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Årsredovisning
Borealis AB

Org.nr 556078-6633

Räkenskapsår 2023-01-01 - 2023-12-31

Fastställelseintyg

Undertecknad styrelseledamot intygar att resultaträkningen och balansräkningen i årsredovisningen har fastställts på årsstämma den 19 juni 2024

Årsstämman beslöt att godkänna styrelsens förslag till resultatdisposition.

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

Stenungsund den 1 juli 2024

Anders Fröberg

Sensitivity: External

20240704173316

Årsredovisning
Borealis AB

Org.nr 556078-6633

Räkenskapsår 2023-01-01 - 2023-12-31

Borealis AB

556078-6633

Årsredovisning
för räkenskapsåret 2023-01-01 - 2023-12-31

Styrelsen och verkställande direktören för Borealis AB avger härmed följande årsredovisning.

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Styrelsens säte: Stenungsund
Företagets redovisningsvaluta: Svenska kronor (SEK).
Alla belopp redovisas, om inte annat anges, i tusentals kronor (tkr).

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Förvaltningsberättelse

Allmänt om verksamheten
Borealis AB är ett helägt dotterbolag till Borealis Sverige AB, som är ett helägt dotterbolag till koncernens moderbolag Borealis AG, med säte i Wien, Österrike. Borealis AG ägs av det österrikiska energi, råvaru och kemibolaget OMV till 75%. De resterande 25% ägs av Abu Dhabi National Oil Company (ADNOC), baserat i Förenade Arabemiraten (UAE).

Borealiskoncernen är en ledande leverantör av innovativa lösningar för polyolefiner och baskemikalier med totalt 6000 anställda. Huvudkontoret ligger i Wien och koncernen har, förutom i Sverige, produktionsanläggningar och verksamhet i ett flertal europeiska länder, Förenade Arabemiraten, Brasilien och USA.

Borealis AB i Stenungsund producerar olefiner (eten och propen) vid sin krackeranläggning och polyetenråvara vid sin polyolefin-anläggning. Sedan 2009 bedriver Borealis AB större delen av sin verksamhet som uppdragproduktion (toll manufacturing) för huvudmannen Borealis AG. Detta innebär en begränsad finansiell risk då ersättning erhålls för täckande av produktionskostnaderna.

Viktiga förhållanden
2023 har präglats av en allmän ekonomisk tillbakagång. Stigande räntor, hög inflation och politisk instabilitet har lett till sjunkande global efterfrågan på många produkter. Kemiindustrin har för närvarande betydande överkapacitet i produktionsledet. Den Europeiska marknaden påverkas av ökande import från andra delar av världen.

Verksamheten i Stenungsund har anpassat sig till den svagare konjunkturen genom produktionsbegränsningar och fokus på kostnadsbesparingar och effektivitetsökningar. En hög andel specialprodukter, fördelaktigt kostnadsläge och god råvaruförsörjning har säkerställt ett relativt bra kapacitetsutnyttjande även under 2023.

Totalt uppgick investeringar i företagets anläggningar till 710 MSEK (1 168 MSEK). Främst beror minskningen jämfört med föregående år på ett planerat underhållsstopp under 2022. Ett stort antal investeringsprojekt genomfördes under produktionsstoppet.
Bolaget har under 2023 slutfört ett mångårigt investeringsprojekt genom uppgradering av fyra krackerugnar till högsta tillgängliga standard vad gäller processäkerhet och energieffektivitet. Genom ombyggnaden säkerställs tillförlitlighet och driftsäkerhet samtidigt som komplexitet och underhållsbehov av anläggningen minskar. Under 2023 togs även en ny anläggning för vattenrening i drift.

Resultat och ställning

Från 2010 genomförs all försäljning av polyolefine och olefiner på uppdrag av moderbolaget Borealis AG. Borealis AB ersätts för fasta produktions- kostnader, inklusive finansieringskostnader av Borealis AG genom ett sk. "Toll-manufacturing"-avtal. För 2023 uppgick denna ersättning till 2 938 mkr (3 054 mkr). Borealis AB uppbär också koncerninterna ersättningar för tjänster inom forskning- och utveckling, försäljningsstöd och administrativa tjänster. Dessa ersättningar redovisas under övriga rörelseintäkter. Under 2023 har Borealis AB intäktsfört sammanlagt 43 MSEK i bidrag relaterat till höga energikostnader.

Rörliga produktionskostnader som råvaror, energi, utsläppsrätter och logistiktjänster hanteras av huvudmannen Borealis AG.
De rörliga kostnader som betalas av bolaget vidarefaktureras till moderbolaget utan marginal. Från 2020 redovisas ersättningar för rörliga produktionskostnader som en del av nettoomsättningen. Under 2023 uppgick dess intäkter till 477 mkr (400 mkr).

Resultatet efter finansiella poster uppgick till 287 mkr (180 mkr). Bolagets soliditet är 53% (49%).

Fasta kostnader ökar under året drivet av inflationseffekter, underhållsaktiviteter, koncerngemensamma kostnader och högre personalkostnader. Personalkostnader har påverkats av fler anställda, ökande lönekostnader och lönebikostnader.
Företaget pensionsskuld ökade under året med 96 mkr (143) mkr, främst beroende på inflationsuppräkning och förändringar i antaganden av PRI vid beräkning av den aktuella pensionsskulden. Denna effekt med tillägg för löneskatter har påverkat årets pensionskostnad.
I årets resultat ingår en nedskrivning av förutbetalda kostnader om 46 MSEK relaterat till ett projekt för kemisk återvinning av plast. Projektet har stoppats tills vidare i väntan på fortsatt utveckling av den tilltänkta tekniska lösningen.
Borealis har tidigare betraktat inköp av reservdelar som en del av löpande utgifter för reparation- och underhåll. Från 2023 redovisas reservdelar som en lagerpost fram till dess att de tas i bruk. Bolagets lagervärde ökade med 107 mkr genom detta.
Som en effekt av att ett antal större investeringsprojekt har tagits i produktion ökar avskrivningar till 813 MSEK (775 MSEK).
Under 2021 infördes ett investeringsstöd i form av en skattelättnad för att mildra effekterna av COVID 19-pandemin. I 2022 års taxering godkändes en skattereduktion på 29,1 mkr. 3,3 mkr har minskat skattekostnaderna för 2023.

Flerårsöversikt	2023	2022	2021	2020	2019
Nettoomsättning (tkr)	3 414 916	3 454 445	3 227 235	3 003 087	2 596 014
Resultat efter finansiella poster (tkr)	287 118	180 008	207 551	177 546	209 721
Rörelsemarginal (%)	8,8%	5,4%	6,4%	5,8%	7,5%
Avkastning på eget kapital (%)	6,3%	4,0%	4,7%	4,2%	5,1%
Balansomslutning (tkr)	8 826 815	8 984 027	8 849 139	8 259 546	8 196 882
Soliditet (%)	53%	49%	52%	52%	51%
Antal anställda	934	932	888	914	930

Nettoomsättningen från 2021 påverkades av en förändring av redovisning av fakturering av rörliga tillverkningskostnader till andra bolag inom Borealisgruppen. Totalt uppgick detta till 477 (400 mkr). Under 2021 inkluderar nettoomsättningen ersättningar från koncernens försäkringsbolag med 121 mkr (2020: 425 mkr).

Verksamhet inom forskning och utveckling

Borealis AB har ett marknads- och utvecklingscenter i Stenungsund (Innovation center). Anläggningen omfattar bland annat ett avancerat högspänningslab, HVTC (High Voltage Test Center).

Innovation center fokuserar främst på produkter och kunder inom segmentet för energiöverföring. Borealis är innovationsledande inom området för överföring av energi över långa avstånd med minimal energiförlust. Stor vikt läggs på utveckling av material utan negativ påverkan på miljö- och hälsa med bibehållen hög prestanda.

Ett hundratal anställda är involverade i forsknings- och marknadsutveckling, teknisk service och produkt- och processutveckling. Arbetet sker på uppdrag av bolagets huvudman, Borealis AG, i tätt sammarbete med övriga forskningsenheter inom Borealisgruppen, universitet, forskningsinstitut och kunder.

Miljö och säkerhetsinformation

Borealis kracker- och polyetenanläggningar bedriver tillståndspliktiga verksamheter och miljötillståndens villkor omfattar bland annat utsläpp till luft och vatten, buller och avfallshantering.

Verksamheten omfattas även av industriutsläppsförordningen och slutsatser om bästa tillgängliga teknik (BAT) gällande "Rening hantering av avloppsvatten och avgaser inom den kemiska sektorn". Krackeranläggningen berörs dessutom av BAT i referensdokumenten "Stora förbränningsanläggningar"(LCP) och " Produktion av organiska högvolymkemikalier" (LVOC).

Under 2023 har utsläppen till vatten, luft och buller varit inom villkorsgränserna för bolagets två anläggningar, även BAT-slutsatsernas gränsvärden (BAT-AEL) uppfylls. Borealis har haft dispens gällande BAT-AEL för dygns- och årsmedelhalt av NOx från en av bolagets ångpannor. Utsläppen av kväveoxid har tidigare varit höga varför nya brännare installerades under 2022. Därefter har NOx-halterna reducerats och varit väl inom gränsvärdet i LCP BREF.

Bolaget har lämnat ett antal handlingsplaner till tillsynsmyndigheten för ytterligare förbättringar gällande verksamhetens miljöpåverkan. Mark- och miljödomstolen beviljade villkorsändring gällande avskiljningsgrad >90% för en cyklon under 2022, eftersom det mättekniskt varit svårt att fastställa.

Fackelsystemet används för uppstart och nedtagning av anläggningen, både vid planerade start och stopp, men också vid driftstörningar. Vid produktionsstörningar är fackling en säkerhetsåtgärd som vidtas. Anledningen till bullret vid fackling är att ånga tillsätts i fackeltoppen för att öka förbränningen och säkerställa att facklingen inte sotar. Under 2023 har fackling förekommit i anslutning till mindre driftstörningar.

Borealis genomför fortlöpande studier och åtgärder för att minska miljöpåverkan från anläggningarna både när det gäller utsläpp till luft och vatten, minimera spridningen av pellets och mikroplast samt buller. Exempel på större projekt som slutförts under 2023 är renoveringen av B-ugnen och byggnationen av en ny processvattenreningsanläggning på krackern, samt uppgraderingen av tankinvallningen på polyeten både gällande säkerhet och miljö.

Bolaget följer löpande upp inträffade och potentiella processäkerhetshändelser. Borealis har en nollvision där målsättning är att inga allvarliga händelser skall inträffa. Under 2023 registrerades en processäkerhetshändelse som klassificerades som allvarlig.

Under året inträffade 7 (7) personskador (TRI). Detta ger en frekvens på 2,4 (2,1) skador per miljoner arbetstimmar.
Borealis långsiktiga målsättning är att detta nyckeltal inte skall överstiga 1,3.

Sjukfrånvaron var under året 3,8% (4,4%). Under 2022 påverkades sjukfrånvaron fortsatt av COVID-19 pandemin under årets första kvartal.

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Borealis AB

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Hållbarhetsredovisning

Med hänvisning till undantagsreglerna i årsredovisningslagen upprättar bolaget inte någon egen hållbarhetsrapport. I Borealis AGs hållbarhetsrapport ingår upplysningar för den koncern i vilken Borealis AB ingår. Hållbarhetsrapporten är en del av "Borealis Annual Report 2023" och finns tillgänglig på Borealis hemsida; www.borealisgroup.com.

Förväntningar avseende den framtida utvecklingen samt risker och osäkerhetsfaktorer

Det främsta övergripande målet kommunicerat från Borealisgruppens ledning är att fortsätta fokusera på säkerhet, hållbarhet och miljöpåverkan.
Den globala ekonomiska utvecklingen innebär en utmaning för Borealis. Inflation, volatila energipriser och stigande markandsräntor bedöms ha en negativ inverkan på efterfrågan och marginaler. Borealis AB bedriver sin verksamhet på uppdrag av sitt moderbolag, Borealis AG, och får en ersättning för produktionskostnader och finansieringskostnader. De kortfristiga, finansiella riskerna för Borealis AB är därmed relativt låga.

Rysslands invasion av Ukraina fortgår. Ledningen för Borealiskoncernen fortsätter att utvärdera situationen för att vidta nödvändiga åtgärder, i enlighet med all gällande lagstiftning och i förekommande fall de sanktioner som införts av USA, UK och EU.

Rapport över förändringar i eget kapital

	Bundet eget kapital		*Fritt eget kapital*		**Totalt**
	Aktie-kapital	Reservfond	Balanserat resultat	Årets resultat	**Eget kapital**
Ingående balans 2022-01-01	65 000	50 000	174 694	223 078	512 771
Omföring resultat föregående år			223 078	-223 078	0
Lämnad utdelning	0	0	-300 000	0	-300 000
Årets resultat			0	122 718	122 718
Utgående balans 2022-12-31	**65 000**	**50 000**	**97 772**	**122 718**	**335 490**
Omföring resultat föregående år			122 718	-122 718	0
Årets resultat			0	221 562	221 562
Utgående balans 2023-12-31	**65 000**	**50 000**	**220 490**	**221 562**	**557 051**

Antal aktier uppgår till 650 000 med ett kvotvärde på 100 kr/styck.

Förslag till resultatdisposition

Styrelsen föreslår att till förfogande stående medel (kronor)

Balanserat resultat	220 489 542
Årets resultat	221 562 330
	442 051 872
disponeras så att	
utdelas till aktieägarna	200 000 000
i ny räkning överföres	242 051 872

Vad beträffar företagets resultat och ställning i övrigt hänvisas till efterföljande resultat- och balansräkning med tillhörande bokslutskommentarer.

Resultaträkning

	Not	2023-01-01 -2023-12-31	2022-01-01 -2022-12-31
Nettoomsättning	1	3 414 916	3 454 445
Kostnad för sålda varor och tjänster	4,5,6,7	-3 235 057	-3 311 468
Bruttoresultat		**179 859**	**142 977**
Administrationskostnader	2,7	-159 436	-145 147
Forsknings- och utvecklingskostnader	7	-107 888	-116 768
Övriga rörelseintäkter	3	483 580	389 945
Övriga rörelsekostnader		-96 310	-84 709
Rörelseresultat		**299 805**	**186 299**
Resultat från finansiella poster			
Ränteintäkter och liknande resultatposter	8	45 678	17 030
Räntekostnader och liknande resultatposter	9	-58 365	-23 321
		-12 687	**-6 291**
Resultat efter finansiella poster		**287 118**	**180 008**
Bokslutsdispositioner	10	-13 313	-25 496
Resultat före skatt		**273 805**	**154 512**
Skatt på årets resultat	11	-52 243	-31 793
Årets resultat		**221 562**	**122 718**

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Balansräkning

	Not	2023-12-31	2022-12-31
TILLGÅNGAR			
Anläggningstillgångar			
Immateriella anläggningstillgångar			
Licenser och liknande rättigheter	12	24 338	33 128
		24 338	**33 128**
Materiella anläggningstillgångar			
Byggnader och mark	13	904 186	855 770
Maskiner och andra tekniska anläggningar	14	5 952 139	5 622 848
Inventarier, verktyg och installationer	15	14 468	4 335
Pågående nyanläggningar	16	386 914	818 172
Periodbundet underhåll	17	365 647	418 391
		7 623 353	**7 719 516**
Finansiella anläggningstillgångar			
Andelar i koncernföretag	18,19	20 955	20 955
Andelar i intresseföretag	20	93 822	87 628
Andra långfristiga fordringar	20	20	20
		114 797	**108 603**
Summa anläggningstillgångar		**7 762 488**	**7 861 247**
Omsättningstillgångar			
Varulager m.m.			
Reservdelar och förnödenheter	22	176 195	66 236
		176 195	**66 236**
Kortfristiga fordringar			
Kundfordringar		17 101	15 667
Fordringar hos koncernföretag		784 097	846 763
Aktuell skattefordran		0	1 119
Övriga fordringar	23	60 707	132 796
Förutbetalda kostnader och upplupna intäkter	24	26 227	60 199
		888 132	**1 056 545**
Kassa och bank		0	0
Summa omsättningstillgångar		**1 064 327**	**1 122 781**
SUMMA TILLGÅNGAR		**8 826 815**	**8 984 027**

Balansräkning

	Not	2023-12-31	2022-12-31
EGET KAPITAL OCH SKULDER			
Eget kapital			
Bundet eget kapital			
Aktiekapital		65 000	65 000
Reservfond		50 000	50 000
		115 000	**115 000**
Fritt eget kapital			
Balanserat resultat		220 489	97 771
Årets resultat		221 562	122 718
		442 051	**220 489**
Summa eget kapital		**557 051**	**335 489**
Obeskattade reserver	25	**5 142 436**	**5 129 129**
Avsättningar	26		
Avsättningar för pensioner och liknande förpliktelser		962 839	866 789
Uppskjuten skatteskuld	21	11 173	11 173
		974 012	**877 961**
Långfristiga skulder	27		
Övriga skulder		12 258	17 094
		12 258	**17 094**
Kortfristiga skulder			
Leverantörsskulder		191 345	302 734
Skulder till koncernföretag		1 047 441	1 369 705
Aktuella skatteskulder		26 602	0
Övriga skulder	28	476 150	492 527
Upplupna kostnader och förutbetalda intäkter	29	399 520	459 389
		2 141 058	**2 624 354**
SUMMA EGET KAPITAL OCH SKULDER		**8 826 815**	**8 984 027**

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Borealis AB

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Kassaflödesanalys

	2023-01-01 -2023-12-31	2022-01-01 -2022-12-31
Den löpande verksamheten		
Resultat efter finansiella poster	287 118	180 008
Justeringar för poster som inte ingår i kassaflödet m.m.		
Avskrivningar och nedskrivningar	812 973	775 042
Förlust vid utrangering av inventarier	1 744	5 945
Resultatandel i intressebolag	-6 194	-4 264
Intäkt utdelning	-4 923	-4 481
Ränteintäkter	-40 755	-17 037
Räntekostnader	58 365	23 321
Avsättning till pensioner	96 051	142 561
Övriga avsättningar	-4 462	-7 929
	1 199 917	**1 093 165**
Betald inkomstskatt	-24 523	-48 829
Kassaflöde från den löpande verksamheten före förändringar av rörelsekapital	**1 175 394**	**1 044 336**
Förändringar i rörelsekapital		
Förändring av varulager	-109 959	-3
Förändring av rörelsefordringar	467 411	231 689
Förändring av rörelseskulder	-510 500	-106 131
Kassaflöde från den löpande verksamheten	**1 022 346**	**1 169 891**
Investeringsverksamheten		
Förvärv av materiella anläggningstillgångar	-709 764	-1 168 139
Kassaflöde från investeringsverksamheten	**-709 764**	**-1 168 139**
Finansieringsverksamheten		
Erhållen utdelning	4 923	4 481
Betald utdelning	-300 000	0
Erhållen ränta	40 635	16 941
Erlagd ränta	-58 140	-23 175
Kassaflöde från finansieringsverksamheten	**-312 582**	**-1 753**
Årets kassaflöde	**0**	**0**
Likvida medel vid årets början	**0**	**0**
Likvida medel vid årets slut	**0**	**0**

Tilläggsupplysningar

Redovisningsprinciper m.m.

