FEED studies (front-end engineering design)
Studies aimed at defining the project and preparing for its execution. In the TotalEnergies' process, this covers the pre-project and basic engineering phases.

FLNG (floating liquefied natural gas)
Floating unit permitting the liquefaction of natural gas and the storage of LNG.

G

gearing
Gearing is a non-GAAP financial measure and its most directly comparable IFRS measure is the ratio of total financial liabilities to total equity. Gearing is a Net-debt-to-capital ratio, which is calculated as the ratio of Net debt excluding leases to (Equity + Net debt excluding leases). This indicator can be a valuable tool for decision makers, analysts and shareholders alike to assess the strength of the Company's balance sheet.

gearing ratio excluding leases commitments
(Net debt excluding leases commitments)/(Net debt excluding leases commitments + shareholders equity Company share + Non-controlling interests).

GHG
The six greenhouse gases in the Kyoto protocol, namely CO_2, CH_4, N_2O, HFCs, PFCs and SF_6, with their respective GWP (Global Warming Potential) as described in the 2007 IPCC report. HFCs, PFCs and SF_6 are virtually absent from the Company's emissions or are considered as non-material, and are therefore no longer counted with effect from 2018.

H

hydraulic fracturing
Technique that involves fracturing rock to improve its permeability.

hydrocarbons
Mixture of molecules composed principally of carbon and hydrogen atoms. They can be solid such as asphalt, liquid such as crude oil or gaseous such as natural gas. They may include compounds with sulphur, nitrogen, metals, etc.

ethane
A colorless, odorless combustible gas of the alkanes class composed of two carbon atoms found in natural gas and petroleum gas.

ethanol
Also commonly called ethyl alcohol or alcohol, ethanol is obtained through the fermentation of sugar (beetroot, sugarcane) or starch (grains). Ethanol has numerous food, chemical and energy (biofuel) applications.

ethylene/propylene
Petrochemical products derived from cracking naphtha or light hydrocarbons and used mainly in the production of polyethylene and polypropylene, two plastics frequently used in packaging, the automotive industry, household appliances, healthcare and textiles.

fossil energies
Energies produced from oil, natural gas and coal.

FPSO (floating production, storage and offloading)
Floating integrated offshore unit comprising the equipment used to produce, process and store hydrocarbons and offload them directly to an offshore oil tanker.

free cash flow after organic investments
Free cash flow after organic investments is a non-GAAP financial measure and its most directly comparable IFRS measure is Cash flow from operating activities. Free cash flow after Organic Investments, refers to Cash Flow From Operations excluding working capital minus Organic Investments. Organic Investments refer to Net Investments excluding acquisitions, asset sales and other transactions with non-controlling interests. This indicator can be a valuable tool for decision makers, analysts and shareholders alike because it illustrates operating cash flow generated by the business post allocation of cash for Organic Investments.

FSRU (floating storage and regasification unit)
Floating unit permitting the storage of LNG and the regasification.

green electricity
Electricity produced from renewable sources.

greenfield project
Project concerning fields that have never been developed.

gross capacity
Capacity expressed on a 100% basis regardless of the ownership share in the asset.

gross investments
Investments including acquisitions and increases in non-current loans.

hydrocracker
A refinery unit that uses catalysts and extraordinarily high pressure, in the presence of surplus hydrogen, to convert heavy oils into lighter fractions.

I

infill well

Operating well added to the existing productive wells in order to accelerate and/or improve hydrocarbon recovery.

Intensity of CO_2 equivalent emissions

Scope 1+2 GHG emissions from the facilities operated by the Company for its upstream oil & gas activities (kg) divided by the Company's operated hydrocarbon production in barrels of oil equivalent (boe).

Intensity of methane emissions

Volume of methane emissions divided by the volume of commercial gas produced, from all facilities operated by the Company (oil and/or gas) for its upstream oil & gas activities.

inventory valuation effect

In accordance with IAS 2, TotalEnergies values inventories of petroleum products in its financial statements according to the First-In, First-Out (FIFO) method and other inventories using the weighted-average cost method. Under the FIFO method, the cost of inventory is based on the historic cost of acquisition or manufacture rather than the current replacement cost. In volatile energy markets, this can have a significant distorting effect on the reported income.

Accordingly, the adjusted results of the Refining & Chemicals and Marketing & Services segments are presented according to the replacement cost method. This method is used to assess the segments' performance and facilitate the comparability of the segments' performance with those of its main competitors.

In the replacement cost method, which approximates the Last-In, First-Out (LIFO) method, the variation of inventory values in the statement of income is, depending on the nature of the inventory, determined using either the month-end prices differential between one period and another or the average prices of the period rather than the historical value. The inventory valuation effect is the difference between the results under the FIFO and the replacement cost methods.

J

joint-venture

Refer to the definition above of "association/consortium/joint-venture".

L

Lifecycle carbon intensity of energy products sold

This indicator measures the average GHG emissions of a unit of energy products used by the Company's customers across its lifecycle (i.e., Scope 1+2+3), from production to end use by customers. This indicator is calculated as a division which takes into account:

- for the numerator:
  - emissions connected to the production and conversion of energy products used by the customers of the Company,
  - emissions connected to the end use of energy products sold to the Company's customers. For each product, stoichiometric emission factors[1] are applied to these sales to obtain an emission volume. Non-energy use products (bitumen, lubricants, plastics, etc.) are not taken into account,
  - less the CO_2 sequestered by Carbon Capture and Storage (CCS) and natural carbon sinks;
- for the denominator: the quantity of energy sold. Electricity is placed on an equal footing with fossil fuels, taking into account average capacity factors and average efficiency ratios.

The carbon intensity indicator therefore corresponds to the average emissions associated with each unit of energy used by customers. To track changes in the indicator, it is expressed in base 100 compared to 2015.

lignocellulose

Lignocellulose is the main component of the wall of plant cells. It can be sourced from agricultural and farming wastes or by-products of wood transformation as well as dedicated plantations and constitutes the most abundant renewable carbon source on the planet. This abundance and its composition (very rich in polymerized sugars) makes it an excellent choice to produce biofuels. As a result, its conversion, whether by thermochemical (e.g., gasification) or biochemical techniques, is widely studied.

liquids

Liquids consist of crude oil, bitumen, condensates and NGL.

LNG (liquefied natural gas)

Natural gas which has been liquefied by cooling to a temperature of approximately -160 °C which allows its volume to be reduced by a factor of almost 600 in order to transport it.

LNG bunkering

Specific type of operation where the LNG is transferred from a determined distribution source (e.g., bunkering ship, LNG terminal) to an LNG-fueled vessel.

LNG production capacity

LNG production average capacity expressed in Mt/y on a 100% basis, taking into account temperature variations over the year and without considering facilities availability. The **nameplate capacity** which corresponds to the facilities design, defined in project phase is different from the **actual capacity** which corresponds to capacity tests on existing facilities.

LNG train

Installation forming part of a liquefaction plant and allowing the separation of natural gas from other gases such as acid gases and LPG, to then liquefy it and finally store it, before loading on to the LNG carriers.

LNG carrier

Vessel specially designed for the transport of LNG and equipped with tanks which enable to minimize thermal losses in order to maintain the LNG in a liquid state.

low-carbon hydrogen

Hydrogen produced from non renewable resources but with greenhouse gas emissions below a maximum threshold. For example, the hydrogen produced from natural gas via the steam reforming process associated with a capture and storage (CCS) process. In Europe, the maximum threshold of greenhouse gas emission for low-carbon hydrogen is the same as that for renewable hydrogen, *i.e.* 3.38 kg CO_2e/kg H_2 according to the European Directive 2018/2001 named RED II. In common language, low-carbon hydrogen is often considered to include renewable hydrogen.