Allmänna redovisningsprinciper
Årsredovisningen har upprättats enligt Årsredovisningslagen (1995:1554) och BFNAR 2012:1 Årsredovisning och koncernredovisning (K3). Redovisningsprinciperna är oförändrade mot föregående år.

Koncernredovisning
Företaget är ett moderföretag men upprättar ingen koncernredovisning med hänvisning till undantagsregeln i årsredovisningslagen 7 kap. 2 §. Koncernredovisning upprättas av Borealis AG med säte i Wien, Österrike. Denna finns tillgänglig på www.borealisgroup.com.

Bolaget redovisar andelar i intresseföretag enligt anskaffningsvärdemetoden. Värdet justeras vid förändringar i intresseföretagets eget kapital.

Intäktsredovisning
Försäljning av tjänster och varor
Intäkten redovisas till verkligt värde av vad företaget fått eller kommer att erhålla. Det innebär att företaget redovisar intäkten till nominellt värde (fakturabelopp) om företaget får ersättning i likvida medel direkt vid leveransen. Avdrag görs för lämnade rabatter.

Företagets huvudsakliga verksamhet är att tillhandahålla produktionstjänster till huvudmannen, Borealis AG. Intäkten redovisas i takt med att arbetet utförs. Ersättning för produktionstjänster redovisas som del av bolagets nottoomsättning. Borealis AB utför även tjänster inom forskning- och utveckling, säljsstöd och adminstrativa tjänster. Intäkter från dessa uppdrag redovisas som övriga rörelseintäkter.

Vid försäljning av varor redovisas normalt inkomsten som intäkt när de väsentliga förmåner och risker som är förknippade med ägandet av varan har överförts från företaget till köparen. Borealis AB redovisar inköp av varor som sedan vidareförsäljs inom koncernen som en del av företagets nettoomsättning. Detta gäller främst förbrukingsvaror som vatten och energi.

Intäkter för licenser i enlighet med toll manufacturing avtalet anses vara en del av företagets huvudsakliga verksamhet och är därmed inkluderade i nettoomsättningen.

Leasingavtal
Företaget som leasetagare
Företaget redovisar samtliga leasingavtal, såväl finansiella som operationella, som operationella leasingavtal. Operationella leasingavtal redovisas som en kostnad linjärt över leasingperioden.
Se vidare not 4.

Ersättningar till anställda
Ersättningar till anställda avser alla typer av ersättningar som företaget lämnar till de anställda. Företagets ersättningar innefattar bland annat löner, betald semester, betald frånvaro, bonus och ersättningar efter avslutad anställning (pensioner). Redovisning sker i takt med intjänandet.

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 övriga planer klassificeras som förmånsbestämda och beräknas enligt Tryggandelagen och redovisas i enlighet med förenklingsreglerna i BFNAR 2012:1. Ränteuppräkning av pensionskulden redovisas som en del av personalkostnader.

Vid avgiftsbestämda planer betalas fastställda avgifter till ett annat företag, normalt ett försäkringsföretag, och företaget har inte längre någon förpliktelse till den anställde när avgiften är betald. Storleken på den anställdes ersättningar efter avslutad anställning är beroende av de avgifter som har betalats och den kapitalavkastning som avgifterna ger.
Vid förmånsbestämda planer har företaget en förpliktelse att lämna de överenskomna ersättningarna till nuvarande och tidigare anställda. Företaget bär i allt väsentligt dels risken att ersättningarna kommer att bli högre än förväntat (aktuariell risk), dels risken att avkastningen på tillgångarna avviker från förväntningarna (investeringsrisk). Investeringsrisk föreligger även om tillgångarna överförs till ett annat företag.
Företaget har förmånsbestämda pensionsplaner som finansieras via Alecta, vilka redovisas som avgiftsbestämda planer då det inte finns tillräcklig information för att redovisa planen som förmånsbestämd.

Ett antal utvalda anställda omfattas av en långsiktig bonusplan (LTIP) inom OMV-koncernen. Planen baseras på en tilldelning av aktier i moderbolaget för OMV-koncernen, OMV AG. Planen består av årliga tilldelningar som löper under 3 år. Tilldelningen är beroende på utfallet av bestämda parametrar som avkastnining till aktieägare, kassaflöde och utvalda nyckeltal.

Under 2023 omfattades 13 personer i Borealis AB av dessa planer. Avsättning inklusive lönebikostnader har gjorts med 9,6 MSEK varav 2.9 MSEK avser styrelsens ordförande och verkställande direktör.

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Omräkning av poster i utländsk valuta
Fordringar och skulder i utländsk valuta har värderats till balansdagens kurs. Kursvinster och kursförluster på rörelsefordringar och rörelseskulder redovisas i rörelseresultatet medan kursvinster och kursförluster på finansiella fordringar och skulder redovisas som finansiella poster.

Koncernbidrag
Erhållna och lämnade koncernbidrag redovisas som bokslutsdisposition.

Skatt
Total skatt utgörs av aktuell skatt och uppskjuten skatt. Skatter redovisas i resultaträkningen, utom då underliggande transaktion redovisas direkt mot eget kapital varvid tillhörande skatteeffekt redovisas i eget kapital.

Aktuell skatt
Aktuell skatt avser inkomstskatt för innevarande räkenskapsår samt den del av tidigare räkenskapsårs inkomstskatt som ännu inte redovisats. Aktuell skatt beräknas utifrån per den skattesats som gäller per balansdagen.

Uppskjuten skatt
Uppskjuten skatt är inkomstskatt som avser framtida räkenskapsår till följd av tidigare händelser. Redovisning sker enligt balansräkningsmetoden. Enligt denna redovisas uppskjutna skatteskulder och uppskjutna skattefordringar på temporära skillnader som uppstår mellan bokförda respektive skattemässiga värden för tillgångar och skulder samt för övriga skattemässiga avdrag eller underskott.
Uppskjutna skattefordringar nettoredovisas mot uppskjutna skatteskulder endast om de kan betalas med ett nettobelopp. Uppskjuten skatt beräknas utifrån gällande skattesats på balansdagen. Effekter av förändringar i gällande skattesatser resultatförs i den period förändringen lagstadgats. Uppskjutna skattefordringar reduceras till den del det inte är sannolikt att den underliggande skattefordran kommer att kunna realiseras inom en överskådlig framtid. Uppskjuten skattefordran redovisas som finansiell anläggningstillgång och uppskjuten skatteskuld som avsättning.

Anläggningstillgångar
Materiella och immateriella anläggningstillgångar redovisas till anskaffningsvärde minskat med ackumulerade avskrivningar och eventuella nedskrivningar.
När det finns en indikation på att en tillgångs värde minskat, görs en prövning av nedskrivningsbehov. Har tillgången ett återvinningsvärde som är lägre än det redovisade värdet, skrivs den ner till återvinningsvärdet. Vid bedömning av nedskrivningsbehov grupperas tillgångarna på det lägsta nivåer där det finns separata identifierbara kassaflöden (kassagenererande enheter). För tillgångar, andra än goodwill, som tidigare skrivits ner görs per varje balansdag en prövning av om återföring bör göras. Inga nedskrivningar har gjorts under 2023.

Immateriella anläggningstillgångar utgörs i huvudsak av licenser vars avskrivningstid baseras på avtalsenliga rättigheter.

Materiella anläggningstillgångar har delats upp på betydande komponenter när komponenterna har väsentligt olika nyttjandeperioder.

Avskrivningsbart belopp utgörs av anskaffningsvärdet minskat med ett beräknat restvärde om detta är väsentligt. Avskrivning sker linjärt över den förväntade nyttjandeperioden.

Följande avskrivningstider tillämpas:

Immateriella anläggningstillgångar	
Licenser	3 - 10 år
Materiella anläggningstillgångar	
Byggnader och Markanläggningar	
Fabriksbyggnader	20 år
Kontorsbyggnader	40 år
Markanläggningar	20 år
Maskiner och andra tekniska anläggningar	
Maskiner och andra tekniska anläggningar	6-20 år
Periodbundet underhåll	5-6 år
Inventarier, verktyg och installationer	3-10 år

Internt upparbetade immateriella anläggningstillgångar
Företaget tillämpar den s.k. "aktiveringsmodellen" avseende internt upparbetade immateriella anläggningstillgångar. Metoden innebär att samtliga utgifter som uppfyller kriterierna i BFNAR 2012:1 aktiveras som immateriell anläggningstillgång och skrivs av under tillgångens förväntade nyttjandeperiod.

Finansiella instrument

Borealis AB

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Finansiella instrument värderas utifrån anskaffningsvärdet. Vid varje balansdag bedömer bolaget om det finns någon indikation på nedskrivningsbehov i någon utav de finansiella anläggningstillgångarna. Nedskrivning sker om värdenedgången bedöms vara bestående. Nedskrivningsbehovet prövas individuellt för aktier och andelar och övriga enskilda finansiella anläggningstillgångar som är väsentliga.

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Varulager
Varulager redovisas enligt BFNAR 2012:3 (K3) kapitel 13. Värdering sker till det lägsta av dess anskaffningsvärde och dess nettoförsäljningsvärde på balansdagen. Med nettoförsäljningsvärdet avses varornas beräknade försäljningspris minskat med försäljningskostnader. Reservdelar som inte har förbrukats inom 3 år från anskaffningstillfället skrivs regelmässigt ner. I de fall reservdelar anskaffas med syftet att innehas stadigvarande i verksamheten redovisas de som anläggningstillgångar.

Fordringar, skulder och avsättningar
Om inget annat anges ovan värderas kortfristiga fordringar till det lägsta av dess anskaffningsvärde och det belopp varmed de beräknas bli reglerade. Långfristiga fordringar och långfristiga skulder värderas efter det första värderingstillfället till upplupet anskaffningsvärde. Övriga skulder och avsättningar värderas till de belopp varmed de beräknas bli reglerade. Övriga tillgångar redovisas till anskaffningsvärde om inget annat anges ovan.

Kassaflödesanalys
Kassaflödesanalysen upprättas enligt indirekt metod. Det redovisade kassaflödet omfattar endast transaktioner som medfört in - och utbetalningar.

Uppskattningar och bedömningar
Borealis AB gör uppskattningar och bedömningar om framtiden. De uppskattningar för redovisningsändamål som blir följden av dessa kommer, definitionsmässigt, inte alltid att motsvara det verkliga resultatet. De uppskattningar och antaganden som innebär en betydande risk för väsentliga justeringar i redovisade värden för tillgångar och skulder under nästkommande år behandlas i huvuddrag nedan.

Intäkter: Borealis AB tillhandahåller tjänster inom produktion, marknadsföring, forskning och utveckling och andra administrativa tjänster på uppdrag av sin huvudman, Borealis AG. Borealis AB erhåller en ersättning för detta baserad på verklig kostnad med en marknadsmässig marginal. Risken för Borealis AB är därför låg och bolagets huvudintäkter kan beräknas relativt väl med utgångspunkt från konstaterade och bedömda, upplupna kostnader.
Utgifter: I samband med årsbokslut görs bedömningar av upplupna kostnader. Dessa bedömningar baseras på levererade varor och tjänster och värderas enligt gällande avtal.

Aktier och andelar: Värdet av aktier och andelar i dotterbolag och intressebolag redovisas till värdet av Borealis andel av eget kapital.

Pensionsskulder: Borealis AB gör avsättningar i balansräkningen för åtagande enligt ITP2. Denna pensionsskuld beräknas enligt grunder fastställda av Pensionsregistreringsinstitutet (PRI). Bedömningar görs bl a av diskonteringsränta, livslängd och framtida omkostnader. Under 2023 har beräkningen påverkats av högre inflation PRI har ökat bolagets pensionsskuld. Den totala ökningen uppgick till 96 mkr och har påverkat årets pensionskostnader.

Inkurans i varulager: Som produktionsenhet lagerför bolaget främst förnödenheter och reservdelar för löpande behov. Det finns viss risk att lager måste kasseras på grund av skador eller ändrade behov. I bokslutet görs nedskrivning för inkurans baserat på förbrukningstakt av reservdelar. I de fall en special slags reservdel inte har använts under de senaste 3 åren görs en regelmässig nedskrivning av värdet till 0. Totalt har bolaget reserverat 198 mkr för reservdelar som bedöms vara obsoleta.

Ändring av redovisningsprinciper och rättelse av fel
Borealis AB har sedan 2009 tillämpat principen att kostnadsföra reservdelar som inköpts för löpande förbrukning. Inköp av reservdelar har ansetts vara del av löpande underhåll. Då reservdelar ofta köps in med lång framförhållning, beställningspunkter sätts med försiktighet och miniminivåer lagerhålls löpande ger denna princip inte en korrekt bild av förbrukningen av reservdelar.
2023 har bolaget övergått till att redovisa alla reserverdelar som en del av lager tills förbrukning sker. Effekten av detta är svåröverskådlig då tidigare praxis tillämpas över en längre tid, ersättning har erhållits från uppdragsgivare baserat på kostnad och avsättningar görs för material med låg omsättningstakt.

Bolagets lagertillgångar ökade med 109 MSEK jämfört med föregående år. 107 MSEK av detta kan anses vara en effekt av ändrad redovisning av varulager. 2022 år lagervärde uppskattas har varit 93 MSEK högre om samma metod använts föregående år. Eftersom bolagets intäkter är baserade på produktionskostnader + 5% mark-up är resultateffekten av denna justering begränsad. Med fortsatt tillämpning av tidigare metod skulle företages kostnader för sålda varor och tjänster ökat med 107 MSEK. Intäkterna beräknas ha minskat med 112 MSEK. Resultat efter skatt beräknas ha varit 4 MSEK lägre med tillämpling av tidigare metod.

Noter

Not 1 Nettoomsättningens fördelning

	2023	2022
Ersättning enligt Toll Manufacturingavtal	2 937 732	3 054 305
Ersättning för rörliga tillverkningskostnader	477 184	400 140
	3 414 916	**3 454 445**

Bolagets huvudersättning hänför sig till ersättning för legoproduktionstjänster, toll manufacturing, för huvudmannen Borealis AG. Rörliga produktionskostnader, främst energi, som vidarefaktureras till huvudmannen Borealis AG som en intäkt.

Nettoomsättningen avser Europa som geografisk marknad

Not 2 Arvode till revisorer

	2023	2022
KPMG AB		
Revisionsuppdraget	969	799
Övriga tjänster	0	0
	969	**799**

2022 års siffror gäller dåvarande revisor Pricewaterhouse Coopers AB.

Not 3 Övriga rörelseintäkter

	2023	2022
Försäljning av tjänster	27 372	27 018
Försäljning av tjänster, koncernföretag	282 285	249 103
Kommissioner	0	4
Kursvinster/förluster på fordringar / skulder av rörelsekaraktär	90 811	68 309
Resultatandel i intressebolag	6 194	4 264
Övrigt	76 917	41 248
	483 580	**389 945**

Not 4 Leasingavtal - leasetagare

Operationell leasing

	2023	2022
Kostnadsförda leasingavgifter avseende operationella leasingavtal	22 315	20 588
Framtida minimileaseavgifter avseende ej uppsägningsbara operationella leasingavtal		
Skall betalas inom 1 år	15 151	11 816
Skall betalas inom 1-5 år	13 126	9 246
Skall betalas senare än 5 år	3 643	0
	31 920	**21 062**

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Not 5 Anställda och personalkostnader

Medelantalet anställda

	2023 Antal anställda	2023 Varav män	2022 Antal anställda	2022 Varav män
Sverige	934	76%	932	76%

	2023	2022
Löner och andra ersättningar		
Styrelse och verkställande direktör	4 455	3 058
Övriga anställda	682 999	688 973
	687 454	**692 031**

Något tantiem till styrelse och verkställande direktör utgår ej.

Pensions- och övriga sociala kostnader		
Pensionskostnader för styrelse och verkställande direktör	686	604
Pensionskostnader för övriga anställda	205 195	243 530
Övriga sociala kostnader enligt lag och avtal	233 291	250 649
	439 172	**494 783**

	2023-12-31	2022-12-31

Inga utestående pensionsförpliktelser till styrelse och verkställande direktör finns. Vissa ledande befattningshavare omfattas av ett långsiktigt belöningsprogram inom OMV-koncernen. Se tilläggsupplysningar.