LPG (liquefied petroleum gas)

Light hydrocarbons (comprised of butane and propane, belonging to the alkanes class and composed of three and four carbon atoms respectively) that are gaseous under normal temperature and pressure conditions and that are kept in liquid state by increasing the pressure or reducing the temperature. LPG is included in NGL.

(1) The emission factors used are taken from a technical note of the CDP: *Guidance methodology for estimation of scope 3 category 11 emissions for oil and gas companies*.

M

microgrid

Small power grids designed to provide a reliable and better-quality power supply to a small number of consumers. They combine multiple local and diffuse production facilities (micro-turbines, fuel cells, small diesel generators, photovoltaic panels, wind turbines, small hydropower), consumption facilities, storage facilities, and supervision and monitoring tools to manage demand.

mining interests

Rights to explore for and/or produce oil and gas in a specific area for a fixed period. Covers the concepts of "permit", "license", "title", etc.

N

naphtha

Heavy gasoline used as a base in petrochemicals.

native CO_2

CO_2 naturally present in the reservoir before any hydrocarbon production or CO_2 injection.

natural gas

Mixture of light gaseous hydrocarbons extracted from underground reservoirs. It is mainly composed of methane, but can also contain ethane up to 10%, molecules with one or two carbon atoms, and other compounds in small quantities.

natural gas liquids (NGL)

A mixture of light hydrocarbons that exist in the gaseous phase at room temperature and pressure and are recovered as liquid in gas processing plants. NGL include ethane, propane and butane.

natural gas for vehicles (NGV)

Natural gas used as vehicle fuel, mainly in the form of LNG or CNG.

nature-based solutions

Sustainable management and use of nature for tackling socio-environmental challenges. Solutions are inspired and supported by nature, cost-effective, provide environmental, social and economic benefits, and help build resilience to environmental challenges.

net cash flow (or free cash-flow)

Net cash flow (or free cash-flow) is a non-GAAP financial measure and its most directly comparable IFRS measure is Cash flow from operating activities. Net cash flow refers to Cash Flow From Operations excluding working capital minus Net Investments. Net cash flow can be a valuable tool for decision makers, analysts and shareholders alike because it illustrates cash flow generated by the operations of the Company post allocation of cash for Organic Investments and Acquisitions net of assets sales (acquisitions - assets sales - other operations with non-controlling interests). This performance indicator corresponds to the cash flow available to repay debt and allocate cash to shareholder distribution or share buybacks.

net financial debts

Non-current financial debts, including current portion, current borrowings, other current financial liabilities less cash and cash equivalents and other current financial assets.

net investments

Net investments is a non-GAAP financial measure and its most directly comparable IFRS measure is Cash flow used in investing activities. Net Investments refer to Cash flow used in investing activities including other transactions with non-controlling interests, including change in debt from renewable projects financing, including expenditures related to carbon credits, including capex linked to capitalized leasing contracts and excluding organic loan repayment from equity affiliates. This indicator can be a valuable tool for decision makers, analysts and shareholders alike to illustrate the cash directed to growth opportunities, both internal and external, thereby showing, when combined with the Company's cash flow statement prepared under IFRS, how cash is generated and allocated for uses within the organization. Net Investments are the sum of Organic Investments and Acquisitions net of assets sales.

net zero emissions

A balance between greenhouse gas emissions and anthropogenic removals in the form of greenhouse gas sinks and reservoirs, such as forests and CO_2 capture and storage facilities.

non-routine flaring

flaring other than routine flaring and safety flaring occurring primarily during occasional and intermittent events.

O

offshore wind

Wind turbine installed offshore rather than inland. Operating on the same model as land-based models, offshore wind turbines capture more sustained and steady winds, and thus produce more electricity.

oil

In the Upstream hydrocarbons activities, generic term designating crude oil, condensates and natural gas liquids.

oil and gas acreage

Areas in which mining rights are exercised.

oil sands

Sandstones containing natural bitumen.

olefins

Group of products (gas) obtained after cracking of petroleum streams. Olefins are ethylene, propylene and butadiene. These products are used in the production of large plastics (polyethylene, polypropylene, PVC, etc.), in the production of elastomers (polybutadiene, etc.) or in the production of large chemical intermediates.

OPEC

Organization of the Petroleum Exporting Countries.

operated charging point (for an electric vehicle)

A charging point is said to be operated when it communicates with a supervision platform, when the Company supplies electricity, and when it issues the charging session's invoice, or any other potential related services (reservation, membership...).

operated perimeter

Activities, sites and industrial assets of which TotalEnergies SE or one of its subsidiaries has operational control, i.e. has the responsibility of the conduct of operations on behalf of all its partners.

Operated oil & gas facilities

Facilities operated by the Company as part of its Upstream oil and gas activities as well as in its Refining & Chemicals and Marketing & Services segments. Facilities for power generation from renewable sources or natural gas, such as combined-cycle natural gas power plants are therefore excluded from this perimeter.

operated production

Total quantity of oil and gas produced on fields operated by the Company.

operator

Partner of an oil and gas joint-venture in charge of carrying out the operations on a specific area on behalf of the partners within a joint-venture. A refinery is also said to be operated by a specific partner when the operations are carried out by the partner on behalf of the joint-venture that owns the refinery.

P

payout

Payout is a non-GAAP financial measure. Payout is defined as the ratio of the dividends and share buybacks for cancellation to the Cash Flow From Operations excluding working capital. This indicator can be a valuable tool for decision makers, analysts and shareholders as it provides the portion of the Cash Flow From Operations excluding working capital distributed to the shareholder.

permit

Area contractually granted to an oil and gas company (or a consortium) by the host country for a defined period to carry out exploration work or to exploit a field.

petcoke (or petroleum coke)

Residual product remaining after the improvement of very heavy petroleum cuts. This solid black product consists mainly of carbon and can be used as fuel.

polymers

Molecule composed of monomers bonded together by covalent bonds, such as polyolefins obtained from olefins or starch and proteins produced naturally.

Power Purchase Agreement (PPA)

Long-term agreement for the supply of electricity used in particular for marketing renewable electricity.

pre-dividend organic cash breakeven

Brent price for which the operating cash flow before working capital changes covers the organic investments.

price effect

The impact of changing hydrocarbon prices on entitlement volumes from production sharing contracts and on economic limit dates.

production costs

Costs related to the production of hydrocarbons in accordance with FASB ASC 932-360-25-15.

production plateau

Expected average stabilized level of production for a field following the production build-up.

production sharing contract/agreement (PSC/PSA)

Exploration and production contract under which a host country or, more frequently, its national company, transfers to an oil and gas company (the contractor) or a consortium (the contracting group) the right to explore a geographic area and develop the fields discovered. The contractor (or contracting group) undertakes the execution and financing, at its own risk, of all operations. In return, it is entitled to a portion of the production, called cost oil/gas, to recover its expenditures and investments. The remaining production, called profit oil/gas, is then shared between the contractor (contracting group), and the national company and/or host country.

project

As used in this document, "project" may encompass different meanings, such as properties, agreements, investments, developments, phases, activities or components, each of which may also informally be described as a "project". Such use is for convenience only and is not intended as a precise description of the term "project" as it relates to any specific governmental law or regulation.

proved permit

Permit for which there are proved reserves.

proved reserves (1P reserves)

Proved oil and gas reserves are those quantities of oil and gas, which, by analysis of geoscience and engineering data, can be estimated with a reasonable certainty to be economically producible from a given date forward, from known reservoirs, and under existing economic conditions, operating methods, and government regulations, prior to the time at which contracts providing the right to operate expire, unless evidence indicates that renewal is reasonably certain, regardless of whether deterministic or probabilistic methods are used for the estimation.

proved developed reserves

Proved developed oil and gas reserves are proved reserves that can be expected to be recovered (i) through existing wells with existing equipment and operating methods or in which the cost of the required equipment is relatively minor compared to the cost of a new well; and (ii) through installed extraction equipment and infrastructure operational at the time of the reserves estimate if the extraction is by means not involving a well.

proved undeveloped reserves

Proved undeveloped oil and gas reserves are proved reserves that are expected to be recovered with new investments (new wells on undrilled acreage, or from existing wells where a relatively major expenditure is required for recompletion, surface facilities).

proved and probable reserves (2P reserves)

Sum of proved reserves and probable reserves. 2P reserves are the median quantities of oil and gas recoverable from fields that have already been drilled, covered by Exploration & Production contracts and for which technical studies have demonstrated economic development in a long-term price environment. They include projects developed by mining.

organic investments

Organic investments is a non-GAAP financial measure and its most directly comparable IFRS measure is Cash flow used in investing activities. Organic investments refers to Net Investments, excluding acquisitions, asset sales and other operations with non-controlling interests. Organic Investments can be a valuable tool for decision makers, analysts and shareholders alike because it illustrates cash flow used by the Company to grow its asset base, excluding sources of external growth.

R

refining

The various processes used to produce petroleum products from crude oil (e.g., distillation, reforming, desulphurization, cracking).

regasification

Before the gas is transported from the terminal to the distribution networks, the LNG is regasified: its temperature is raised from -160 °C to 0 °C under high pressure.

renewable diesel

Refers to diesel fuel made from 100% renewable raw materials, such as vegetable oils or materials from the circular economy (animal fats, used cooking oils, etc.). Thanks to its hydrotreatment production process, renewable diesel has a chemical composition identical to that of fossil diesel and can therefore be used without any limit on its incorporation into diesel, without damaging the operation of engines. Using renewable diesel reduces greenhouse gas emissions by more than 50% compared with its fossil equivalent, and also helps to improve air quality (by reducing particle and nitrogen oxide emissions).

renewable/renewable energy

An energy source the inventories of which can be renewed or are inexhaustible, such as solar, wind, hydraulic, biomass and geothermal energy.

renewable hydrogen

Hydrogen produced from renewable resources, such as wind, solar, geothermal, hydraulic, biomass, biogas energy etc. Green hydrogen is a renewable hydrogen specifically produced from renewable electricity via the water electrolysis process. In Europe, the maximum threshold of greenhouse gas emission for renewable hydrogen is 3.38 kg CO_2e/kg H_2 according to the European Directive 2018/2001 named RED II.

reserve life

Synthetic indicator calculated from data published under ASC 932. Ratio of the proved reserves at the end of the period to the production of the past year.

reserves

Estimated remaining quantities of oil and gas and related substances expected to be economically producible, as of a given date, by application of development projects to known accumulations.

reservoir

Porous, permeable underground rock formation that contains oil or natural gas.

resource acquisitions

Acquisition of a participating interest in an oil and gas mining property by way of an assignment of rights and obligations in the corresponding permit or license and related contracts, with a view to producing the recoverable oil and gas.

return on average capital employed (ROACE)

ROACE is a non-GAAP financial measure. ROACE is the ratio of Adjusted Net Operating Income to average Capital Employed at replacement cost between the beginning and the end of the period. This indicator can be a valuable tool for decision makers, analysts and shareholders alike to measure the profitability of the Company's average Capital Employed in its business operations and is used by the Company to benchmark its performance internally and externally with its peers.

return on equity (ROE)

Ratio of adjusted consolidated net income to average adjusted shareholders' equity (after distribution) between the beginning and the end of the period. Adjusted shareholders' equity for a given period is calculated after distribution of the dividend (subject to approval by the Shareholders' Meeting).

Risked service contract

Service contract where the contractor bears the investments and the risks. The contractor usually receives a portion of the production to cover the refund of the investments and the related interests, and a monetary remuneration linked to the performance of the field.

routine flaring

Flaring during normal production operations conducted in the absence of sufficient facilities or adequate geological conditions for the reinjection, on-site utilization or sale of the gas produced (as defined by the working group of the Global Gas Flaring Reduction program as part of the World Bank's Zero Routine Flaring initiative). Routine flaring does not include safety flaring.

S

Safety flaring

Flaring to ensure the safe performance of operations conducted at the production site (emergency shutdown, safety-related testing, etc.)

Scope 1 GHG emissions

Direct emissions of greenhouse gases from sites or activities that are included in the scope of reporting for climate change-related indicators. Direct biogenic CO_2 emissions are excluded from Scope 1 and reported separately.

Scope 2 GHG emissions

Indirect emissions of greenhouse gases attributable to brought-in energy (electricity, heat, steam), net from potential energy sales, excluding purchased industrial gases (H_2). If not stated otherwise, TotalEnergies reports Scope 2 GHG emissions according to the market-based method defined by the GHG Protocol.

Scope 3 GHG emissions

other indirect emissions. If not stated otherwise, TotalEnergies reports Scope 3 GHG emissions, category 11, which correspond to indirect GHG emissions related to the direct use-phase emissions of sold products over their expected lifetime (i.e., the scope 1 and scope 2 emissions of end users that occur from the combustion of fuels) in accordance with the definition of the GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard Supplement. The Company follows the oil & gas industry reporting guidelines published by IPIECA, which comply with the GHG Protocol methodologies. In order to avoid double counting, this methodology accounts for the largest volume in the oil and gas value chains, i.e. the higher of the two production volumes or sales for end use. For TotalEnergies, in 2024, the calculation of Scope 3 GHG emissions for the oil value chain considers products sales (higher than production) and for the gas value chain, the marketable gas and condensates production (higher than gas sales, either as LNG or as direct sales to B2B/B2C customers). A stoichiometric emission factor (oxidation of molecules to carbon dioxide) is applied to these sales or production to obtain an emission volume. In accordance with the Technical Guidance for Calculating Scope 3 Emissions Supplement to the Corporate Value Chain (Scope 3) Accounting and Reporting Standard which defines end users as both consumers and business customers that use final products, and with IPIECA's Estimating petroleum industry value chain (Scope 3) greenhouse gas emissions guidelines, under which reporting of emissions from fuel purchased for resale to non-end users (e.g. traded) is optional, TotalEnergies does not report emissions associated with trading activities.