Könsfördelning bland ledande befattningshavare		
Andel kvinnor i styrelsen	13%	13%
Andel män i styrelsen	87%	87%
Andel kvinnor bland övriga ledande befattningshavare	56%	56%
Andel män bland övriga ledande befattningshavare	44%	44%

Not 6 Inköp och försäljning mellan koncernföretag

	2023	2022
Andel av årets totala inköp som skett från andra företag inom koncernen	23%	16%
Andel av årets totala försäljning som skett till andra företag inom koncernen	100%	100%

Not 7 Av- och nedskrivningarnas fördelning per funktion

	2023	2022
Kostnad sålda varor och tjänster	-810 427	-771 798
FoU- och administrationskostnader	-2 545	-3 244
	-812 973	**-775 042**

Not 8 Utdelningar, ränteintäkter och liknande resultatposter

	2023	2022
Utdelning på andelar i dotterföretag	4 923	4 481
Ränteintäkter från koncernföretag	11 006	1 037
Övriga ränteintäkter	661	8
Ersättning för finansieringskostnader enl. Toll Manufactoringavtal	29 088	11 504
	45 678	**17 030**

Not 9 Räntekostnader och liknande resultatposter

	2023	2022
Räntekostnader till koncernföretag	-55 164	-22 642
Övriga räntekostnader	-3 201	-679
	-58 365	**-23 321**

Not 10 Bokslutsdispositioner

	2023	2022
Lämnat koncernbidrag	-6	-38
Skillnad mellan bokförd avskrivning och avskrivning enligt plan	-13 307	-25 458
	-13 313	**-25 496**

Not 11 Skatt på årets resultat

	2023	2022
Aktuell skatt	-55 740	-6 190
Skatt hänförlig till tidigare års redovisade resultat	3 496	159
Uppskjuten skatt	0	-25 762
Summa redovisad skattekostnad	**-52 243**	**-31 793**

Avstämning av effektiv skattesats

Redovisat resultat före skatt	**273 805**	**154 512**
Skatt på redovisat resultat enligt gällande skattesats (20,6%):	-56 404	-31 829
Skatteeffekt av ej avdragsgill upp- och nedskrivning	0	0
Skatteeffekt av övriga ej avdragsgilla kostnader	-836	-885
Skatteeffekt av ej skattepliktiga intäkter	2 418	1 787
Skatt hänförlig till tidigare års redovisade resultat	3 496	159
Skatt på resultatandel i dotterbolag	-918	-1 025
Redovisad skattekostnad	**-52 243**	**-31 793**
Effektiv skattesats	19,1%	20,6%

Not 12 Licenser samt liknande rättigheter

	2023-12-31	2022-12-31
Ingående anskaffningsvärden	515 592	515 592
Årets anskaffningar	1 873	0
Utgående ackumulerade anskaffningsvärden	**517 465**	**515 592**
Ingående avskrivningar	-482 464	-471 868
Årets avskrivningar	-10 663	-10 596
Utgående ackumulerade avskrivningar	**-493 128**	**-482 464**
Utgående redovisat värde	**24 337**	**33 128**

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Not 13 Byggnader och mark

	2023-12-31	2022-12-31
Ingående anskaffningsvärden	2 541 420	2 560 728
Överfört från pågående nyanläggningar	133 938	3 870
Försäljningar/utrangeringar	0	-23 178
Utgående ackumulerade anskaffningsvärden	**2 675 358**	**2 541 420**
Ingående avskrivningar	-1 685 650	-1 608 352
Försäljningar/utrangeringar		5 074
Årets avskrivningar	-85 523	-82 373
Utgående ackumulerade avskrivningar	**-1 771 173**	**-1 685 650**
Utgående redovisat värde	**904 186**	**855 770**

Not 14 Maskiner och andra tekniska anläggningar

	2023-12-31	2022-12-31
Ingående anskaffningsvärden	16 373 188	16 006 802
Överfört från pågående nyanläggningar	958 227	461 373
Försäljningar/utrangeringar	-18 451	-94 988
Utgående ackumulerade anskaffningsvärden	**17 312 964**	**16 373 188**
Ingående avskrivningar	-10 750 340	-10 237 142
Försäljningar/utrangeringar	17 620	107 906
Årets avskrivningar	-628 106	-621 104
Utgående ackumulerade avskrivningar	**-11 360 825**	**-10 750 340**
Utgående redovisat värde	**5 952 139**	**5 622 848**

Not 15 Inventarier, verktyg och installationer

	2023-12-31	2022-12-31
Ingående anskaffningsvärden	103 263	101 957
Överfört från pågående nyanläggningar	14 676	1 306
Försäljningar/utrangeringar	-23 423	0
Utgående ackumulerade anskaffningsvärden	**94 516**	**103 263**
Ingående avskrivningar	-98 928	-94 316
Försäljningar/utrangeringar	22 510	0
Årets avskrivningar	-3 631	-4 611
Utgående ackumulerade avskrivningar	**-80 048**	**-98 928**
Utgående redovisat värde	**14 467**	**4 335**

Not 16 Pågående nyanläggningar

	2023-12-31	2022-12-31
Vid årets början	818 172	573 876
Årets anskaffningar	709 764	1 168 139
Överfört till anläggningstillgångar	-1 141 021	-923 843
Vid årets slut	**386 914**	**818 172**

Not 17 Periodbundet underhåll

	2023-12-31	2022-12-31
Ingående anskaffningsvärden	506 853	353 928
Överfört från pågående nyanläggningar	32 307	457 294
Försäljningar/utrangeringar	0	-304 369
Utgående ackumulerade anskaffningsvärden	**539 160**	**506 853**
Ingående avskrivningar	-88 462	-335 711
Försäljningar/utrangeringar	0	303 607
Årets avskrivningar	-85 051	-56 358
Utgående ackumulerade avskrivningar	**-173 513**	**-88 462**
Utgående redovisat värde	**365 647**	**418 391**

Not 18 Andelar i koncernföretag

	2023-12-31	2022-12-31
Ingående anskaffningsvärden	20 955	20 955
Årets omvärdring av aktier och andelar	0	0
Utgående redovisat värde	**20 955**	**20 955**

Not 19 Specifikation av andelar i koncernföretag

Namn	Kapital-andel	Rösträtts-andel	Antal andelar	Bokfört värde
Etenförsörjning i Stenungsund AB *556258-6536 Stenungsund*	80%	80%	40 000	4 000
Borealis Group Services AS, *991 488 677 Bamble, Norge*	100%	100%	1 000	8 150
Fastighets KB Stenungsund-Munkeröd 1:72 (Komplementär) 969667-1107 Stenungsund	100%	100%	0	8 805
				20 955

Dotterbolagen har ej konsoliderats med moderbolaget utan konsolideringen har gjorts i Borealis AG med säte i Wien, Österrike. Borealis konsolideras från oktober 2020 i OMV-gruppen.

Not 20 Andelar i intresseföretag och övriga fordringar

	2023-12-31	2022-12-31
Ingående anskaffningsvärden	87 628	83 364
Årets anskaffningar		
Årets resultatandel	6 194	4 264
Utgående ackumulerade anskaffningsvärden	**93 822**	**87 628**
Utgående redovisat värde	**93 822**	**87 628**

Namn	Antal andelar	Kapital-andel	Rösträtts-andel	Bokfört värde	Intäktsförd utdelning
PetroPort Holding AB *556825-4725 Stenungsund*	25 000	50%	50%	93 772	
Industrins räddningstjänst i Stenungsund AB *556825-4725 Stenungsund*	12 500	25%	25%	50	
				93 822	**0**

Övriga långfristiga fordringar	2023-12-31	2022-12-31
Andel i föreningen Hållbar Kemi i Stenungsund	20	20

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Not 21 Uppskjuten skatt

Temporära skillnader föreligger i de fall tillgångars eller skulders redovisade respektive skattemässiga värden är olika. Temporära skillnader avseende följande poster samt underskottsavdrag har resulterat i uppskjutande skattefordringar och -skulder. Redovisad uppskjuten skatteskuld hänför sig till uppskrivning av fastighetsvärden.

Uppskjuten skatteskuld	**2023-12-31**	**2022-12-31**
Övriga skattepliktiga temporära skillnader	11 173	11 173
Uppskjutna skatteskulder som redovisas i balansräkningen	**11 173**	**11 173**

Not 22 Varulager

	2023-12-31	**2022-12-31**
Förnödenheter, förbrukningsmaterial och strategiskt viktiga reservdelar	71 367	66 473
Reservdelar för löpande förbrukning	302 659	0
Avsättning för inkurans och låg omsättningshastighet	-197 831	-237
Varulager	**176 195**	**66 236**

Strategiskt viktiga reservdelar lagerhålls även om förbrukning inte sker löpande.

Not 23 Övriga fordringar

	2023-12-31	**2022-12-31**
Skattekonto/moms/punktskatt	1 079	45 711
Momsfordran	39 685	65 319
PRI-pensioner	19 943	19 526
Övriga fordringar	0	2 240
	60 707	**132 796**

Not 24 Förutbetalda kostnader och upplupna intäkter

	2023-12-31	**2022-12-31**
Förutbetalda försäkringspremier	22 111	13 650
Förutbetalda licenskostnader	0	43 456
Övriga förutbetalda kostnader	4 116	3 092
	26 227	**60 199**

Not 25 Obeskattade reserver

	2023-12-31	2022-12-31
Ackumulerade överavskrivningar Byggnader och mark	14 216	13 089
Ackumulerade överavskrivningar Maskiner och inventarier	5 128 220	5 116 040
	5 142 436	**5 129 129**

Not 26 Avsättningar

	2023-12-31	2022-12-31
Pensioner och liknande förpliktelser		
Belopp vid årets ingång	866 789	724 228
Årets avsättningar	96 050	142 561
	962 839	**866 789**
Härav tryggat enligt Tryggandelagen (PRI)	**960 454**	**863 420**
	0	**0**

Not 27 Långfristiga skulder

	2023-12-31	2022-12-31
Förfaller mellan 2 och 5 år efter balansdagen		
Skulder avseende förskottsbetald hyra	8 000	12 000
Långfristiga personalprogram och övriga skulder	4 258	5 094
	12 258	**17 094**

Not 28 Övriga kortfristiga skulder

	2023-12-31	2022-12-31
Emissionsrätter	458 514	476 250
Personalens källskatt	17 423	15 960
Övriga poster	213	316
	476 150	**492 527**

Not 29 Upplupna kostnader och förutbetalda intäkter

	2023-12-31	2022-12-31
Upplupna semesterlöner (inkl. sociala avgifter)	155 200	155 288
Upplupna arbetsgivaravgifter	16 156	15 132
Upplupna personalkostnader	97 779	101 031
Upplupna projekt- och driftkostnader	72 134	135 606
Upplupen fastighetsskatt	1 905	0
Förutbetalda bidrag och projektintäkter	44 969	41 349
Övriga förutbetalda intäkter	11 378	10 982
	399 520	**459 389**

20240704117326

Not 30 Ställda säkerheter

	2023-12-31	2022-12-31
Fastighetsinteckningar - relaterat till hyresavtal Grace	127 000	127 000
Summa ställda säkerheter	**127 000**	**127 000**

Not 31 Eventualförpliktelser

	2023-12-31	2022-12-31
Garantiåtaganden		
PRI Pensionsgaranti	19 209	17 268
Övriga eventualförpliktelser	48	67
	19 257	**17 336**

Not 32 Nyckeltalsdefinitioner

Rörelsemarginal
Rörelseresultat i procent av nettoomsättningen

Justerat eget kapital
Eget kapital med tillägg för obeskattade reserver som reducerats med uppskjuten skatt.

Avkastning på eget kapital
Resultat efter finansiella poster i procent av genomsnittligt justerat eget kapital

Soliditet
Justerat eget kapital i procent av balansomslutning

Not 33 Händelser efter räkenskapsårets utgång

Inga särskilda händelser har inträffat under kvartal 1, 2024.

Borealis AB

556078-6633

Not 34 Förslag till resultatdisposition

Styrelsen föreslår att till förfogande stående medel (kronor)

Balanserat resultat	220 489 542
Årets resultat	221 562 330
	442 051 872
disponeras så att	
utdelas till aktieägarna	200 000 000
i ny räkning överföres	242 051 872

Den dag som framgår av elektronisk underskrift

DocuSigned by:
Anders Fröberg
85D14331F05744B...
Ordförande

DocuSigned by:
Marcus Kierkegaard
88C11789B670471...
Verkställande direktör

DocuSigned by:
Wolfram Krenn
D2B781B8B9EB45A...
Styrelseledamot

DocuSigned by:
Thomas Van De Velde
7ED07E6A57E8489...
Styrelseledamot

DocuSigned by:
Patrik Andersson
9E53321987DE4EB...
Arbetstagarrepresentant

DocuSigned by:
Anna Rydh
3C6E7BC7E2D045D...
Arbetstagarrepresentant

DocuSigned by:
Jerker Lönnström
Arbetstagarrepresentant

Vår revisionsberättelse har lämnats den dag som framgår av elektroniskt underskrift

KPMG AB

DocuSigned by:
Maria Kylén
Auktoriserad Revisor

DocuSign

Certificate Of Completion

Envelope Id: 3C7FDF9A319648D7A316E97FEAB46E1E
Status: Completed
Subject: Complete with DocuSign: Sign of the annual report of Borealis AB 2023
Source Envelope:
Document Pages: 22
Signatures: 8
Certificate Pages: 4
Initials: 0
AutoNav: Enabled
EnvelopeId Stamping: Enabled
Time Zone: (UTC+01:00) Amsterdam, Berlin, Bern, Rome, Stockholm, Vienna

Envelope Originator:
Olsson, Annelie
Trabrennstraße 6-8
Wien, 1020
annelie.olsson@borealisgroup.com
IP Address: 147.161.189.81

20240704173727

Record Tracking

Status: Original
04 April 2024 | 15:57

Holder: Olsson, Annelie
annelie.olsson@borealisgroup.com

Location: DocuSign

Signer Events

Anders Fröberg
anders.froberg@borealisgroup.com
Director of Manufacuring excellence
Borealis AB
Security Level: Email, Account Authentication (None)

Signature

DocuSigned by:
Anders Fröberg
85D14331F05744B

Signature Adoption: Pre-selected Style
Using IP Address: 62.20.52.194

Timestamp

Sent: 04 April 2024 | 16:17
Viewed: 04 April 2024 | 16:22
Signed: 04 April 2024 | 16:23

Authentication Details
Identity Verification Details:
Workflow ID: 83f4db5e-4aca-4199-a361-76eb7b49f45a
Workflow Name: DocuSign ID Verification
Workflow Description: The signer will need to identify themselves with a valid government ID.
Identification Method: Electronic ID
Type of Electronic ID: BankID Sweden
Transaction Unique ID: ef649879-b3b1-577d-9c0d-c44ed7b3f4a0
Country or Region of ID: SE
Result: Passed
Performed: 04 April 2024 | 16:22

Electronic Record and Signature Disclosure:
Not Offered via DocuSign

Anna Rydh
anna.rydh@borealisgroup.com
Security Level: Email, Account Authentication (None)

DocuSigned by:
Anna Rydh
3C6F7BC7F2D045D

Signature Adoption: Pre-selected Style
Using IP Address: 155.4.128.137

Sent: 04 April 2024 | 16:17
Viewed: 04 April 2024 | 17:25
Signed: 04 April 2024 | 17:27

Authentication Details
Identity Verification Details:
Workflow ID: 83f4db5e-4aca-4199-a361-76eb7b49f45a
Workflow Name: DocuSign ID Verification
Workflow Description: The signer will need to identify themselves with a valid government ID.
Identification Method: Electronic ID
Type of Electronic ID: BankID Sweden
Transaction Unique ID: 9c0135ee-8bc7-5af4-848d-71a310ea9393
Country or Region of ID: SE
Result: Passed
Performed: 04 April 2024 | 17:25

Electronic Record and Signature Disclosure:
Not Offered via DocuSign

Signer Events	Signature	Timestamp
Jerker Lindström jerker.lindstrom@gmail.com Security Level: Email, Account Authentication (None)	DocuSigned by: Jerker Lindström C4DDE6BA076B47E Signature Adoption: Pre-selected Style Using IP Address: 78.69.85.159	Sent: 04 April 2024 | 16:17 Viewed: 04 April 2024 | 16:24 Signed: 04 April 2024 | 16:25

Authentication Details
Identity Verification Details:
Workflow ID: 83f4db5e-4aca-4199-a361-76eb7b49f45a
Workflow Name: DocuSign ID Verification
Workflow Description: The signer will need to identify themselves with a valid government ID.
Identification Method: Electronic ID
Type of Electronic ID: BankID Sweden
Transaction Unique ID: c53e545d-8e59-53bb-8067-0357b77d065c
Country or Region of ID: SE
Result: Passed
Performed: 04 April 2024 | 16:23

Electronic Record and Signature Disclosure:
Not Offered via DocuSign

Marcus Kierkegaard marcus.kierkegaard@borealisgroup.com HC Operations Manager Borealis AB Security Level: Email, Account Authentication (None)	DocuSigned by: Marcus Kierkegaard 88C11789B679471 Signature Adoption: Pre-selected Style Using IP Address: 62.20.52.194	Sent: 04 April 2024 | 16:17 Viewed: 04 April 2024 | 17:50 Signed: 04 April 2024 | 17:50

Authentication Details
Identity Verification Details:
Workflow ID: 83f4db5e-4aca-4199-a361-76eb7b49f45a
Workflow Name: DocuSign ID Verification
Workflow Description: The signer will need to identify themselves with a valid government ID.
Identification Method: Electronic ID
Type of Electronic ID: BankID Sweden
Transaction Unique ID: a088b8c1-dd1f-548e-b9cf-1a303f240944
Country or Region of ID: SE
Result: Passed
Performed: 04 April 2024 | 17:49

Identity Verification Details:
Workflow ID: 83f4db5e-4aca-4199-a361-76eb7b49f45a
Workflow Name: DocuSign ID Verification
Workflow Description: The signer will need to identify themselves with a valid government ID.
Identification Method: Electronic ID
Type of Electronic ID: BankID Sweden
Transaction Unique ID: a088b8c1-dd1f-548e-b9cf-1a303f240944
Country or Region of ID: SE
Result: Passed
Performed: 04 April 2024 | 17:51

Electronic Record and Signature Disclosure:
Not Offered via DocuSign

Maria Kylén maria.kylen@kpmg.se KPMG AB Security Level: Email, Account Authentication (None)	DocuSigned by: Maria Kylén 1E9E381DFF5A4E8 Signature Adoption: Pre-selected Style Using IP Address: 195.178.167.162	Sent: 04 April 2024 | 16:17 Viewed: 08 April 2024 | 12:33 Signed: 08 April 2024 | 12:38

Authentication Details

20240704173328

Signer Events	Signature	Timestamp

Identity Verification Details:
Workflow ID: 83f4db5e-4aca-4199-a361-76eb7b49f45a
Workflow Name: DocuSign ID Verification
Workflow Description: The signer will need to identify themselves with a valid government ID.
Identification Method: Electronic ID
Type of Electronic ID: BankID Sweden
Transaction Unique ID: 8b94129b-905d-5520-bd9f-ffdf47975596
Country or Region of ID: SE
Result: Passed
Performed: 08 April 2024 | 12:33