In accordance with ESRS, biogenic CO_2 emissions from the combustion or biodegradation of biomass (from sales of biofuels and biogas) are excluded from Scope 3 and disclosed separately. The biofuels value chain which was previously reported in Scope 3 Category 11 is not included anymore and the 2023 and 2024 data have been consequently restated.

seismic

Method of exploring the subsoil that entails methodically sending vibration or sound waves and recording their reflections to assess the type, size, shape and depth of subsurface layers.

seismic acquisition

Field campaign consisting of acquiring geophysical data, offshore or onshore, with a view to imaging the subsurface and implanting exploration, development or production wells.

shale gas

Natural gas in a source rock that has not migrated to a reservoir.

shale oil

Oil in a source rock that has not migrated to a reservoir.

shipping

Transport by sea. LNG is carried out on board LNG carriers (refer to definition).

sidetrack

Well drilled from a portion of an existing well (and not by starting from the surface). It is used to get around an obstruction in the original well or resume drilling in a new direction or to explore a nearby geological area.

silicon

The most abundant element in Earth's crust after oxygen. It does not exist in a free state but in the form of compounds such as silica, which has long been used as an essential element of glass. Polysilicon (or crystalline silicon), which is obtained by purifying silicon and consists of metal-like crystals, is used in the construction of photovoltaic solar panels, but other minerals or alloys may be used.

site restitution

Refer to the definition above of "asset retirement".

special items

Due to their unusual nature or particular significance, certain transactions qualifying as "special items" are excluded from the business segment figures. In general, special items relate to transactions that are significant, infrequent or unusual. In certain instances, transactions such as restructuring costs or asset disposals, which are not considered to be representative of the normal course of business, may qualify as special items although they may have occurred in prior years or are likely to recur in following years.

special fluids

Extremely purified, high-tech petroleum products, used in such diverse applications as paint, mastics, drilling fluids, cosmetics, water treatment and crop protection, print inks as well as tires and vaccines.

steam cracker

A petrochemical plant that turns naphtha and light hydrocarbons into ethylene, propylene, and other chemical raw materials.

supervised charging point (for an electric vehicle)

A charging point is said to be supervised when it communicates with a supervision platform.

sustainable aviation fuel (SAF)

Molecules aiming to be incorporated into conventional fossil-based aviation fuel.

It can be made through different technologies and from different feedstocks:

- biomass, e.g. waste and residues sourced from the circular economy such as used cooking oils (pursuant to regulations applicable in the various regions) via a mature technology available at industrial scale;
- green hydrogen and CO_2 (named e-fuels or synthetic fuels), via a technology still under development.

As of today, SAF is not used pure, but is incorporated in varying proportions up to 50% into conventional fossil-based aviation fuel. Incorporation rates vary depending on airlines requests and/or regulations applicable in the different countries. For instance, in France, since 2022, the regulation requires the incorporation of SAF and the regulation ReFuelEU Aviation (EU) 2023/2405 expects the incorporation of SAF in Europe at a minimum rate of: 2% starting from 2025, 6% (including 1.2% of synthetic fuel) starting from 2030 and 70% (including 35% of synthetic fuel) starting from 2050.

SAF may allow a reduction of up to 90% CO_2 emissions over its full lifecycle, compared with its fossil equivalent (pursuant to European directive (EU) 2023/2413 of October 18, 2023 on the promotion of the use of energy from renewable sources, named RED III).

T

technical costs

Ratio (Production costs* + exploration expenses + DD&A*)/production of the year. *Excluding non-recurrent items.

thermochemical conversion

Conversion of carbonaceous resources (gas, coal, biomass, waste, CO_2) through thermal transformation (chemical reactions controlled by the combined action of temperature, pressure and often of a catalyst). Gasification is an example.

tight gas

Natural gas trapped in very low-permeable reservoir.

turnaround

Temporary shutdown of a facility for maintenance, overhaul and upgrading.

U

unconventional hydrocarbons

Unconventional Oil & Gas are defined by the U.S. Energy Information Administration (EIA) as hydrocarbons that are "produced by means that do not meet the criteria for conventional production" i.e. "by a well drilled into a geologic formation in which the reservoir and fluid characteristics permit the oil and natural gas to readily flow to the wellbore." According to United Nations Framework Classification for Resources (UNFC), "examples include CBM (Coal-Bed Methane), low permeability deposits such as tight gas (including shale gas) and tight oil (including shale oil), gas hydrates and natural bitumen".

unitization

Creation of a new joint-venture and appointment of a single operator for the development and production as single unit of an oil or gas field involving several permits/licenses or countries.

unproved permit

Permit for which there are no proved reserves.

Upstream oil and gas activities

The Company's Upstream hydrocarbons activities include the oil and gas exploration and production activities of the Exploration & Production and the Integrated LNG segments. They do not include power generation facilities based on renewable sources or natural gas such as combined-cycle natural gas power plants.

V

variable cost margin, Refining Europe

This indicator represents the average margin on variable costs realized by TotalEnergies' European refining business. It is equal to the difference between the sales of refined products realized by TotalEnergies' European refining and the crude purchases as well as associated variable costs, divided by refinery throughput in tons.

The previous ERMI indicator was intended to represent the margin after variable costs for a hypothetical complex refinery located around Rotterdam in Northern Europe that processes a mix of crude oil and other inputs commonly supplied to this region to produce and market the main refined products at prevailing prices in this region.

Cross-reference lists

Universal Registration Document cross-reference list, for use in identifying the information required by Annex 1 to the Commission Delegated Regulation (EU) 2019/980 dated March 14, 2019 supplementing Regulation (EU) 2017/1129 of the Europea Parliament and of the Council as regards the format, content, scrutiny and approval of the prospectus to be published when securities are offered to the public or admitted to trading on a regulated market, and repealing Commission Regulation (EC) No 809/2004.

Information required by Annex 1 of Delegated Regulation (EU) 2019/980		2024 Universal Registration Document	
		Relevant chapters	Relevant paragraphs
1.	Persons responsible, third party information, experts' reports and competent authority approval		
1.1	Persons responsible	p 1	p 1
1.2	Certification of the persons responsible	p 1	p 1
1.3	Statements by experts and declarations of any interest	n/a	n/a
1.4	Third party information	n/a	n/a
1.5	Statement of approval by the competent authority	n/a	n/a
2.	Statutory auditors	4	4.4.5
3.	Risk factors	3	3.1
4.	Information about the issuer		
4.1	Legal and commercial name	1	1.8.3
		7	7.2.1
4.2	Place of registration, registration number and legal entity identifier (LEI)	1	1.8.3
		7	7.2.1
4.3	Date of incorporation and length of life	1	1.8.3
		7	7.2.1
4.4	Domicile, legal form, applicable legislation, country of incorporation, address and telephone number of registered office, website of the issuer	1	1.8.3
		7	7.2.1
5.	Business overview		
5.1	Principal activities	1	1.1.1
		2	2.1 to 2.6
5.2	Principal markets	1	1.1.1
		2	2.1 to 2.6
5.3	Important events in the development of the business	1	1.9.1 to 1.9.4
5.4	Strategy and objectives	1	1.2 to 1.4
			1.9.3
5.5	Dependence on certain patents or licenses, industrial, commercial or financial contracts or new manufacturing processes	2	2.1 to 2.6
		3	3.1.1 and 3.1.5
5.6	Competitive position	1	1.1.1
		2	2.1 to 2.6
		3	3.1.6
5.7	Investments	1	1.5
5.7.1	Material investments over the last three fiscal years	1	1.5.1
5.7.2	Material investments in progress or for which commitment have already been made	1	1.5.2
5.7.3	Information relating to the joint-ventures and undertakings in which the issuer holds a proportion of the capital likely to have significant effect on the assessment of its own assets and liabilities, financial position or profits and losses	2	2.1 to 2.6
		8	8.7 (Note 8)
5.7.4	Environmental issues affecting the most significant tangible fixed assets	3	3.1.1 and 3.4
		5	5.2
6.	Organizational structure	1	1.8.3
6.1	Issuer's position within the group	1	1.8.3
6.2	List of the significant subsidiaries	1	1.8.3
		8	8.7 (Note 18)

Information required by Annex 1 of Delegated Regulation (EU) 2019/980		2024 Universal Registration Document	
		Relevant chapters	Relevant paragraphs
7.	Operating and financial review		
7.1	**Financial condition**		
7.1.1	Financial condition	1	1.9.1
7.1.2	Likely future development and activities in the field of research and development	1	1.6
7.2	**Operating results**	**1**	**1.9.1**
		8	**8.2**
		10	**10.2.1**
7.2.1	Significant factors materially affecting income from operations	1	1.9.1 and 1.9.4
		8	8.7 (Notes 3, 4 and 5)
7.2.2	Narrative description of changes in net sales or revenues over the last three fiscal years	1	1.9.1
		8	8.7 (Notes 3, 4 and 5)
8.	Capital resources		
8.1	**Information concerning capital resources (both short and long term)**	**1**	**1.9.2**
8.2	**Sources, amounts and narrative description of cash flows**	**1**	**1.9.2**
		8	**8.5**
8.3	**Borrowing requirements and funding structure**	**1**	**1.9.2**
8.4	**Restrictions on the use of capital resources that have materially affected, or could materially affect, operations**	**1**	**1.9.2**
		8	**8.7 (Note 15.1)**
8.5	**Anticipated sources of funds needed for the principal future investments and major encumbrances on the most significant tangible fixed assets or for which firm commitments have already been made**	**1**	**1.5.3 and 1.9.2**
		8	**8.7 (Note 7)**
9.	Regulatory environment	1	1.9.3
		2	2.1.5, 2.4.1, 2.5.1 and 2.6.1
		3	3.1.1 and 3.1.4
10.	Trend information		
10.1	**Most significant trends in production, sales and inventory and costs and selling prices since the end of the last fiscal year**	**1**	**1.9.1 and 1.9.4**
10.2	**Known trends, uncertainties, demands, commitments or events that are likely to have a material effect on prospects for the current fiscal year**	**1**	**1.9.3 and 1.9.4**
		3	**3.1, 3.2, 3.4 and 3.5**
11.	Profit forecasts or estimates	n/a	n/a
12.	Administrative, management and supervisory bodies and senior management		
12.1	**Information about members of the administrative and management bodies**	**4**	**4.1**
12.2	**Conflicts of interests, understandings relating to nominations, restrictions on the disposal of holdings in the issuer's securities**	**4**	**4.1.1.2**
13.	Remuneration and benefits		
13.1	**Remuneration paid and benefits in kind granted by the issuer and its subsidiaries**	**4**	**4.3**
13.2	**Amounts set aside or accrued to provide pension, retirement or similar benefits**	**4**	**4.3.2**
		8	**8.7 (Notes 8.4, 9.2 and 10)**
		10	**10.3 (Note 26)**
14.	Board practices		
14.1	**Date of expiration of the current term of office and date of commencement in office**	**4**	**4.1.1**
14.2	**Contracts with the issuer or any of its subsidiaries providing for benefits upon termination of such contracts**	**4**	**4.3.2**
14.3	**Information about the issuer's audit committee and remuneration committee**	**4**	**4.1.2.3**
14.4	**Compliance with the Corporate Governance regime applicable to the issuer**	**4**	**4.2**
14.5	**Potential material impacts on the corporate governance**	**4**	**4.1**

Information required by Annex 1 of Delegated Regulation (EU) 2019/980		2024 Universal Registration Document	
		Relevant chapters	Relevant paragraphs
15.	Employees		
15.1	Number of employees at the end of the last three fiscal years; if material, breakdown by geographic location and category of activity	1	1.1.1
		5	5.3.1.1
		8	8.7 (Note 10)
15.2	Shareholdings and stock options	4	4.3.4
		6	6.4.2
15.3	Arrangements for involving employees in the capital of the issuer	4	4.3.4
		5	5.3
16.	Major shareholders		
16.1	Interests held above the threshold for notification (known interests) as at the date of the URD or appropriate statement to the effect that no such person exists	6	6.4.1
16.2	Major shareholders' voting rights in excess of their share in the share capital	7	7.2.4
16.3	Control of the issuer by one or more shareholders	n/a	n/a
16.4	Arrangements, known to the issuer, the operation of which may at a subsequent date result in a change in control of the issuer	n/a	n/a
17.	Related party transactions	4	4.4.1
		8	8.7 (Note 8)
18.	Financial information concerning the issuer's assets and liabilities, financial position and profits and losses		
18.1	Historical financial information		
18.1.1	Audited historical financial information	7	7.3
18.1.2	Change of accounting reference date	n/a	n/a
18.1.3	Accounting standard	8	8.7 (Note 1)
18.1.4	Change of accounting framework	8	8.7
18.1.5	Financial information audited according to national accounting standards	7	7.3
		8	8.1
		10	10.1
18.1.6	Consolidated annual financial statements	8	8.2 to 8.7
18.1.7	Age of financial information		December 31, 2024
18.2	Interim and other financial information		
18.2.1	Quarterly or half yearly financial information published since the date of the last audited financial statements	n/a	n/a
18.2.2	Interim financial information covering the first six months of the fiscal year after the end of the last audited fiscal year	n/a	n/a
18.3	Auditing of historical annual financial information		
18.3.1	Auditing of the historical financial information	7	7.3.3
		8	8.1
		10	10.1
18.3.2	Other information in the Universal Registration Document that has been audited by the auditors	4	4.5
		10	10.1
18.3.3	Source of the financial information in the Universal Registration Document that is not extracted from the issuer's audited financial statements	7	7.3.4
		9	9.1 to 9.4
18.4	Pro forma financial information	n/a	n/a
18.5	Dividend policy	1	1.9.1.7
		6	6.2
18.6	Legal and arbitration proceedings	3	3.5
18.7	Significant change in the issuer's financial position	1	1.9.4

Information required by Annex 1 of Delegated Regulation (EU) 2019/980		2024 Universal Registration Document	
		Relevant chapters	Relevant paragraphs
19.	Additional information		
19.1	**Share capital**		
19.1.1	Issued capital and authorized capital	7	7.1
		8	8.7 (Note 9)
		10	10.3 (Note 7) and 10.4.2
19.1.2	Shares not representing capital	n/a	n/a
19.1.3	Shares held by the issuer or its subsidiaries	6	6.3.1.4
		8	8.7 (Note 9)
		10	10.3 (Note 7), 10.4.1 and 10.4.4
19.1.4	Securities granting future access to the issuer's share capital	4	4.4.2
		7	7.1.3
19.1.5	Terms of any acquisition rights and/or obligations over capital issued but not paid, or any capital increase	n/a	n/a
19.1.6	Capital of any member of the Company which is under option	n/a	n/a
19.1.7	History of the issuer's share capital over the last three fiscal years	7	7.1.4
		8	8.7 (Note 9)
		10	10.3 (Note 7) and 10.4.4
19.2	**Memorandum and Articles of Association**		
19.2.1	Issuer's objects and purposes, registration number	7	7.2.1 and 7.2.2
19.2.2	Rights, preferences and restrictions attached to each class of the existing shares	7	7.2.4
19.2.3	Provisions of the issuer's statutes, charter or bylaws that would have the effect of delaying, deferring or preventing a change in control of the issuer	4	4.4.4
		7	7.2.4
20.	Material contracts **(other than contracts entered into in the ordinary course of business)**	n/a	n/a
21.	Documents available	6	6.6.1

UNIVERSAL REGISTRATION DOCUMENT CROSS-REFERENCE LIST, FOR USE IN IDENTIFYING THE INFORMATION CONTAINED IN THE ANNUAL FINANCIAL REPORT

The cross-reference list below is used to identify the information in this Universal Registration Document contained in the annual financial report to be published by listed companies pursuant to Article L. 451-1-2 of the French Financial and Monetary Code and Article 222-3 of the General Regulation of the French Financial Markets Authority.