Electronic Record and Signature Disclosure:
Not Offered via DocuSign

Patrik Andersson
patrik.andersson@borealisgroup.com
Security Level: Email, Account Authentication (None)

DocuSigned by:
Patrik Andersson
8E5332198708E4EB

Signature Adoption: Pre-selected Style
Using IP Address: 62.20.52.194

Sent: 04 April 2024 | 16:17
Viewed: 04 April 2024 | 16:19
Signed: 04 April 2024 | 16:19

Authentication Details
Identity Verification Details:
Workflow ID: 83f4db5e-4aca-4199-a361-76eb7b49f45a
Workflow Name: DocuSign ID Verification
Workflow Description: The signer will need to identify themselves with a valid government ID.
Identification Method: Electronic ID
Type of Electronic ID: BankID Sweden
Transaction Unique ID: fc9c8b2e-d6b9-518e-9c93-38a6ad6e0189
Country or Region of ID: SE
Result: Passed
Performed: 04 April 2024 | 16:18

Electronic Record and Signature Disclosure:
Not Offered via DocuSign

Thomas Van de Velde
thomas.vandevelde@borealisgroup.com
SVP Borealis Base Chemicals Business
Borealis AG
Security Level: Email, Account Authentication (None)

DocuSigned by:
Thomas Van de Velde
7ED07E8A57F8489

Signature Adoption: Pre-selected Style
Using IP Address: 84.199.227.43

Sent: 04 April 2024 | 16:17
Viewed: 04 April 2024 | 16:31
Signed: 04 April 2024 | 16:31

Authentication Details
Identity Verification Details:
Workflow ID: 83f4db5e-4aca-4199-a361-76eb7b49f45a
Workflow Name: DocuSign ID Verification
Workflow Description: The signer will need to identify themselves with a valid government ID.
Identification Method: Electronic ID
Type of Electronic ID: itsme
Transaction Unique ID: 310abc32-e2c6-59ec-a868-23e153eb08ea
Country or Region of ID: BE
Result: Passed
Performed: 04 April 2024 | 16:31

Electronic Record and Signature Disclosure:
Not Offered via DocuSign

Wolfram Krenn
wolfram.krenn@borealisgroup.com
EVP Base Chemicals & Operations
Vienna
Security Level: Email, Account Authentication (None)

DocuSigned by:
Wolfram Krenn
D2B781BBB9EB45A

Signature Adoption: Pre-selected Style
Using IP Address: 62.20.52.194

Sent: 04 April 2024 | 16:17
Viewed: 04 April 2024 | 16:25
Signed: 04 April 2024 | 16:26

Authentication Details

Signer Events	Signature	Timestamp

Identity Verification Details:
Workflow ID: 83f4db5e-4aca-4199-a361-76eb7b49f45a
Workflow Name: DocuSign ID Verification
Workflow Description: The signer will need to identify themselves with a valid government ID.
Identification Method: Government Issued Id Document
Type of Document: Passport
Identification Level: ID Only
Transaction Unique ID: ca8ab020-0245-5b47-b435-09b50b550e15
Country or Region of ID: AT
Result: Passed
Performed: 04 April 2024 | 16:25

Electronic Record and Signature Disclosure:
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In Person Signer Events	Signature	Timestamp
Editor Delivery Events	**Status**	**Timestamp**
Agent Delivery Events	**Status**	**Timestamp**
Intermediary Delivery Events	**Status**	**Timestamp**
Certified Delivery Events	**Status**	**Timestamp**
Carbon Copy Events	**Status**	**Timestamp**
Bjarne Kristiansson Bjarne.Kristiansson@borealisgroup.com Security Level: Email, Account Authentication (None)	COPIED	Sent: 04 April 2024 | 16:17 Viewed: 04 April 2024 | 16:18

Electronic Record and Signature Disclosure:
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Witness Events	Signature	Timestamp
Notary Events	**Signature**	**Timestamp**

Envelope Summary Events	Status	Timestamps
Envelope Sent	Hashed/Encrypted	04 April 2024 | 16:17
Certified Delivered	Security Checked	04 April 2024 | 16:25
Signing Complete	Security Checked	04 April 2024 | 16:26
Completed	Security Checked	08 April 2024 | 12:38

Payment Events	Status	Timestamps

DocuSign Envelope ID: 63D19805-D0F4-485C-A978-DCB2189E0D3E

20240704173329

Revisionsberättelse

Till bolagsstämman i Borealis AB, org. nr 556078-6633

Rapport om årsredovisningen

Uttalanden

Vi har utfört en revision av årsredovisningen för Borealis AB för år 2023.

Enligt vår uppfattning har årsredovisningen upprättats i enlighet med årsredovisningslagen och ger en i alla väsentliga avseenden rättvisande bild av Borealis ABs finansiella ställning per den 31 december 2023 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 Borealis 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.

Övriga upplysningar

Revisionen av årsredovisningen för år 2022 har utförts av en annan revisor som lämnat en revisionsberättelse daterad den 4 juni 2023 med omodifierade uttalanden i Rapport om årsredovisningen.

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 huruvida 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 huruvida 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.

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 för Borealis AB för år 2023 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 Borealis 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.

Göteborg 2024-04-08

KPMG AB

DocuSigned by:
Maria Kylén
1E9E381DFF5A4E8...
Maria Kylén
Auktoriserad revisor

DocuSign

Certificate Of Completion

20240704173330

Envelope Id: 63D19805D0F4485CA978DCB2189E0D3E
Subject: Complete with DocuSign: Borealis AB - RB 2023(4360823.1).pdf
Source Envelope:
Document Pages: 2 Signatures: 1
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Combined Annual Report 2023

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Reviewing 2023

Five-Year Comparison of Key Figures

→ See detailed background explanation of the performance in the respective chapter

		2023 excl. NITRO [1]	2023 incl. NITRO [2]	
Income and profitability				
Total sales and other income	EUR mn	7,282	8,043	
Operating profit	EUR mn	18	-9	
Operating profit as percentage of total sales and other income	%	0	0	
Net profit	EUR mn	216	168	
Return on capital employed, net after tax	%	–	2	
Cash flow and investments				
Cash flow from operating activities	EUR mn	438	552	
Investments in property, plant and equipment	EUR mn	659	729	
Cash and cash equivalents	EUR mn	2,348	–	
Financial position				
Balance sheet total	EUR mn	13,412	–	
Net interest-bearing debt	EUR mn	-152	–	
Equity attributable to owners of the parent	EUR mn	9,219	–	
Gearing	%	-2	–	
Health, Safety & Environment [3]				
Total Recordable Injuries (TRI) [4]	number/mn work hours	4.0	4.0	
EU ETS CO_2 emissions	mn metric tons	1.3	2.3	
Primary energy consumption	GWh	14,824	17,294	
Flaring performance	metric tons	32,239	32,239	
Waste generation	metric tons	73,467	79,235	
Water withdrawal	mn m³	334	449	
Number of employees	full-time equivalents [6]	–	–	
	headcount [7]	5,943	–	

1) NITRO 2023: Borealis divested the Borealis Fertilizers, Melamine and Technical Nitrogen (TEN) Business beginning of July 2023, therefore only Fertilizers, Melamine and TEN data for first six months is included for NITRO. For further details please refer to note 8.1. Sale of Borealis NITRO in the Notes to the Consolidated Financial Statements // 2) NITRO 2020–2022: Borealis Fertilizers, Melamine and Technical Nitrogen Business excl. Rosier Group. See also footnote 1. // 3)–7) next page

As described in the Notes to the Consolidated Financial Statements, Borealis sold its divesting Fertilizers, Melamine and Technical Nitrogen Products business unit (Borealis NITRO). This has resulted in the "discontinued operation" classification in the Consolidated Financial Statements. Accordingly, turnover, capital expenditure and operating expenditure, as presented in the chapter EU Taxonomy (→ chapter EU Taxonomy, p. 92), do not include the nitrogen business unit (except Rosier Group as this is not part of the Fertilizers, Melamine and TEN divestment process).
All non-financial information for the reporting period 2023 includes Borealis Fertilizers, Melamine and TEN (NITRO) for the first half of 2023. The figures are, therefore, not fully comparable.

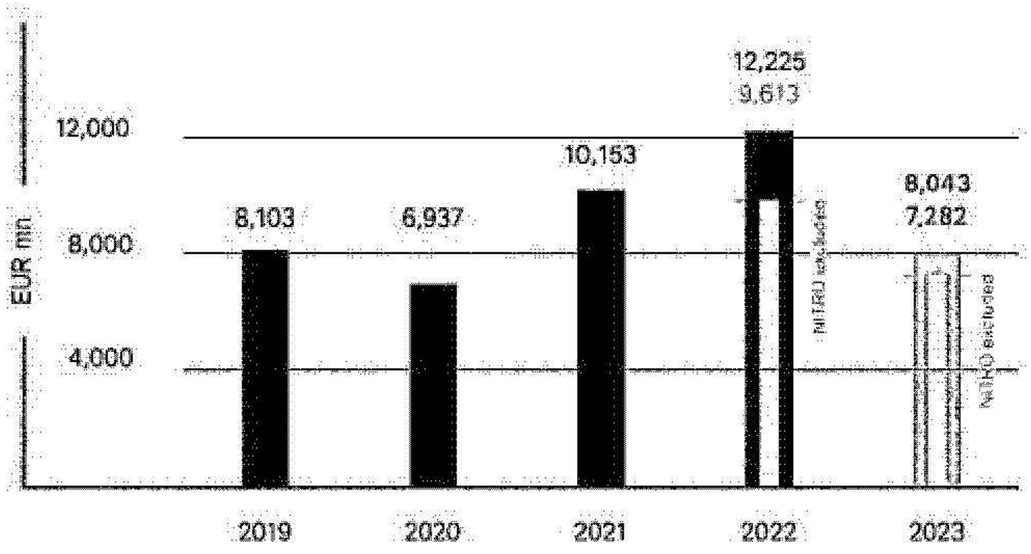
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	2022 excl. NITRO [2]	2022 Incl. NITRO [2]	2021 Incl. NITRO [2]	2020 Incl. NITRO [2]	2019
●					
	9,613	12,225	10,153	6,937	8,103
	703	1,081	1,517	351	605
	7	9	15	5	7
●	1,613	2,111	1,396	589	872
	–	19	19	8	11
	602	898	967	1,083	872
	544	667	660	614	376
	2,226	2,242	1,551	83	83
	–	14,685	12,985	10,583	10,118
	–	-70	223	1,833	1,569
	–	9,785	8,176	6,417	6,445
	–	-1	3	29	24
●					
	2.6	2.9	2.3	3.9	3.4
	1.4	3.4	3.9	4.1	4.6
●	14,923	21,364	21,730	22,340	25,831
	39,955	39,955	38,538	42,543 [5]	27,619
	82,425	92,383	102,023	97,905	86,109
	407	657	735	755	750
	–	–	6,934	6,920	6,869
	5,631	7,649	7,508	–	–

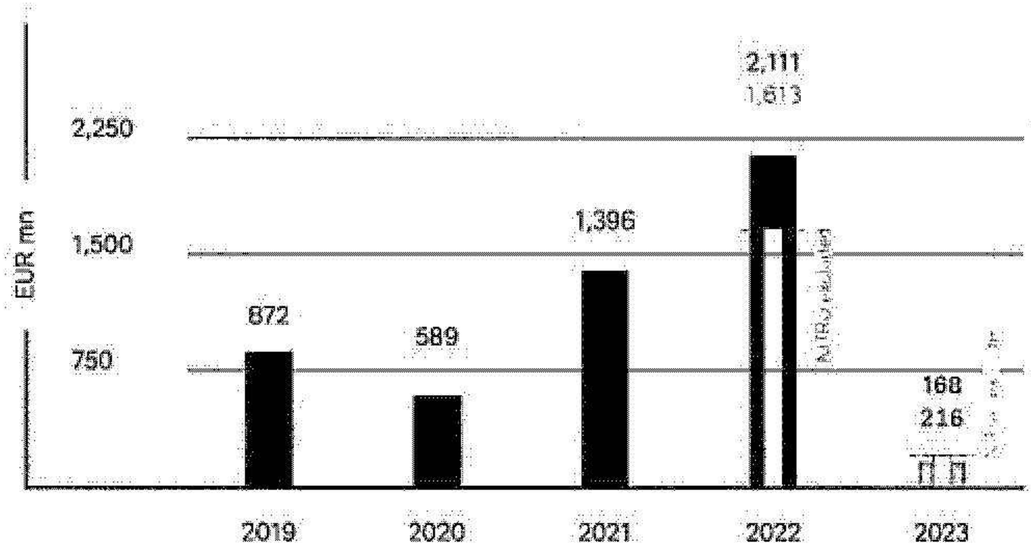
3) Environmental data might be subject to minor adjustments due to ongoing audits and missing third-party data at the time of closing of this report. // 4) Rosler Group is excluded from TRI 2022 excl. NITRO. // 5) Severe upsets led to significant emergency flaring during shutdowns; further there was a lack of recycling capacity. // 6) Full-time equivalents considers part-time employed staff only as 0.5. // 7) Number of employees has been presented in headcount instead of full-time equivalents since 2022. A comparison to previous years is only possible until 2021.