	2024 Universal Registration Document	
Annual financial report	**Relevant chapters**	**Relevant paragraphs**
Annual financial statements	10	10.2 and 10.3
Consolidated Financial Statements	8	8.2 to 8.7
Management report		Financial report cross-reference list hereafter
Report on Corporate Governance		Cross-reference list hereafter
Declaration of persons responsible for the annual financial report		p. 1
Reports of the statutory auditors on the statutory financial statements and Consolidated Financial Statements	8 10	8.1 10.1
Certification report on the information regarding the sustainability reporting under the CSRD	5	5.5

CROSS-REFERENCE LIST OF BOARD OF DIRECTORS' MANAGEMENT REPORT MENTIONED IN ARTICLE L. 225-100 OF THE FRENCH COMMERCIAL CODE, TO WHICH IS ATTACHED THE REPORT ON CORPORATE GOVERNANCE

In order to facilitate the reading of this Universal Registration Document, the cross-reference list below is used to identify the information to be contained in the management report.

Required elements	**Reference texts**	**Relevant chapters**	**Relevant paragraphs**
Position and activities of the Corporation and the Company			
Position of the Corporation during the last fiscal year and objective and comprehensive analysis of changes in the business, results and financial position of the Corporation and the Company, and in particular the debt position, in light of the volume and complexity of the business	Articles L. 232-1, II, 1°, L. 233-6 and L. 233-26 of the French Commercial Code	1 8	1.9.1 and 1.9.2 8.7 (Notes 2 and 17)
Foreseeable trends and outlook			
Significant changes between the end of the fiscal year and the establishment of the Management Report			
Significant acquisitions of shares in companies with registered offices in France	Article L. 233-6 para. 1 of the French Commercial Code	1	1.8.3
Research and development activities	Articles L. 232-1,II, 2° and L. 233-26 of the French Commercial Code	1	1.6
Corporation's existing branch offices	Article L. 232-1, II, 3° of the French Commercial Code	1	1.8.3
Key financial performance indicators	Article L. 232-1, II, 4° of the French Commercial Code	1 2	1.1.1 and 1.9 2.1 to 2.6
Information on the company's essential intangible resources, how its business model fundamentally depends on these resources, and how they constitute a source of value creation for the company	Article L. 232-1, II, 7° of the French Commercial Code	1	1.7.2
Impacts of the company's activities on the fight against tax evasion	Article L. 22-10-35, 1° of the French Commercial Code	1	1.4
Actions aimed at promoting the link between the Nation and its armed forces and supporting engagement in the French National Guard reserves	Article L. 22-10-35, 2° of the French Commercial Code	1	1.4
Internal control and risk management			
Description of the principal risks and uncertainties faced by the Corporation and TotalEnergies' companies	Article L. 232-1, II, 5° of the French Commercial Code	1 3	1.9.3 and 1.9.4 3.1
Information on the Corporation's objectives and policy relating to the hedging of each of the main categories of planned transactions for which hedge accounting is used, as well as its exposure to price, credit, liquidity, and cash flow risks. These indications include the Corporation's use of financial instruments	Article L. 232-1, II, 6° of the French Commercial Code	1 3	1.9.2 3.3

Required elements	Reference texts	Relevant chapters	Relevant paragraphs
Policy for the prevention of technological accident risk conducted by the company; the company's ability to cover its civil liability towards property and people due to the operation of installations listed in Article L. 515-36 of the French Environmental Code; means provided by the company to ensure the management of compensation for victims in case of a technological accident involving its liability	Article L. 232-1-1 of the French Commercial Code	3	3.1 and 3.4
Anti-corruption measures	Law n°2016-1691 of December 9, 2016	5	5.4.2
Vigilance plan relating to the Corporation's activities and all of the subsidiaries or companies controlled by the Corporation and report on its effective implementation	Article L. 225-102-1, I of the French Commercial Code	3	3.6
Report on corporate governance			
Information regarding the compensation			
Description of the compensation policy of the corporate officers (*mandataires sociaux*) in all the component of the fixed and variable compensation, of the decision process which is followed for its determination, its review and its implementation	Article L. 22-10-8 of the French Commercial Code	4	4.3.1.1 and 4.3.2.2
Global compensation (including in-kind benefits) paid by the Corporation or allocated to each corporate officers (*mandataires sociaux*) of TotalEnergies SE during the 2024 fiscal year	Article L. 22-10-9, I, 1° of the French Commercial Code	4	4.3.1.2 and 4.3.2.1
Relative proportion of the fixed and variable compensation	Article L. 22-10-9, I, 2° of the French Commercial Code	4	4.3.1.2 and 4.3.2.1
Use of the possibility to ask for the restitution of a variable compensation	Article L. 22-10-9, I, 3° of the French Commercial Code		n/a
Mention of all commitments taken by TotalEnergies SE for his corporate officers (*mandataires sociaux*) corresponding to the components of compensation, of indemnities, of in-kind benefits due or that may be due because of the beginning, the termination or the changing of functions or after those happened, notably the pension commitment and other lifetime benefit	Article L. 22-10-9, I, 4° of the French Commercial Code	4	4.3.1.2 and 4.3.2.1
Compensation paid or attributed by a company included in the scope of consolidation pursuant to the Article L. 233-16 of the French Commercial Code	Article L. 22-10-9, I, 5° of the French Commercial Code		n/a
Ratios between the compensation level of each corporate officer and the average and median compensation of the Corporation's employees	Article L. 22-10-9, I, 6° of the French Commercial Code	4	4.3.2.1
Annual trend of the compensation, of the Corporation's performances, of the average compensation based on full time employee of the Corporation, other than the executives, and the ratios, for the last five fiscal years at least	Article L. 22-10-9, I, 7° of the French Commercial Code	4	4.3.2.1
Explanation as regard to the fact that the global compensation respect for the adopted compensation policy, including the way it contributes to the long term performance of the Corporation, and the way the performance criteria were applied	Article L. 22-10-9, I, 8° of the French Commercial Code	4	4.3.1.2 and 4.3.2.1
Way the vote of the last ordinary shareholders' meeting pursuant to the I of the Article L. 22-10-34 of the French Commercial Code was taken into consideration	Article L. 22-10-9, I, 9° of the French Commercial Code	4	4.3.2.1
Difference compared to the implementation process of the compensation policy and all applied derogation in accordance with the second paragraph of the III of Article L. 22-10-8 of the French Commercial Code, including the explanation of the nature of extraordinary circumstances and the indication of specific elements to which it is derogated	Article L. 22-10-9, I, 10° of the French Commercial Code	4	4.3.2.1
Mention, if needed, of the application of the provisions of the second paragraph of Article L. 225-45 of the French Commercial Code	Article L. 22-10-9, I, 11° of the French Commercial Code		n/a
Granting and retention of the options by the corporate officers (*mandataires sociaux*)	Articles L. 22-10-57, L. 22-10-58 and L. 225-185 of the French Commercial Code	4	4.3.2 and 4.3.4
Free shares granted to the directors and corporate officers (*dirigeants mandataires sociaux*) and retention by the latter	Articles L. 225-197-1, L. 22-10-59 and L. 22-10-60 of the French Commercial Code	4	4.3.2.2 and 4.3.4
Information regarding governance			
List of all of the directorships and functions held at any company by each corporate officers (*mandataires sociaux*) during the 2024 fiscal year	Article L. 225-37-4, 1° of the French Commercial Code	4	4.1.1.1
Agreements made, directly or through an intermediary, between, on the one hand, any corporate officers (*mandataires sociaux*) or shareholder holding more than 10% of TotalEnergies SE's voting rights and, on the other hand, a company of which TotalEnergies SE directly or indirectly owns more than half of the capital (in the meaning of Article L. 233-3 of the French Commercial Code), other than agreements related to its ordinary course of business and signed under normal conditions	Article L. 225-37-4, 2° of the French Commercial Code	4	4.4.1
Summary table of valid delegations granted by the Shareholders' Meeting with respect to capital increases, pursuant to Articles L. 225-129-1 and L. 225-129-2 of the French Commercial Code, showing the use made of such delegations during the 2024 fiscal year	Article L. 225-37-4, 3° of the French Commercial Code	4	4.4.2

Required elements	Reference texts	Relevant chapters	Relevant paragraphs
Statement of the choice made between the two forms of management set out in Article L. 225-51-1 of the French Commercial Code	Article L. 225-37-4, 4° of the French Commercial Code	4	4.1.5.1
Composition and preparation and organization of the work of the Board of Directors	Article L. 22-10-10, 1° of the French Commercial Code	4	4.1.1 and 4.1.2
Description of the diversity policy applied to members of the Board of Directors' principle, as well as a description of this policy, its terms and conditions of implementation and results achieved during the past fiscal year.	Article L. 22-10-10, 2° of the French Commercial Code	4	4.1.1.5 and 4.1.5.2
Limits set by the Board of Directors concerning the powers of the Chief Executive Officer, if any	Article L. 22-10-10, 3° of the French Commercial Code	4	4.1.5.1
Declaration regarding the Corporate Governance Code to which the Corporation voluntarily refers, and, if applicable, the reasons why any provision thereof has been set aside	Article L. 22-10-10, 4° of the French Commercial Code	4	4.2
Particular conditions regarding shareholders' participation in the Shareholders' Meeting or provisions of the bylaws setting out such conditions	Article L. 22-10-10, 5° of the French Commercial Code	4 7	4.4.3 7.2.6
Description of the process implemented by the Corporation in accordance with Article L. 22-10-12 of the French Commercial Code and its implementation	Article L. 22-10-10, 6° of the French Commercial Code	4	4.4.1
Main characteristics of the internal control and risk management procedures put in place relating to the preparation and processing of financial information	Article L. 22-10-10, 7° of the French Commercial Code	3 4	3.3.4 4.4.5
Information regarding factors likely to have an impact in the event of a public takeover or exchange offer	Article L. 22-10-11 of the French Commercial Code	4	4.4.4
Sustainability reporting under the CSRD			
Sustainability Report	Articles L. 232-6-3, I et L. 233-28-4, I of the French Commercial Code	5	5.1 to 5.4
Certification report on the information regarding sustainability reporting under the CSRD	Article L. 451-1-2 of the French Financial and Monetary Code	5	5.5
Shareholders and share capital			
Identity of any individual or legal entity directly or indirectly holding more than one twentieth, one tenth, three twentieths, one fifth, one quarter, one third, one half, two thirds, eighteen twentieths or nineteen twentieths of the share capital or voting rights at the Shareholders' Meetings of the Corporation	Article L. 233-13 of the French Commercial Code	6	6.4
Information on changes during the fiscal year		6	6.4.1
Statement of the names of any controlled companies holding treasury shares and the share of the Corporation's capital that they own			n/a
Statement of employee shareholding on the last day of the fiscal year (proportion of share capital represented	Article L. 225-102, paragraph 1 of the French Commercial Code	1 6	1.1.1 6.4
Number of shares purchased and sold during the fiscal year pursuant to Articles L. 225-208, L. 22-10-62, L. 225-209-2, L. 228-12 and L. 228-12-1 of the French Commercial Code, average purchase and sale price, amount of trading costs, number of shares held in the name of the Corporation at the end of the fiscal year and the value thereof at the purchase price, together with the par value thereof for each purpose, number of shares used, any reallocations thereof, and the fraction of the share capital they represent	Article L. 225-211 of the French Commercial Code	6	6.3
Disposal of reciprocal shareholdings	Articles L. 233-29, L. 233-30 and R. 233-19 of the French Commercial Code		n/a
Statement of conversion adjustments and adjustments to terms of issue or exercise of stock options or securities granting access to the share capital	Articles R. 228-90 and R. 228-91 of the French Commercial Code		n/a
Summary of transactions in the Corporation's stock carried out by the directors and persons mentioned in Article L. 621-18-2 of the French Monetary and Financial Code during the last fiscal year	Article L. 621-18-2 of the French Financial and Monetary Code Article 223-23 of the General Regulation of the AMF	4	4.1.6

Required elements	Reference texts	Relevant chapters	Relevant paragraphs
Additional information			
Table of results of the Corporation for each of the last five fiscal years	Article R. 225-102 of the French Commercial Code	10	10.4.2
Amounts of dividends distributed in the last three fiscal years and amount of distributed income in those fiscal years	Article 243 bis of the French General Tax Code	6	6.2
Additional fiscal information	Articles 223 *quater* and 223 *quinquies* of the French General Tax Code	10	10.3 (Note 21)
Information about payment terms of suppliers or customers	Article D. 441-6 of the French Commercial Code	10	10.4.5
Statement of injunctions or penalties for antitrust practices ordered by the French Competition Authority	Article L. 464-2 of the French Commercial Code		n/a
Amounts of all incidental loans with a term of less than three years made by the Corporation to microbusinesses, SMEs or intermediate-sized enterprises with which the Corporation has financial links that justify such a loan	Article L. 511-6 of the French Financial and Monetary Code		n/a
Statutory auditors' declaration attached to the management report	Article L. 511-6 of the French Financial and Monetary Code		n/a
Changes made to the method of presentation of the annual financial statements		8	8.7
		10	10.3 (Note 1)
Report on payments made to the benefit of governments	Articles L. 22-10-37 and L. 232-6-2 of the French Commercial Code	9	9.3

Disclaimer

Unless otherwise stated, the terms "TotalEnergies", "TotalEnergies company" and "Company" in this document are used to designate TotalEnergies SE and the consolidated entities directly or indirectly controlled by TotalEnergies SE. Likewise, the words "we", "us" and "our" may also be used to refer to these entities or their employees. The entities in which TotalEnergies SE directly or indirectly owns a shareholding are separate and independent legal entities. The term "Corporation" as used in this document exclusively refers to TotalEnergies SE, which is the parent company of the Company.

This document contains references to websites (including the TotalEnergies website) and the Sustainability & Climate – 2024 Progress Report. These references are for the readers' convenience only. TotalEnergies is not incorporating by reference into this document any information posted on any website mentioned or in the Sustainability & Climate - 2024 Progress Report, unless otherwise stated.