Key Financial and Non-financial Metrics

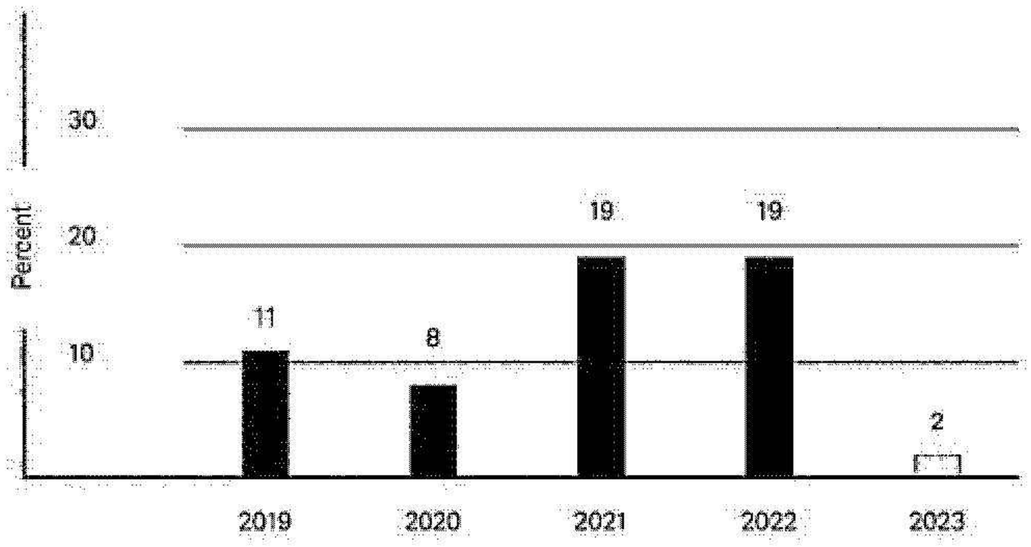
Total Sales and Other Income



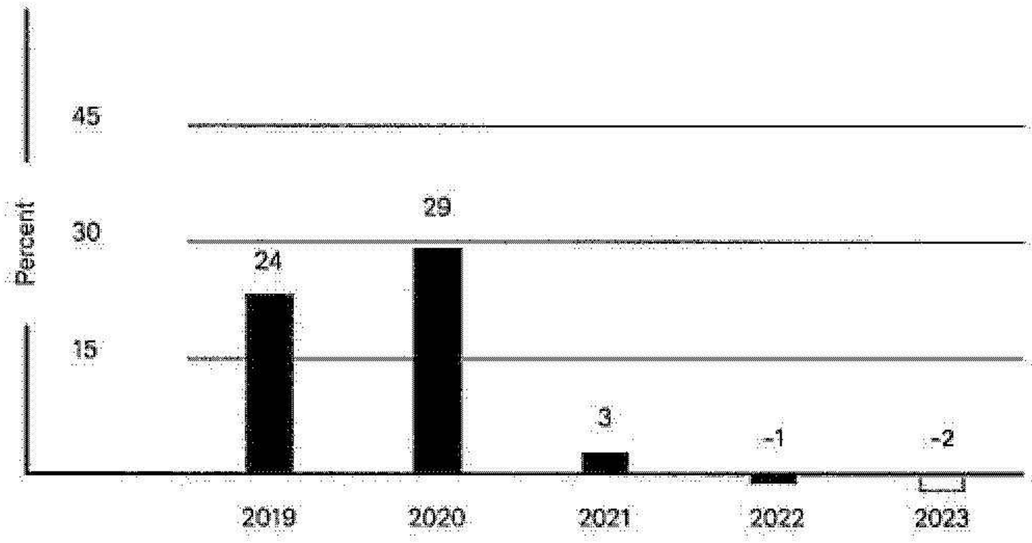
Net Profit



ROCE



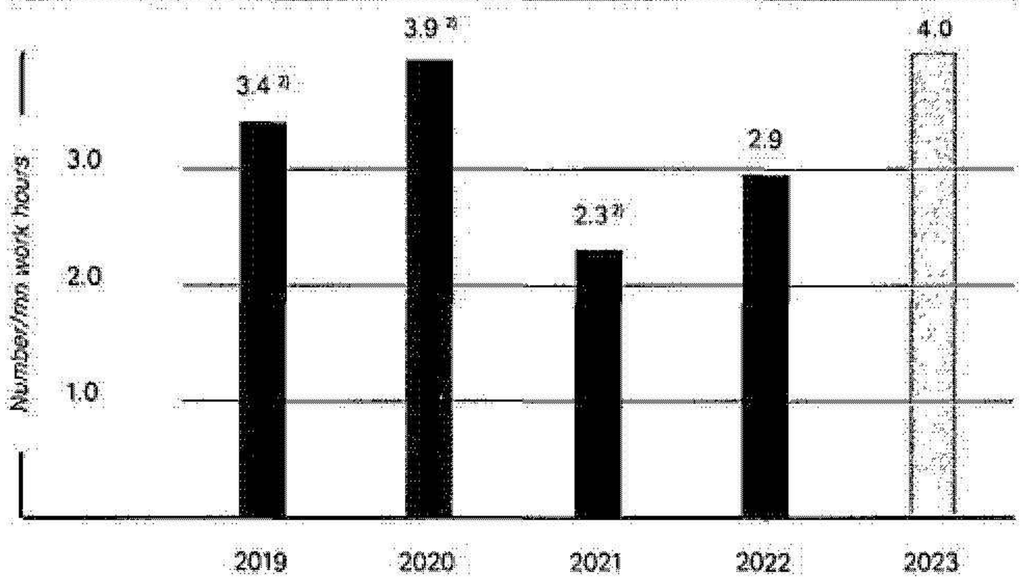
Gearing



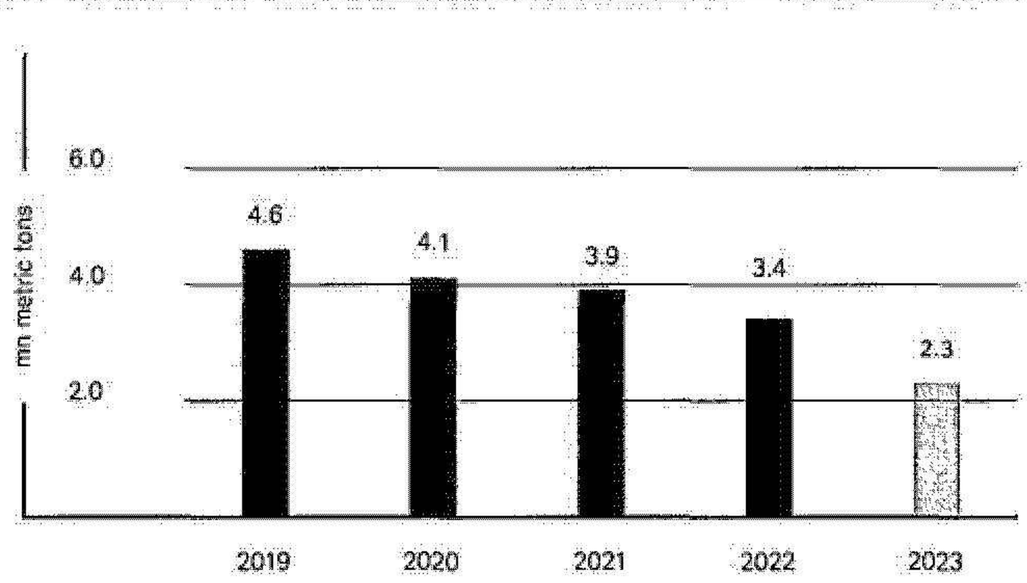
As described in the Notes to the Consolidated Financial Statements, Borealis sold its divesting Fertilizers, Melamine and Technical Nitrogen Products business unit (Borealis NITRO). This has resulted in the "discontinued operation" classification in the Consolidated Financial Statements. Accordingly, turnover, capital expenditure and operating expenditure, as presented in the chapter EU Taxonomy (→ chapter EU Taxonomy, p. 92), do not include the nitrogen business unit (except Rosier Group as this is not part of the Fertilizers, Melamine and TEN divestment process).
All non-financial information for the reporting period 2023 includes Borealis Fertilizers, Melamine and TEN (NITRO) for the first half of 2023. The figures are, therefore, not fully comparable.

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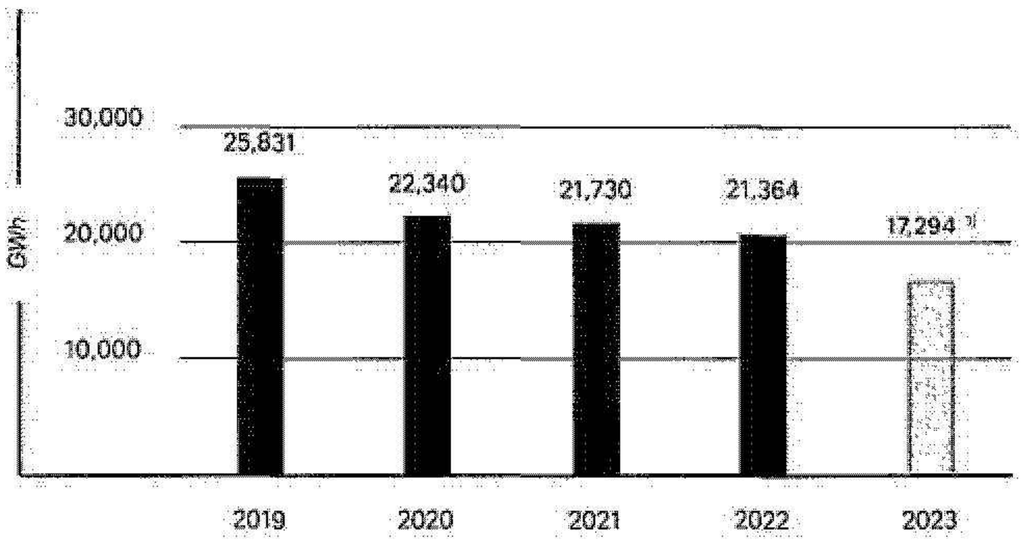
Total Recordable Injuries (TRI) [1]



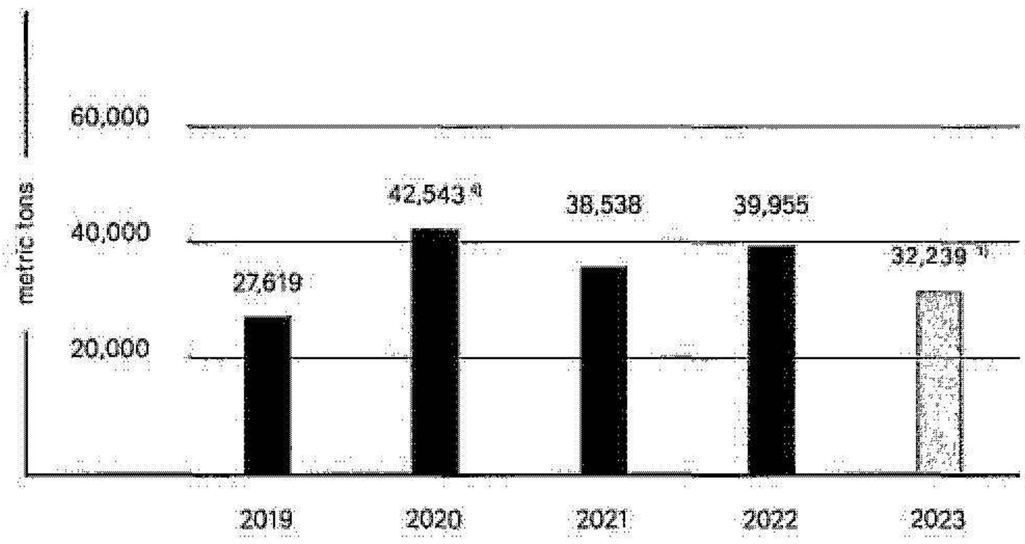
EU ETS CO_2 Emissions



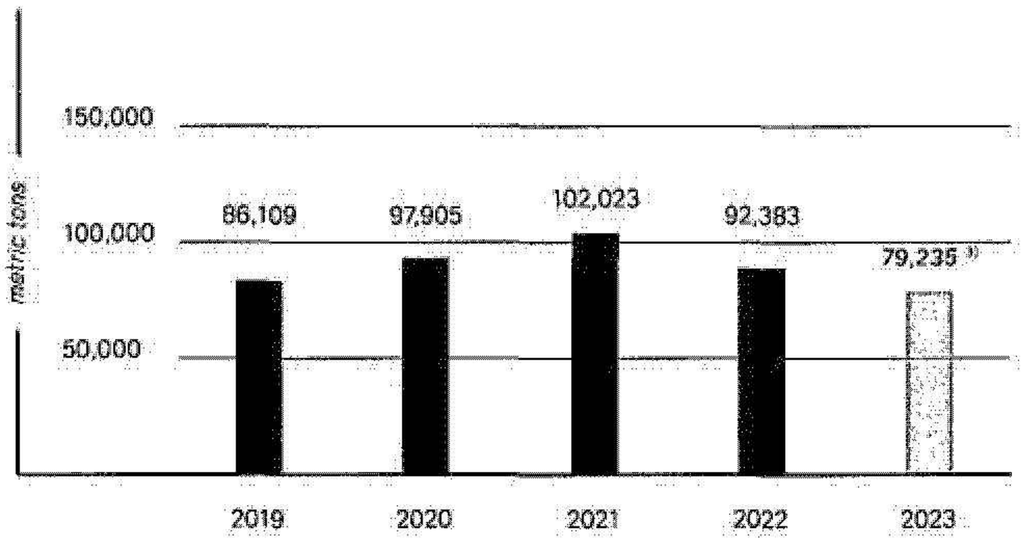
Primary Energy Consumption



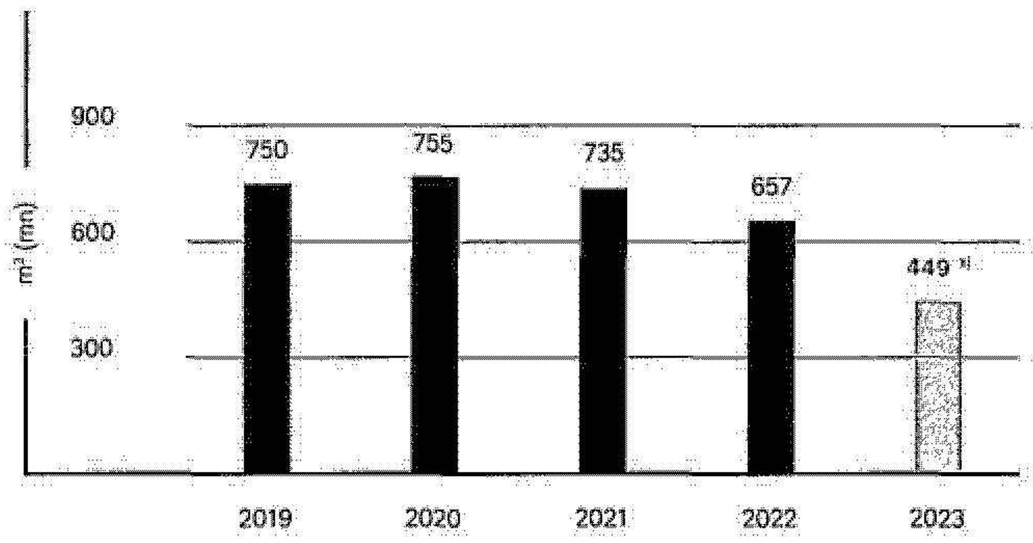
Flaring Performance



Waste Generation



Water Withdrawal



All non-financial information for the reporting period 2023 includes Borealis Fertilizers, Melamine and TEN (NITRO) for the first half of 2023. The figures are, therefore, not fully comparable.
1) Includes own employees and contractors // 2) Definitions were adjusted in 2022 to be aligned with OMV definitions. A comparison to previous years is therefore not possible. //
3) Environmental data might be subject to minor adjustments due to ongoing audits and missing third-party data at the time of closing of this report. // 4) Severe upsets led to significant emergency flaring during shutdowns; furthermore, there was a lack of recycling capacity.

Borealis at a Glance

~6,000

Head Office **in Vienna,** Austria. Operating on **five continents** in **120 countries.**
~6,000 employees



75%

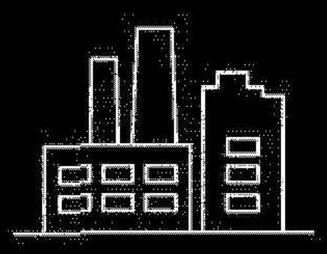
25%

Total Recordable Injuries (TRI)

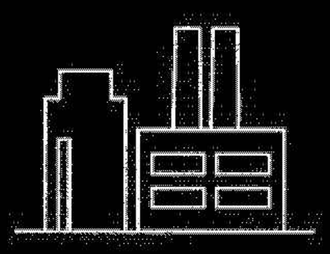
128

advanced and circular polyolefin solutions and base chemicals

#2



Joint Venture
Borouge –



Joint Venture
Bayport Polymers (Baystar™) –



High-level, simplified overview. Headcount excludes employees of Borealis Fertilizers, Melamine and Technical Nitrogen products (Borealis NITRO).
TRI frequency includes NITRO data for the first half year of 2023.

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Milestones 2023

"B-Safe" program puts safety first as it is rolled out across the entire Group

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Nitrogen business unit divested to AGROFERT as of July, and **Rosier to YILDIRIM** in January

---

Start-up of new Borstar® 3G polyethylene plant Bay 3 as part of the **Baystar™** joint venture with TotalEnergies in **Texas**

Annual production capacity of circular products and solutions to be boosted by **acquisition of Rialti S.p.A.** (finalized), **Integra Plastics AD** (in progress) and by an **increase** in the Group's **share in Renasci N.V.** to 98.56%

ISCC PLUS certification for all Europe-based polyolefins and polyolefin compounding facilities as well as recycling operations in Belgium (Renasci), Austria (Ecoplast) and Germany (mtm)

Two new power purchase agreements put Borealis over the 40% mark of use of **renewable electricity** to power European operations, two years earlier than foreseen by the Borealis Strategy 2030

Strategic launches based on renewably sourced feedstock, including **Stelora™**, the new class of engineering polymer suitable for technically advanced applications; and the **Bornewables™ line of Queo™** portfolio of circular plastomers and elastomers

Completion of major **cracker furnace upgrade in Stenungsund, Sweden** enhances energy efficiency and process safety standards of this feedstock-flexible cracker

---

Borealis cements **innovation leadership as top-ranked Austrian company in patent applications**

Project STOP inaugurates the largest material recovery facility to date in Banyuwangi, and **hands over another two projects to local municipalities Pasuruan and Jembrana, Indonesia**

Borealis **named #1 plastics producer in BloombergNEF's 2022 Circular Economy ranking,** reflecting its leadership in developing more sustainable packaging, thus accelerating circularity

About Borealis

Statement of the Supervisory Board

Changes to the Supervisory and Executive Boards
Daniela Vlad, OMV Executive Vice President Chemicals & Materials, and member of the OMV Executive Board, was appointed Chairperson of the Borealis Supervisory Board in April 2023, assuming the position previously held by Alfred Stern, OMV CEO. As of June 1, 2023, Daniel Turnheim was appointed Borealis Chief Financial Officer for a three-year period. He replaces Mark Tonkens, who left the Borealis Executive Board by mutual agreement at the end of May 2023. Craig Arnold will assume the position of Executive Vice President Polyolefins, Circular Economy Solutions and Innovation & Technology as of February 1, 2024, following the departure of Lucrèce Foufopoulos-De Ridder at the end of 2023.

Safety
While excellent results were achieved in the areas of process and occupational safety in 2023, the reported Total Recordable Injuries (TRI) rate per million working hours has deteriorated from the 2.9 obtained in 2022 to 4.0 in 2023. While no fatal or life-threatening injuries were recorded in 2023, a large number of low-impact incidents (both actual and potential) were recorded. One third of all TRIs occured at the world-scale construction site for Borealis' propane dehydrogenation plant in Kallo, Belgium. The Supervisory Board recognizes the extensive efforts undertaken by the Group to enhance safety performance and address shortcomings. These measures include the firmly established "B-Safe" program first rolled out in 2023; the new "2030 HSSE" (Health, Safety, Security and Environment) strategy; and several targeted actions – such as at the major construction site in Kallo, Belgium – which seek to prevent accidents and incidents altogether. The Group-wide commitment to "Zero Harm" can only be realized through the rapid and effective deployment of these programs.

Financial Results
The year 2023 was one of petrochemical overcapacity and flagging demand, both of which exerted downward pressure on prices and operating rates. Overall, industry profitability and operating rates fell to levels last seen during the height of the global financial crisis of 2007–2008. While Borealis Polyolefins achieved similar sales volumes in 2023 as in 2022, at 3.50 versus 3.54 million metric tons, respectively, the net sales of the segment dropped to EUR 5,687 million in 2023 from EUR 7,041 million in 2022.

The olefin industry margin rose from the beginning of 2023. Its peak in May reflected the seasonal tightness during maintenance season. However, the unprecedented destocking during the summer period resulted in an overall lower margin compared to 2022.

Borealis Base Chemicals delivered net sales of EUR 1,201 million, down from the EUR 1,846 million reported in 2022, the result of reduced demand due to polyolefins overcapacity, and one which subsequently led to lower operating rates and lower margins.

In the first half of the year (prior to divestment of the Borealis nitrogen business unit in July 2023), Borealis Fertilizer sales were 1.35 million metric tons. This compares to the 1.63 million metric tons reported for the same period in 2022. The decline was due primarily to urea imports into the European market.

Melamine sales also decreased, from 0.06 million metric tons in 2022 to 0.04 million metric tons in 2023 due to lower demand.

Operating profit of the Borealis Group was negative in 2023 due to adverse market conditions, high inventory effects, and a generally weaker environment in all business areas, driven by higher inflation and cost-of-living crises. Borealis Polyolefins operating profit fell to EUR -79 million in 2023 from EUR 526 million in 2022. Base Chemicals delivered a 2023 operating profit of EUR 162 million; this compares to the EUR 243 million reported in the previous year. The full-year contribution by the joint venture Borouge was solid at EUR 317 million, yet below the EUR 1,062 million reported in 2022. Despite a modest uptick in the level of contributions from the Baystar™ joint venture in the second half of 2023, its overall contribution was negative, at EUR -158 million compared to EUR -58 million in 2022.

Acquisitions and Divestments
Several acquisitions carried out or set in motion in 2023 are expected to consolidate Borealis's leadership in the area of plastics recycling and the circular economy. Italy-based Rialti S.p.A., a leading polypropylene

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(PP) compounder of recyclates used in injection molding and extrusion processes, was acquired in October. The acquisition of Integra Plastics AD, an advanced mechanical recycling company based in Bulgaria, is expected to be completed by end of Q1 2024. In the course of 2023, Borealis also increased its share in Belgium-based recycling experts Renasci N.V., from 50.01% to 98.56%.

On July 5, 2023, the Borealis nitrogen business unit, which included fertilizers, technical nitrogen and melamine products, was divested to Czech-based AGROFERT a.s., a major player on the European fertilizer market. The final purchase price, based on AGROFERT's binding offer submitted in June 2022, is subject to closing adjustments. As of January 2, 2023, Borealis also divested all shares held in Rosier S.A. to the YILDIRIM Group.