This document may contain forward-looking statements (including forward-looking statements in the meaning of the Private Securities Litigation Reform Act of 1995), notably with respect to the financial condition, results of operations, activities and strategy of TotalEnergies. In particular it may contain indications of prospects, objectives, paths of progress and ambitions of TotalEnergies, including those relating to climate and more generally to sustainability. TotalEnergies has an ambition of carbon neutrality by 2050, together with society, it being specified that the means to be deployed do not solely rely on TotalEnergies.

These forward-looking statements may generally be identified by the use of the future or conditional tense or forward-looking words such as "will", "expected to", "could", "would", "may", "likely", "might", "envisions", "intends", "anticipates", "believes", "considers", "plans", "expects", "thinks" "targets", "aims" or similar terminology. Such forward-looking statements included in this document are based on economic data, estimates and assumptions prepared in a given economic, competitive and regulatory environment and considered to be reasonable by TotalEnergies as of the date of this document.

These forward-looking statements are not historical data and should not be interpreted as assurances that the perspectives, objectives or goals announced will be achieved. They may prove to be inaccurate in the future, and may evolve or be modified with a significant difference between the actual results and those initially estimated, due to the uncertainties notably related to the economic, financial, competitive and regulatory environment, or due to the occurrence of risk factors, such as, notably, the price fluctuations in crude oil and natural gas, the evolution of the demand and price of petroleum products, the changes in production results and reserves estimates, the ability to achieve cost reductions and operating efficiencies without unduly disrupting business operations, changes in laws and regulations including those related to the environment and climate, currency fluctuations, technological innovations, meteorological conditions and events, as well as socio-demographic, economic and political developments, changes in market conditions, loss of market share and changes in consumer preferences, or pandemics such as the COVID-19 pandemic. Additionally, certain financial information is based on estimates particularly in the assessment of the recoverable value of assets and potential impairments of assets relating thereto.

Readers are cautioned not to consider forward-looking statements as accurate, but as an expression of the Company's views only as of the date this document is disclosed.

TotalEnergies SE and its subsidiaries undertake to use their best efforts to update or revise, when necessary and in accordance with applicable legal and regulatory requirements, any and all forward-looking statements, information, trends or objectives contained in this document. Readers are expressly reminded that all information published in this document reflects the current state of knowledge and takes into account recent and evolving regulatory requirements and applicable best practices.

TotalEnergies assumes no responsibility for the accuracy, completeness or veracity of information and data provided by or sourced from third parties contained in this document or used for assumptions, estimates or more generally for forward-looking data published in this document. TotalEnergies shall not be liable for any errors, omissions or inaccuracies in the information and data provided by or sourced from third parties contained in this document or used for assumptions, estimates or, more generally, forward-looking statements published in this document. Users are advised to verify them independently before relying on them.

The information on risk factors that could have a significant adverse effect on TotalEnergies' business, financial condition, including its operating income and cash flow, reputation, outlook or the value of financial instruments issued by TotalEnergies, is provided in this document (chapter 3).

Additionally, the developments of environmental and climate change-related issues in this document are based on various frameworks and the interests of various stakeholders which are subject to evolve independently of our will. Moreover, our disclosures on such issues, including climate-related disclosures, may include information that is not necessarily "material" under US securities laws for SEC reporting purposes or under applicable securities law.

Financial information by business segment is reported in accordance with the internal reporting system and shows internal segment information that is used to manage and measure the performance of TotalEnergies. In addition to IFRS measures, certain alternative performance indicators are presented, such as performance indicators excluding the adjustment items described below (adjusted operating income, adjusted net operating income, adjusted net income), return on equity (ROE), return on average capital employed (ROACE), gearing ratio, operating cash flow before working capital changes, the shareholder rate of return. These indicators are meant to facilitate the analysis of the financial performance of TotalEnergies and the comparison of income between periods. They allow investors to track the measures used internally to manage and measure the performance of TotalEnergies.

These adjustment items include:

(i) Special items

Due to their unusual nature or particular significance, certain transactions qualifying as "special items" are excluded from the business segment figures. In general, special items relate to transactions that are significant, infrequent or unusual. However, in certain instances, transactions such as restructuring costs or assets disposals, which are not considered to be representative of the normal course of business, may qualify as special items although they may have occurred in prior years or are likely to occur in following years.

(ii) The inventory valuation effect

In accordance with IAS 2, TotalEnergies values inventories of petroleum products in its financial statements according to the First-In, First-Out (FIFO) method and other inventories using the weighted-average cost method. Under the FIFO method, the cost of inventory is based on the historic cost of acquisition or manufacture rather than the current replacement cost. In volatile energy markets, this can have a significant distorting effect on the reported income. Accordingly, the adjusted results of the Refining & Chemicals and Marketing & Services segments are presented according to the replacement cost method. This method is used to assess the segments' performance and facilitate the comparability of the segments' performance with those of its main competitors.

In the replacement cost method, which approximates the Last-In, First-Out (LIFO) method, the variation of inventory values in the statement of income is, depending on the nature of the inventory, determined using either the month-end prices differential between one period and another or the average prices of the period rather than the historical value. The inventory valuation effect is the difference between the results under the FIFO and the replacement cost methods.

(iii) Effect of changes in fair value

The effect of changes in fair value presented as an adjustment item reflects, for trading inventories and storage contracts, differences between internal measures of performance used by TotalEnergies' Executive Committee and the accounting for these transactions under IFRS.

IFRS requires that trading inventories be recorded at their fair value using period-end spot prices. In order to best reflect the management of economic exposure through derivative transactions, internal indicators used to measure performance include valuations of trading inventories based on forward prices.

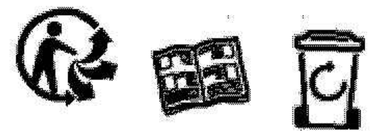
TotalEnergies, in its trading activities, enters into storage contracts, whose future effects are recorded at fair value in TotalEnergies' internal economic performance. IFRS precludes recognition of this fair value effect.

Furthermore, TotalEnergies uses into derivative instruments to risk manage certain operational contracts or assets. Under IFRS, these derivatives are recorded at fair value while the underlying operational transactions are recorded as they occur. Internal indicators defer the fair value on derivatives to match with the transaction occurrence.

The adjusted results (adjusted operating income, adjusted net operating income, adjusted net income) are defined as replacement cost results, adjusted for special items, excluding the effect of changes in fair value.

Euro amounts presented for the fully adjusted-diluted earnings per share represent dollar amounts converted at the average euro-dollar (€-$) exchange rate for the applicable period and are not the result of financial statements prepared in euros.

Cautionary Note to US Investors – The SEC permits oil and gas companies, in their filings with the SEC, to separately disclose proved, probable and possible reserves that a company has determined in accordance with SEC rules. We may use certain terms in this document, such as "potential reserves" or "resources", that the SEC's guidelines strictly prohibit us from including in filings with the SEC. US investors are urged to consider closely the disclosure in the Form 20-F of TotalEnergies SE, File N° 1-10888, available from us at 2, place Jean Millier – Arche Nord Coupole/Regnault – 92078 Paris-La Défense Cedex, France, or at the Company website totalenergies.com. You can also obtain this form from the SEC by calling 1-800-SEC-0330 or on the SEC's website sec.gov.



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