Corporate Strategy and Purpose
The Borealis Strategy 2030 continues to serve both as foundation and guide for transformation, accompanying Borealis as it expands its global presence while at the same time reducing its own CO_2 footprint. As a strategic evolution centered on sustainability, the strategy draws on the solid base of Borealis' people, corporate culture and safety mindset. Its focus is on delivering value-add solutions in collaboration with customers and partners in order to speed the transition to a circular economy of plastics. Its bundling of traditional areas of strength for Borealis – innovation and technology paired with performance excellence – enables the Group to seize growth opportunities in the most promising market areas, including specialty polyolefins, compounding, catalyst technologies and the licensing thereof.

Global Growth Projects
Establishing a global presence and becoming a truly global partner for its customers is crucial to ensuring the long-term competitiveness and viability of the Borealis Group. Current expansion projects – whether joint ventures, acquisitions or new builds – will allow Borealis to capitalize on future opportunities for growth in the most promising geographical markets and business sectors.

The joint venture Borouge in Abu Dhabi, founded in 1998 by Borealis and the Abu Dhabi National Oil Company (ADNOC), is the site of the largest ongoing growth project. Solid progress was made in 2023 towards completion of the new, USD 6.2 billion facility, which will ultimately encompass a 1.5 million metric tons/year ethane cracker; two Borstar third generation (3G) polyethylene (PE) plants, each with an annual production capacity of 700,000 metric tons; a cross-linked PE (XLPE) unit with an annual production capacity of 100,000 metric tons; the PP5, a PP unit started up in 2022; and a Hexene-1 unit. Once Borouge 4 is onstream, it will supply large volumes of advanced based chemicals and polyolefins to customers in the Middle East and Asia as well as the neighboring TA'ZIZ Industrial Chemicals Zone.

In North America, the Baystar joint venture with TotalEnergies in Texas has now started up the largest and most advanced Borstar plant ever built outside of Europe, thus bringing the proprietary Borstar 3G technology to the US for the first time. The new, USD 1.4 billion PE unit has an annual production capacity of 625,000 metric tons, thereby more than doubling Baystar's total production capacity.



Daniela Vlad
Chairperson



Khaled Salmeen
Vice Chairperson



Reinhard Florey
Board Member



Martijn Arjen van Koten
Board Member



Khaled Al Zaabi
Board Member

This fully integrated facility will supply value-added specialty polymers to growth sectors in North America like energy, infrastructure and consumer products. Baystar also comprises an ethane-based steam cracker that was started up in 2022, two legacy PE production units and the TotalEnergies ethane cracker in adjoining Port Arthur.

In Europe, on-site mobilization at the construction site of the new, world-scale propane dehydrogenation (PDH) plant being built at the existing Borealis production site in Kallo resumed as of mid-year 2023. Plant start-up is anticipated during the course of 2025, with annual propylene production projected to be around 740,000 metric tons. The issues which led to a temporary work stoppage in 2022, including misconduct on the part of one of the site's former contractors which resulted in the termination of all contracts and a new tender process, have been resolved. The Supervisory Board has full confidence that the measures enacted to ensure full compliance with fundamental contractual principles and work ethics will be effective.

Plastics Circularity

Borealis is cementing its position as an industry leader in plastics circularity, and is becoming a fully customer-centric supplier of sustainable material solutions that add value to society. Recycled and renewable-based polymers in its Borcycle™ C, Borcycle™ M, and Bornewables™ grade portfolios, as well as the renewable hydrocarbons in the Borvida™ family of base chemicals, are helping increase the share of circular products in the Group's overall production output.

The global sustainability certification system ISCC (International Sustainability and Carbon Certification) is an objective method with which to track and verify the origins of sustainable feedstocks. As a mark of quality, it enables traceability by way of objective, third-party verification of critical points along the supply chain. In 2023, an ISCC PLUS certification was conferred on all Borealis polyolefin and polyolefin compounding sites in Europe; and on Borealis recycling facilities operated by Renasci N.V. in Ostend (Belgium); mtm plastics GmbH in Niedergebra (Germany); and Ecoplast Kunststoffrecycling GmbH in Wildon (Austria).

Borealis has intensified its efforts to speed up the commercialization of chemical recycling, a valuable complement to mechanical recycling. The virgin-grade monomers produced in chemical recycling processes are suitable for use in the manufacture of high-end, food-grade polyolefin applications used in robust sectors such as infrastructure, healthcare and consumer products. In addition to ongoing collaboration with OMV centered on the patented OMV ReOil® technology, Borealis is working with its upstream partner Neste and its Neste RE™ technology to develop new applications and bring these to market. Having acquired a majority stake in Renasci N.V., Borealis now enjoys ample access to chemically recycled feedstock for the grades in its ISCC PLUS-certified Borcycle C portfolio.

Value Creation through Innovation

Despite the challenging industry environment, Borealis has maintained the same high level of investment in R&D in order to sustain its innovation leadership, and to drive transformation in all areas of business activity. By creating value through innovation, Borealis is helping remove obstacles that slow the transition to the circular economy, green energy and decarbonization. For example, Stelora™, the new class of engineering polymer produced from renewably sourced feedstock launched in 2023, expands the existing range of options for technically advanced applications requiring high heat resistance. This makes it especially relevant for e-mobility and renewable energy generation. The new Bornewables line of Queo™ is a portfolio of polymers and elastomers based on renewable feedstock, thus bridging the performance gap between conventional plastics and elastomers in a more eco-efficient way.

The more than 500 people engaged in R&D at the Borealis Group work at the Innovation Headquarters in Linz (Austria) and at innovation centers in Porvoo (Finland) and Stenungsund (Sweden). Others are employed at pilot and catalyst manufacturing plants in both Finland and Austria. As in previous years, Borealis again tops the list of patent filers in Austria, having filed the same number of new priority patent applications at the European Patent Office in 2023 (128) as it did in 2022 (128).

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Energy and Climate: Making Progress towards Decarbonization

The Borealis Strategy 2030 stipulates ambitious decarbonization goals. One is to reduce Scope 1 and Scope 2 emissions from 5.1 million metric tons/year (the 2019 baseline) to less than 2 million metric tons/year by 2030. Another is to increase the share of renewables in the total electricity supply used to power its European production operations in Base Chemicals and Polyolefins to 100% by the year 2030.

The Supervisory Board is pleased to report that Borealis reached an intermediate decarbonization goal two years earlier than set forth in the Strategy: two new power purchase agreements (PPAs) signed in 2023 to use wind to power productions in Finland have put the Group over a 40% share of renewables. Thanks to the cumulative clean energy output of these and eight other PPAs signed since 2021, as well as the recent completion of a major revamp of the Stenungsund cracker furnace to achieve significantly higher energy efficiency, Borealis is well on its way to realizing meaningful emissions reductions.

Economic Development and Outlook for 2024

The Supervisory Board exhorts all Borealis executives and employees to make good on the promise of "Zero Harm" by truly living the principles outlined in safety programs such as "B-Safe" and "HSSE 2030." Safety must remain the number one priority for the entire Group. We are confident that Borealis can in fact become an industry leader in health, safety, security and the environment so long as its people remain vigilant and committed.

A confluence of factors made the year 2023 a challenging one for petrochemicals companies, and Borealis was no exception. Market volatility, logistics and supply chain disruptions, lagging demand and geopolitical strife will continue into 2024 and beyond. The long-term structural changes to the industry brought about by new technologies, decarbonization efforts and lower economic growth in China are unfolding against a backdrop of uncertainty. Transformation is essential to adapt to these changing circumstances. In adhering to the Borealis Strategy 2030, the Group has already taken significant steps in its own transformation to become a fully customer-centric provider of value-added and more sustainable solutions that benefit society. Its focus on sustainability makes Borealis ideally positioned to seize market opportunities that arise while at the same time overcoming the many obstacles. Borealis will continue to make good on its purpose of re-inventing essentials for sustainable living, especially in challenging times.

In order to manage what will likely be a painful and prolonged trough, the Strong Foundation – Performance Excellence (SFPE) program launched in 2022 is alleviating the most severe effects of the industry downturn. By optimizing margins, managing variable costs, and achieving long-term savings in fixed costs, the Supervisory Board is confident that Borealis will weather current and future storms.

Negotiations between the OMV Executive Board and ADNOC on the subject of potential cooperation commenced in July of 2023. These preliminary discussions seek to explore pathways which may combine the respective strengths of each partner: the technological innovation Borealis is known for – particularly in circular polyolefins and lucrative specialty polymers – and the more advantageous cost position and better access to growing markets enjoyed by Borouge. An agreement in which Borealis and Borouge act as equal partners in a jointly controlled, listed platform would boost growth and market opportunities in core markets. The Supervisory Board is optimistic that constructive negotiations will continue apace, and that ADNOC and the OMV Group will agree on a structure that ensures sustained growth and successful transformation for the Borealis Group.

Vienna, February 28, 2024
Supervisory Board

Executive Board



Thomas Gangl
Chief Executive Officer
Appointed in April 2021
Male / Austrian national

Prior to joining Borealis as new CEO in April 2022, Thomas Gangl was a member of the OMV Executive Board and in charge of Refining & Petrochemical Operations at OMV from 2019. Since starting in 1998 as a process engineer, his OMV career positions include General Manager of OMV Deutschland GmbH and Senior Vice President, Business Unit Refining & Petrochemicals. Thomas Gangl studied process engineering at the Vienna University of Technology, Austria, and mechanical engineering at the University of Salford in Manchester, United Kingdom.

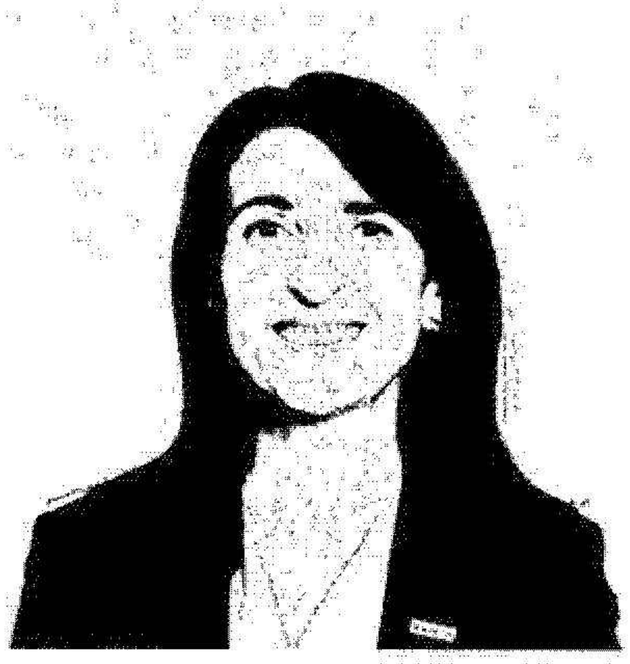
Significant external positions
Borouge PLC; Vice Chairperson of the Board of Non-Executive Directors
World Energy Council Austria (WEC); Vice President of the Board of Non-Executive Directors
Austro-Arab Chamber of Commerce; Member of the Board of Non-Executive Directors
World Business Council for Sustainable Development (WBCSD); Member of the Board of Non-Executive Directors
Österreichischer Verband Creditreform (ÖVC); Member of Advisory Council



Daniel Turnheim
Chief Financial Officer
Appointed in June 2023
Male / Austrian national

Daniel Turnheim joined Borealis after a long-standing career in OMV Group. After joining OMV in 2002, he held various senior management functions in OMV Finance, including Head of Controlling at OMV UK in London, United Kingdom and a two-year assignment to Petrol Ofisi in Istanbul, Turkey. From 2011 to 2012, Daniel Turnheim held the role of Chief Financial Officer at OMV Petrom in Bucharest, Romania, before being appointed Senior Vice President Finance & Tax at OMV AG. Daniel Turnheim holds a Master's degree from the Vienna University of Economics and Business in Vienna, Austria.

Significant external positions
Member of Borouge PLC Audit Committee
Member of Baystar Finance & Audit Committee



Lucrèce Foufopoulos-De Ridder
Executive Vice President Polyolefins, Circular Economy Solutions and Innovation & Technology
Appointed in January 2019 – until December 2023
Female / dual Belgian-Swiss citizenship

Lucrèce Foufopoulos-De Ridder was appointed to the Borealis Executive Board as Executive Vice President Polyolefins, Circular Economy Solutions and Innovation & Technology in January 2019. She joined Borealis after a career of more than 20 years in the chemical and petrochemical industry, most recently at Eastman, where she served as Vice President & General Manager of the Rubber Additives business unit. Prior to that, Lucrèce Foufopoulos-De Ridder held a variety of positions at multinationals, including Dow Chemical, Rohm and Haas, Dow Corning and Tyco. Lucrèce Foufopoulos-De Ridder holds a European Master's degree in Polymer and Composites Engineering from the University of Leuven, and a Master's degree in Materials Science & Engineering from the University of Ghent, both in Belgium.

Significant external positions
Borouge Pte. Ltd.; Member of the Board of Non-Executive Directors
Plastics Europe – Vice President of the Steering Board, Chair of the Advocacy Committee

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Wolfram Krenn
Executive Vice President
Base Chemicals & Operations
Appointed in July 2021
Male / Austrian national

Wolfram Krenn was appointed Executive Vice President Base Chemicals and Operations and member of the Borealis Executive Board in July 2022. Immediately prior to joining Borealis, Wolfram Krenn had held the position of Senior Vice President for Refining Assets at OMV since 2019. Having started his career at OMV in 1998 as a process engineer, he gained international experience in production and operations as lead for OMV Petrom's Petrobrazi Refinery in Romania. In 2018, he was appointed Senior Vice President Site Management Schwechat, Austria. Wolfram Krenn holds a Master's degree in Chemical Engineering from the Technical University of Graz, Austria.

Significant external positions
TÜV Austria Holding AG; Member of the Supervisory Board



Philippe Roodhooft
Executive Vice President
Joint Ventures & Growth Projects
Appointed in November 2017
Male / Belgian national

Philippe Roodhooft was appointed Executive Vice President Middle East and Growth Projects in November 2017, after having served since 2013 as Chief Operating Officer of Borouge ADP in the UAE. Prior to that, Philippe Roodhooft held Vienna-based senior management positions, including Senior Vice President Supply Chain and Product Management for Polyolefins, Senior Vice President Operations for the Borealis Group and General Manager for the Central European production sites. He holds a Master's degree in Applied Science from Katholieke Universiteit Leuven in Belgium, with a specialization in Production Management and Electro Mechanical Engineering.

Significant external positions
Bayport Polymers LLC; Chairman of the Board of Non-Executive Directors
Borouge Pte. Ltd.; Vice Chairman of the Board of Non-Executive Directors
Borouge PLC; Member of the Board of Non-Executive Directors



Craig Arnold
was appointed Borealis Executive Vice President Polyolefins, Circular Economy Solutions and Innovation & Technology with effect from February 1, 2024, succeeding Lucrèce Foufopoulos-De Ridder.

OUR PURPOSE

OUR VISION

Borealis Strategy 2030

GEOGRAPHICAL EXPANSION
Become a fully global partner to our customers

We grow through M&A and selected builds in NAM, Middle East and Asia. We leverage Borouge's market presence for growth in Asia.

TRANSFORMATION
Evolve to fully customer-centric approach to offer advanced and sustainable material solutions

Circular Economy
We lead the transformation to a truly circular economy across all our applications.

Value Add
We invest in compounding and adjacencies to accelerate value creation through innovation.

SUSTAINABILITY
We significantly reduce our CO_2 footprint

STRONG FOUNDATION
Build on safety, people and culture to sustain strong growth

Safety
Goal Zero guides our strategic aspiration to be among the safest companies in the industry.

People
People make it happen. We shape an experience where everyone can perform at their best and make a difference.

Innovation & Technology
Accelerate circularity, drive specialty growth and create more value in licensing and catalyst technology.

Performance Excellence
We focus on excellence across all activities. Utilize technology and digitalization to drive efficiencies.

Our Values

Considering the impact of everything we do.

We show respect, speak up and act responsibly towards each other, our customers and the environment.



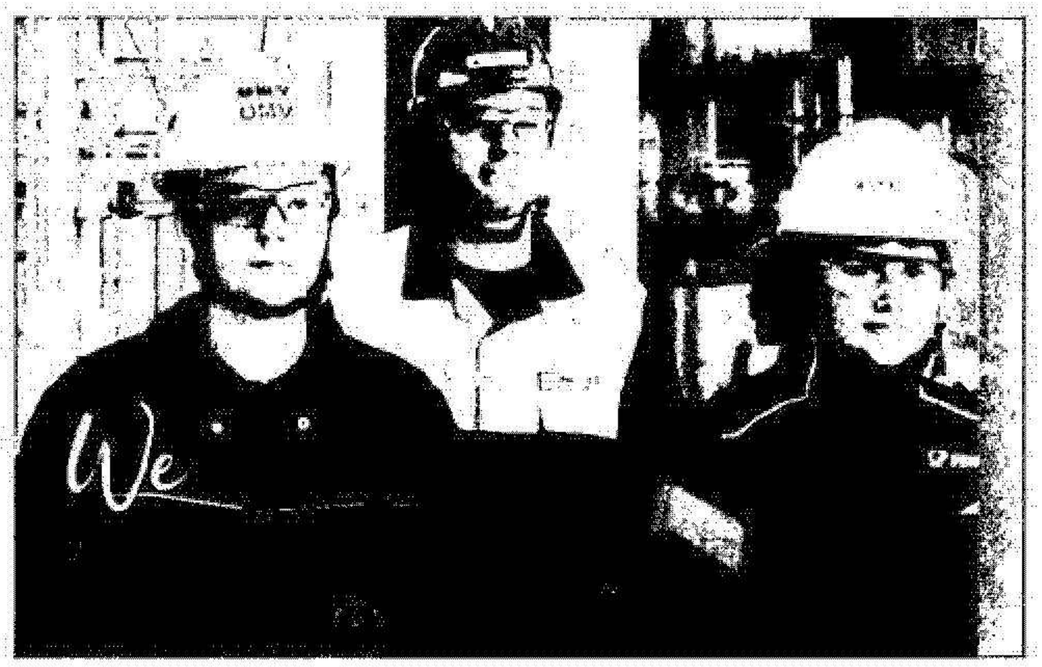
Defining tomorrow by welcoming new perspectives today.

We learn by being inclusive, asking questions, sharing our knowledge and having the courage to try new things.



Overcoming obstacles and finding solutions to deliver high performance.

We take ownership, trusting and empowering each other to make bold decisions to deliver safely and at speed.



"As long as Borealis remains dedicated to our purpose of re-inventing essentials for sustainable living, we will overcome any obstacles the market puts in our way."

Thomas Gangl, CEO

Interview with Borealis' CEO and CFO, Thomas Gangl and Daniel Turnheim





Borealis CEO Thomas Gangl: In our previous interview in 2022, you anticipated a worsening general market environment in 2023. Now that this has come to pass, how has Borealis responded?

TG: The past year has indeed been a perfect storm of volatility and uncertainty: a deteriorating macro-economic environment, sluggish demand, growing geopolitical strife, rising energy costs, and in many countries, high inflation. Separately, these factors would be enormously challenging. But taken together, they complicate industry-wide efforts to transform and decarbonize.

Yet our long-term approach to managing these challenges has already been charted in our Borealis Strategy 2030. It serves as our guide as we maintain strategic focus on expanding our geographic footprint to better serve growth markets, and transforming ourselves to become a truly customer-centric provider of advanced and circular material solutions. As long as Borealis remains dedicated to our purpose of re-inventing essentials for sustainable living, we will overcome any obstacles the market puts in our way.

However, there is room for improvement in safety performance. Our Total Recordable Injuries (TRI) rate per million of 4.0 in 2023 is a deterioration versus 2022. Despite intensive efforts to prevent all such incidents, a large number of low-impact TRIs occurred, both actual and potential. In response, we have launched an expanded safety training program to improve performance. This and other efforts, including our established B-Safe program, show our steadfast commitment to "Zero Harm."

Daniel Turnheim: you were appointed Borealis CFO in June of this turbulent year. From your perspective, how can Borealis best manage this "perfect storm" of market challenges?

DT: For the petrochemicals industry, the macro challenges posed by the economic slowdown in China, inflation and rising interest rates are compounded by weak margins and increased competition from lower-cost producers outside of Europe.

Our financial results in 2023 reflect these challenges, with our net profit dropping to EUR 168 million from the record EUR 2,111 million reported in 2022, whereby one-off effects from the Borouge IPO in June 2022 contributed significantly to last year's result. However, the "Strong Foundation – Performance Excellence" (SFPE) program introduced in mid-2022 was designed to mitigate the negative effects of the industry downturn by delivering long-term profit improvements across the entire Group, and to use these profits to support the ongoing implementation of our Borealis Strategy 2030. We focused on measures to improve profits in practices related to pricing, procurement, logistics, energy efficiency and the integrated value chain, among others. As the industry downturn became more entrenched, we launched an additional fixed-cost program in August this year which targets structural and more or less permanent changes that reduce our fixed-cost base. We intend to achieve fixed-cost savings of EUR 100 million by the end of 2025, working from a 2022 baseline.

TG: Implementing SFPE would not be possible without the time and effort invested by our people in first identifying, then managing, the many ways to do more with less. Given their support, we are confident that Borealis can remain competitive in this difficult market environment while at the same time achieving our crucial, long-term strategic goals like geographic expansion.

Growth projects such as the joint venture Borouge, whose spectacular IPO in Abu Dhabi made headlines in 2022, have long been a driver of geographic expansion for Borealis. Where do things currently stand?

DT: Like last year, Borouge continued to be a growth driver for Borealis, but driven by the market, its net profit contribution was lower than in 2022, which was a record year in terms of profits. We are pleased to report that good progress has been made on the Borouge 4 expansion project. Once operational, Borouge 4 will help meet robust polymers demand in the Middle East and Asia, and supply feedstock to the adjacent TA'ZIZ Chemical Zone in Ruwais, Abu Dhabi.

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How are Borealis' other major growth projects advancing?

TG: In October, we celebrated the start-up of Bay 3, our new Borstar® polyethylene (PE) plant in Texas. It is a huge milestone for the Baystar™ joint venture with our partner TotalEnergies, because we have brought our most advanced Third Generation Borstar (3G) Technology to the US for the first time. The Baystar venture is now a fully integrated PE business. We are gradually ramping up production at this 625,000 metric-ton-per-year facility, doubling the site's total capacity.

DT: Our third major growth project is the new, world-scale propane dehydrogenation (PDH) plant at our existing production site in Kallo, Belgium. This massive undertaking had been temporarily suspended after misconduct on the part of the former contractor IREM was uncovered in 2022. After completing the re-tendering process for construction works in April 2023, construction activity got back on track as of this summer. In line with our unwavering commitment to corporate ethics and compliance, Borealis has stepped up its oversight of the Kallo project.

New builds are only one path to growth; mergers and acquisitions are another. What were your activities in this arena in 2023?

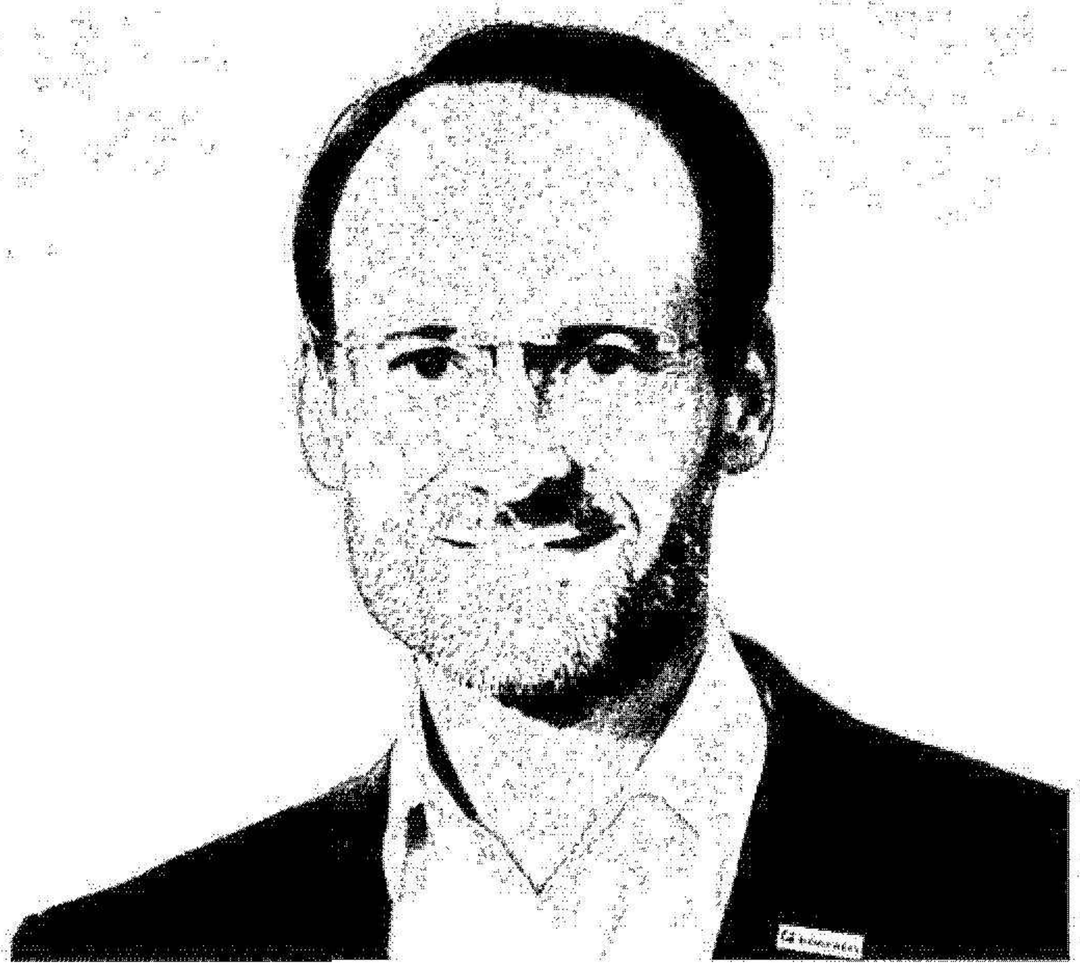
DT: Our 2023 acquisitions are helping Borealis grow while consolidating our circular economy leadership. In October, we completed the acquisition of Rialti S.p.A., a leading European producer of high-quality, mechanically recycled polypropylene (PP) compounds for extrusion and injection molding applications in mobility and other higher-margin sectors. In November, we increased our share in Renasci N.V. from just over 50% to 98.56%. We also agreed to acquire Integra Plastics AD, an advanced mechanical recycler based in Bulgaria. Pending foreign direct investment and regulatory approvals, we anticipate closing this second deal by end of Q1 2024.

TG: These acquisitions are especially exciting because they move us closer to our goal of 1.8 million metric tons of global production capacity for circular products and solutions by 2030. We are also proud to have now obtained ISCC PLUS (International Sustainability and Carbon Certification) accreditation for all of our European polyolefin and



"As long as Borealis remains dedicated to our purpose of re-inventing essentials for sustainable living, we will overcome any obstacles the market puts in our way."

Thomas Gangl, CEO



"As long as we stay on track with our SFPE program, we will have sufficient room to maneuver in the future."

Daniel Turnheim, CFO

polyolefin compounding sites, as well as our recycling facilities with Renasci N.V. in Belgium, mtm plastics in Germany and Ecoplast in Austria. This is an important milepost in traceability for renewable-based materials such as our Bornewables™, and the recyclate-based products in our Borcycle™ M and Borcycle™ C portfolios.

While Borealis has acquired new shares in some companies, it has shed them in others. Please update us on the divestment of the Borealis nitrogen business unit.

TG: The long and laborious divestment of this unit, which included fertilizers, technical nitrogen and melamine products, started in February 2021. It concluded in the first week of July 2023 as Borealis divested its shares to Czech-based AGROFERT. While the business was valued on an enterprise basis at EUR 810 million, the parties continue the process of customary closing accounts adjustments.
As a leading player on the European fertilizer market, AGROFERT is committed to guaranteeing supply security and building out its production facilities. In January, Borealis also divested all its shares in Rosier after finalizing an agreement with the YILDIRIM Group.

In addition to spearheading the circular economy transition, Borealis is also becoming more sustainable in its own production operations. How did 2023 shape up in this regard?

TG: Borealis had originally set 2025 as the target year by which we would power 40% of our Polyolefins and Base Chemicals operations in Europe with 100% renewable electricity.
We are very proud to have already reached this goal in 2023. The power purchase agreement (PPA) that put us over the 40% mark was signed with a new partner in Finland, Alpiq. This PPA, along with another signed in April with an existing partner, Axpo, will ensure clean electricity supply to our production facilities in Porvoo, Finland. Thanks to these and the eight other PPAs finalized since 2021, we are well on our way to achieving our 2030 target of using 100% renewable electricity to power our European operations. This also means that we are on track to lower our Scope 1 and Scope 2 emissions to 2 million metric tons per year, from a 2019 baseline of 5.1 million.

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DT: Investing in our existing assets is another way in which we are improving the sustainability of operations. In 2023, we completed a major upgrade of our cracker furnace in Stenungsund, Sweden to further improve its energy efficiency and process safety standards. It is also a benchmark in Health, Safety, Security and the Environment (HSSE): there were no major accidents or process safety incidents throughout the entire seven-year project duration.

Market volatility and industry pressures are likely to continue into 2024 and beyond. Daniel Turnheim, from a CFO's point of view, how can Borealis counter what industry experts ICIS have called "an unprecedented level of uncertainty within the industry"?

DT: Ensuring operational reliability at our Baystar joint venture is crucial, because access to cost-advantaged ethane is key to remaining competitive on a global scale. Cracker reliability must be improved, and the new Bay 3 successfully ramped up.

However, our short-term financial performance will be impacted by factors outside our direct control, such as depressed demand in the face of overcapacity. We will continue to feel the impact of a weaker price environment in our core business areas. In addition to high energy costs, stubbornly high inflation in Europe exerts additional cost pressure and is thus a major concern. The dire predictions of a prolonged and deepening industry downturn cannot be discounted, but the petrochemical industry has always been one with pronounced booms and busts.

We are meeting industry challenges head on through our SFPE program, which is enabling us to better manage our variable costs, optimize margins and realize fixed-cost savings. As long as we stay on track with our SFPE program, we will have sufficient room to maneuver in the future. Our strong balance sheet and cash flow enable us to pursue our long-term goals of strategic growth and transformation.

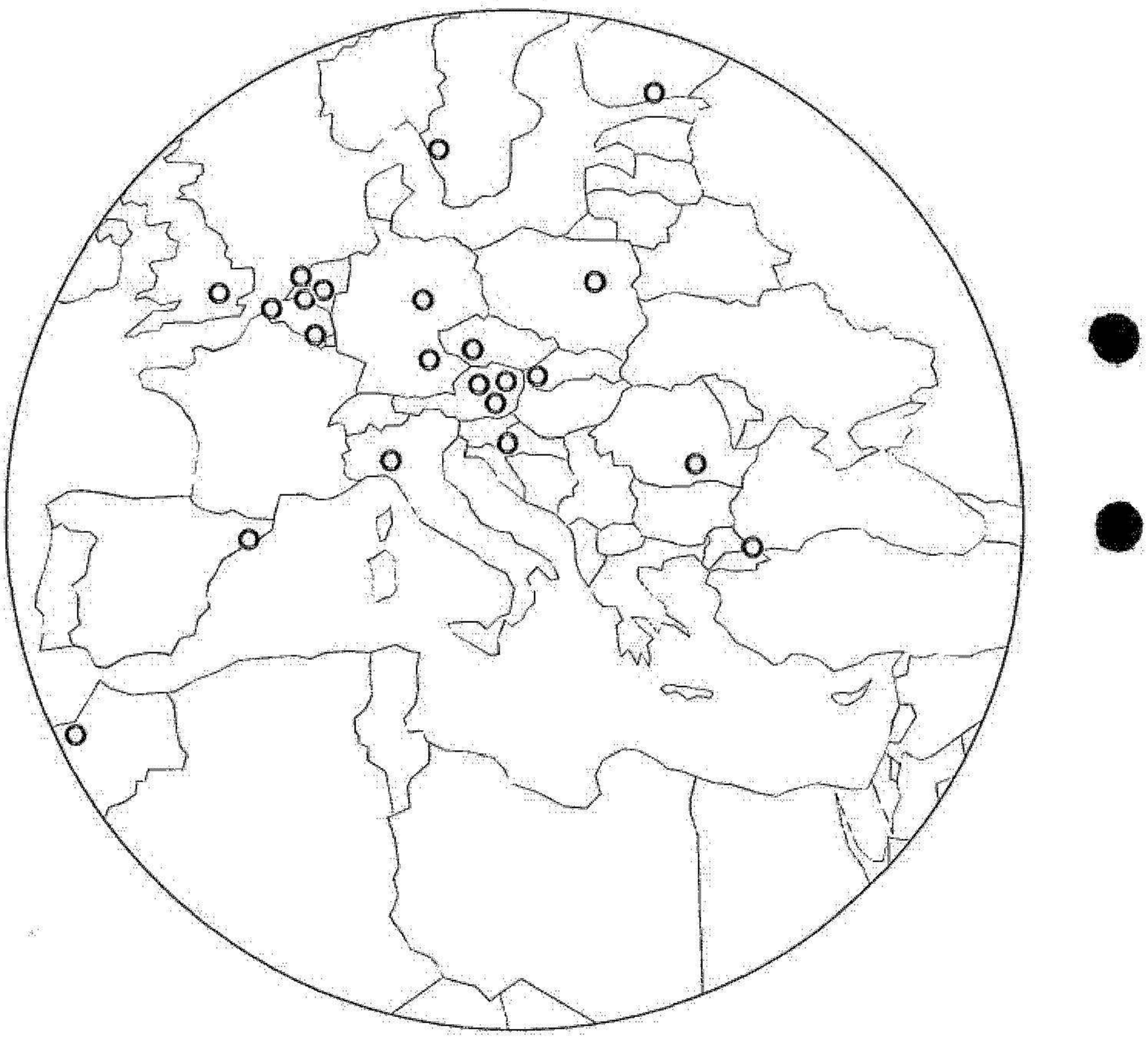
The closing words go to you, Thomas Gangl. As CEO, which focus areas will occupy you most in the coming year?

TG: Safety, in all aspects of our operations. The outstanding process safety results achieved in 2023 along with the excellent occupational safety performance at numerous sites show that we can deliver safety excellence as long as we maintain the necessary vigilance. To ensure that Borealis becomes an industry leader in HSSE by the end of the decade, we have developed and rolled out our new "2030 HSSE" strategy.

However, we must also stay focused on accelerating the speed of transformation. It remains to be seen whether the recent COP28 agreement will be the long sought-after breakthrough in global decarbonization efforts, but it is clear that we are at a tipping point. Much progress has been made. But we need globally coordinated, downstream efforts to incentivize the massive investments required to reach net zero and accomplish the circular economy transition. These actions include expanding our clean electricity infrastructure, establishing economically viable waste recovery and recycling capacities, and exploiting the potential of new technologies and processes available to us – whether chemical recycling, green hydrogen or carbon-dioxide removal, to name a few. To this end, policymakers at all levels of government should promote investment and innovation that drive decarbonization and circularity.

Borealis is playing a vital role in advancing plastics circularity by way of our technological prowess and constructive partnerships along the value chain. We are making good on our commitment to lowering our own emissions. Thanks to the solid foundation of our people – who are unflagging in their dedication to innovation and progress, even when the going gets tough – Borealis is well positioned to stay the course in uncertain times.

Borealis Worldwide



Customer Service Centers
Austria, Belgium, Finland,
Türkiye, United States

Innovation Centers
Austria, Finland, Sweden

O – Borealis Locations

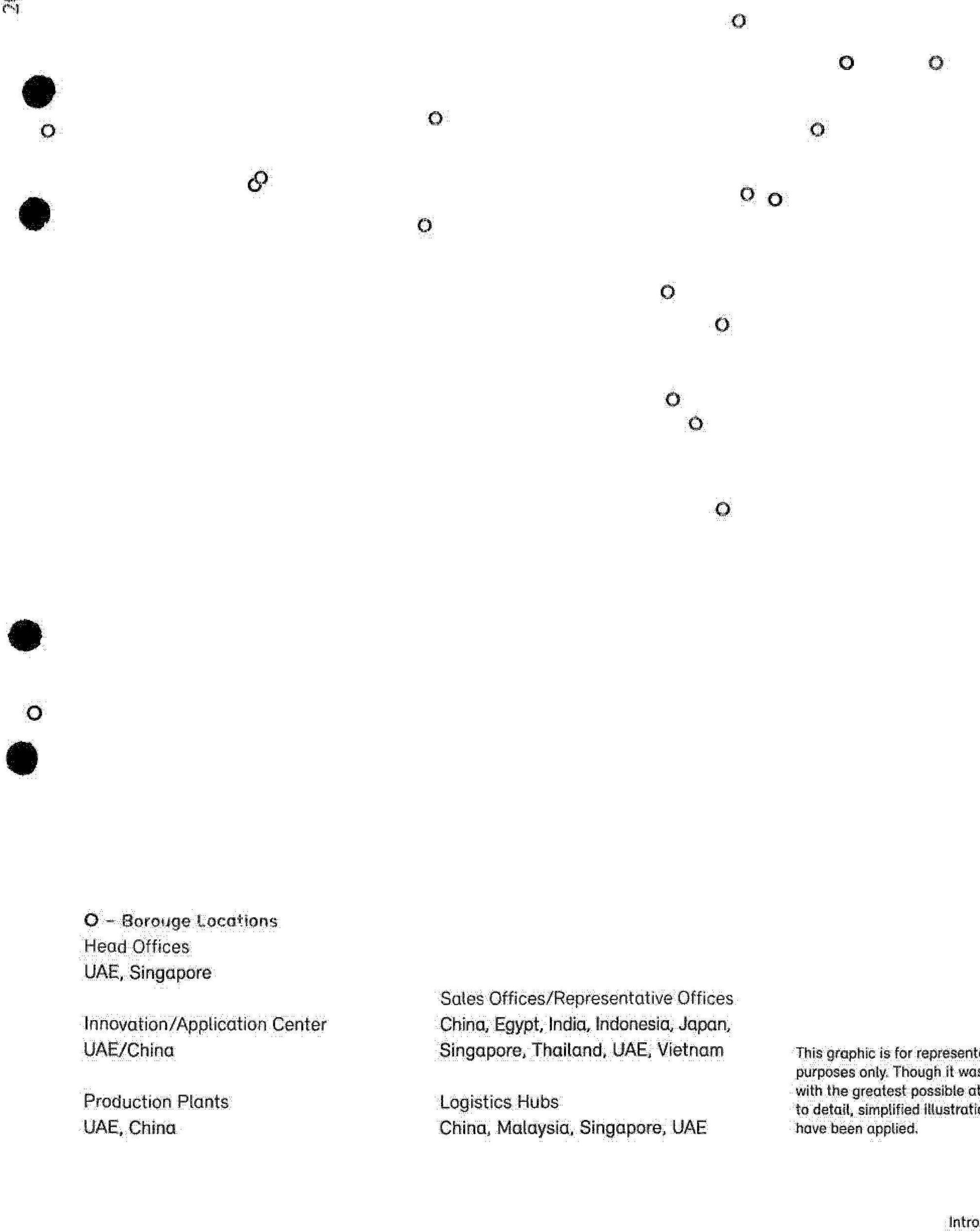
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info@borealisgroup.com

Production Plants
Austria, Belgium, Brazil, Finland,
Germany, Italy, South Korea,
Sweden, The Netherlands,
United States

Recycling Plants
Austria, Belgium, Germany

Sales Offices/Representative Offices
Argentina, Brazil, Chile, Colombia,
Croatia, Czech Republic, France,
Mexico, Morocco, Poland, Romania,
Slovakia, South Africa, Spain,
Türkiye, UAE, UK

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● – Borouge Locations
Head Offices
UAE, Singapore

Innovation/Application Center
UAE/China

Production Plants
UAE, China

Sales Offices/Representative Offices
China, Egypt, India, Indonesia, Japan, Singapore, Thailand, UAE, Vietnam

Logistics Hubs
China, Malaysia, Singapore, UAE

This graphic is for representational purposes only. Though it was prepared with the greatest possible attention to detail, simplified illustrations may have been applied.

Our Business

Borealis is one of the world's leading providers of advanced and sustainable polyolefin solutions. In Europe, Borealis is also an innovative leader in polyolefins recycling and a major producer of base chemicals. We leverage our polymer expertise and decades of experience to offer value-adding, innovative and circular material solutions for key industries such as consumer products, energy, healthcare, infrastructure and mobility.

With operations in over 120 countries and head offices in Vienna, Austria, Borealis employs around 6,000 people. In 2023, we generated a net profit of EUR 168 million. OMV, the Austria-based international energy, fuels & feedstock and chemicals & materials company, owns 75% of our shares. The Abu Dhabi National Oil Company (ADNOC), based in the United Arab Emirates (UAE), owns the remaining 25%.

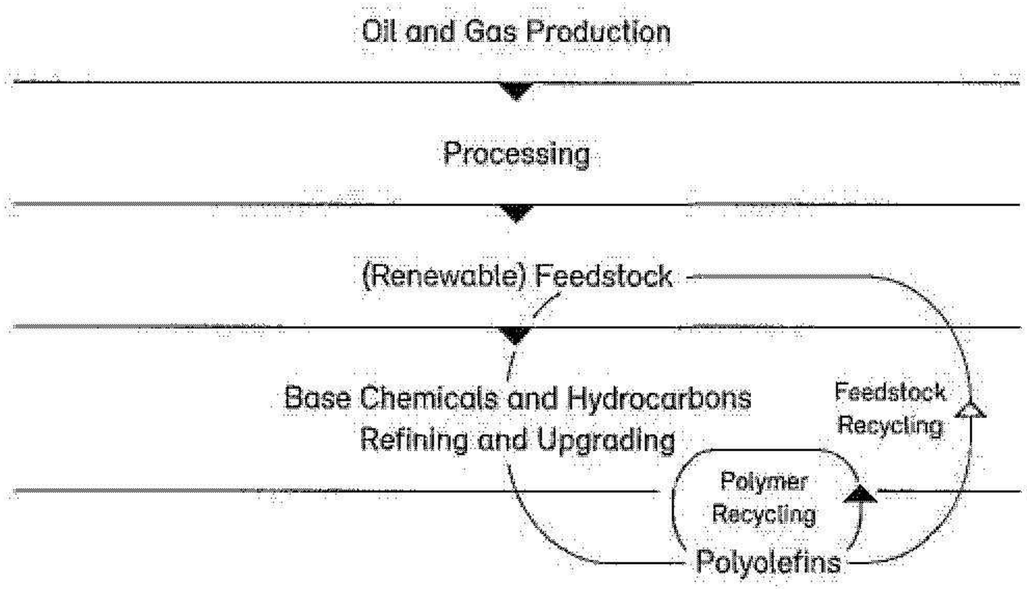
In re-inventing essentials for sustainable living, we build on our commitment to safety, our people, innovation and technology, and performance excellence. We are accelerating the transformation to a circular economy of polyolefins and expanding our geographical footprint to better serve our customers around the globe. Our operations are augmented by two important joint ventures: Borouge (with ADNOC, headquartered in the UAE); and Baystar™ (with TotalEnergies, based in the US).

Value creation through innovation is at the core of Borealis' strategy
Borealis continuously invests in its people, its Borstar® and other proprietary technologies and in its working processes, both internally and with external partners. The result is continuous technological improvement.

As a leading innovator in its industries, Borealis continuously identifies and anticipates unmet market needs to consequently develop the corresponding solutions. Using proprietary technologies, innovative tools and leveraging expertise acquired over many years, Borealis unlocks materials' molecular properties and creates tailor-made products.

Borealis enhances this process with in-depth market knowledge, a cross-functional approach and an emphasis on open innovation.

Fig. 1: **Chemical production flow**



Industry Segments
Borealis clusters its businesses in two business segments: Polyolefins and Base Chemicals.

Polyolefins
The value-adding polyolefin products manufactured by Borealis form the basis of many valuable plastics applications that are an intrinsic part of modern life. Borealis works closely with its customers and industry partners to provide innovative and value-creating plastics solutions in a variety of industries and segments. These solutions make end products safer, lighter, more affordable, durable and circular. In short: they enable more sustainable living.

Circular Economy
Borealis recognizes Circular Economy as imperative across all its industry applications and is dedicated to the entire cascade of circular solutions, including reuse and design for recycling. Borealis also offers solutions produced from (advanced) mechanically recycled feedstock (Borcycle™ M), chemically recycled feedstock (Borcycle™ C) and renewable-based feedstock (Bornewables™). These sustainable solutions embody the aims of our EverMinds™ approach dedicated to promoting and advancing circularity in the industry to ensure the continued success of our customers and partners.

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Advanced polyolefin solutions

Consumer Products

With over 50 years of experience in the industry, Borealis is an innovative and reliable supplier of advanced and circular polyolefin plastic materials used in consumer products. Proprietary Borealis Borstar technology enables production of eco-efficient, sustainable and high-performing solutions for flexible and rigid packaging, and for hygiene and filtration applications.

Borcycle M and the ISCC PLUS-certified Borcycle C products based on mechanically and chemically recycled feedstock as well as the ISCC PLUS-certified Bornewables products using renewable-based feedstock meet a growing demand for high-sustainability packaging applications. In addition, via Design for Recycling (DfR) Borealis accelerates the transformation of the plastics industry towards circularity.

All of these innovative solutions designed for eco-efficiency and easy recycling play a significant role also in safeguarding the quality and safety of consumer and industrial products, while also fulfilling demand for enhanced functionality, convenience and sustainability. They protect and preserve, prevent spoilage and minimize waste.

Energy

For over six decades, Borealis has been a leading provider of value-creating polyolefin compounds for the energy industry and a partner of choice for wire and cable customers. Our global presence is assured thanks to our own operations outside Europe such as Rockport (US), and DYM SOLUTION CO., LTD (South Korea), as well as through our joint ventures Borouge (UAE) and Baystar (US).

The proprietary technologies and advanced material solutions accelerating electrification and the green energy transition include our industry-wide platform Borlink™; the sustainable engineering polymer class Stelora™; the solar brand Quentys™; and our Borclean™ capacitor film resins.

As a reliable partner, Borealis provides high-performance compounds for insulation and protection of land and submarine applications; power transmission and distribution; network and communication cables; energy storage and capacitors. Our Borcycle M, Borcycle C and Bornewables portfolios of ISCC PLUS-certified circular solutions help meet growing industry demand for high-quality and more sustainable cable and capacitor polymers.

Healthcare

As a leading supplier of advanced polyolefins for medical and diagnostic devices and pharmaceutical packaging, Borealis has been a reliable and trusted partner to the industry for over 25 years. The cornerstone of Borealis Healthcare is the Bormed™ Concept, founded on the principles of service, commitment and conformance, with unrivaled regulatory and technical support provided to material engineers to enable innovation.

Medical polyolefins in the Bormed grade portfolio offer superior technical performance, fulfilling the most stringent requirements in terms of safety and quality. As a global supplier, Borealis can ensure long-term supply security.

As a circular economy pioneer, Borealis offers material solutions from its ISCC PLUS-certified Bornewables and Borcycle C grade portfolios to deliver the same high material performance as virgin grades, but with a reduced carbon footprint.

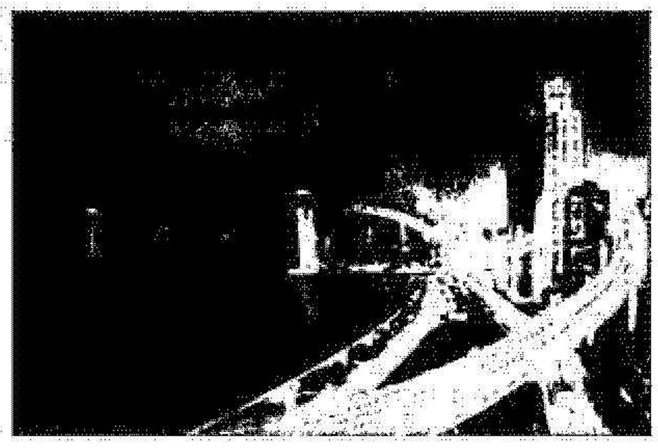
Infrastructure

As a trusted and experienced partner with more than 50 years of experience (since 1967), Borealis offers market-leading polyethylene and polypropylene materials for pipe systems in water and gas distribution, waste water and sewage disposal, plumbing, heating, and industrial, along with multi-layer steel pipe coating solutions for onshore and offshore oil and gas pipelines. With the proprietary Borealis Borstar technology as the main foundation, complimented by selected other processes, Borealis can offer a wide variety of tailored pipe solutions.

Fig. 2: **Industries served by Borealis' polyolefins applications**



Consumer Products

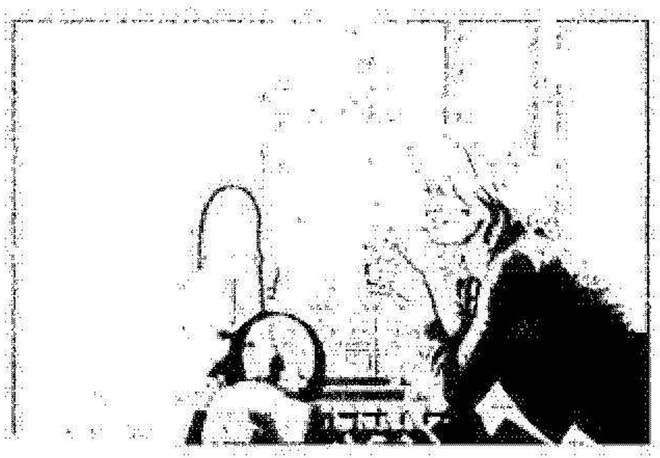


Energy



Healthcare

With our advanced polyolefins for virgin and circular economy solutions, we serve these industries:



Infrastructure



Mobility



Solutions for Polymers

In addition, Borcycle M and the ISCC PLUS-certified Borcycle C compounds based on mechanically and chemically recycled feedstock as well as the ISCC PLUS-certified Bornewables compounds using renewable-based feedstock meet a growing demand for high-sustainability building and infrastructure pipe polymers.

By offering more durable and reliable as well as circular pipe solutions, Borealis' step-change innovations continue to boost the sustainability of pipe networks by making them safer, leak free, longer lasting and more efficient, with installation costs reduced by up to 60% compared to the traditional pipe material.

Based on Borealis' European assets, its Middle Eastern joint venture Borouge as well as the American joint venture Baystar, Borealis confirms its position as a partner of choice for global pipe customers, helping to meet the growing needs and requirements of the building and infrastructure industry today and in the future.

Mobility

For over 50 years, Borealis has been a leading supplier of innovative polyolefin-based solutions for engineering applications in the mobility industry. Together with our value chain partners around the globe, we are developing solutions for a more sustainable and energy-efficient future.

The proprietary Borstar technology forms the foundation of high-performance, cost-effective and lightweight polypropylene materials that can substitute for conventional materials like metal.

As an alternative to fossil fuel-based polyolefins, our renewable-based feedstock Bornewables and advanced mechanical recycling Borcycle M portfolios can help reduce the carbon footprint of vehicles. Our leading-edge material solutions are found in automotive interior, exterior, e-powertrain and under the hood applications.

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Solutions for Polymers

Borealis continually develops novel and performance-enhancing solutions, such as polymer modifiers (plastomers and elastomers), foam solutions and reinforced polyolefins for structural parts. These material solutions may be designed for new or existing applications.

In polymer modifiers, Borealis continues to expand its wide range of attractive solutions. The Queo™ brand helps bridge the performance gap between conventional plastics, such as polyethylene (PE), and conventional elastomers, like ethylene propylene diene monomer. Queo makes it possible to meet or even surpass the most demanding requirements in sealing, flexibility, compatibility and processability.

Borealis' high melt strength (HMS), polypropylene-based foamed products fulfill the varying and sophisticated needs of both converters and consumers in the packaging, automotive and construction industries. For example, foam solutions in packaging offer excellent recyclability, especially when compared to conventional alternatives. Furthermore, HMS polypropylene (PP) foam also offers weight reduction, heat stability (for microwaveable packaging) and good thermal insulation properties.

Borealis' reinforced polyolefins are novel, performance-enhancing material solutions. The wide range of PP compounds are globally available and help contribute to enhanced sustainability, for example, through improved cost and energy efficiency.

Base Chemicals

As the building blocks of the chemical industry, base chemicals are used to manufacture the essential products and applications used by industry and consumers in daily life. Base chemicals are used in diverse sectors, including aviation, mobility, renewable energy, consumer appliances, advanced packaging, healthcare and many others.

Borealis produces a wide range of these base chemicals, including ethylene, propylene, C4 hydrocarbons, hydrogen, phenol and acetone. Its Borvida™ portfolio of sustainable base chemicals produced using non-food waste and residues from biomass and chemically recycled waste enhance the circularity of these essential building blocks. Together with OMV, Borealis is one of the largest olefins producers in Europe. Thanks to its joint ventures with Borouge (UAE) and Baystar (US), Borealis is a sizeable international player in the industry.

The Borealis Base Chemicals business is tasked with sourcing renewable power, natural gas and main utilities (e.g. steam, water and nitrogen) for all its Base Chemicals and Polyolefins production locations in Europe. This integral function plays an important role in enabling Borealis to lower its own emissions and achieve its ambitious sustainability targets.

Olefins and Co-products

Borealis sources feedstock like naphtha, butane, propane and ethane from the oil and gas industry. It uses its olefin units to convert feedstock into the building blocks of the chemical industry: olefins (ethylene and propylene); and C4 hydrocarbons (petrochemical derivatives e.g. butanes, n- and iso-butylene, butadiene), among others.

Ethylene, propylene and C4 base chemicals are produced in steam crackers in Finland and Sweden, and in Abu Dhabi, as part of the Borouge joint venture. An ethane cracker with an annual production capacity of one million metric tons of ethylene commenced operations in 2023 as part of the Baystar joint venture in Texas (US). Propylene and hydrogen are also produced at Borealis' propane dehydrogenation (PDH) plant in Kallo (Belgium). A second PDH plant currently under construction will triple Kallo's propylene capacity once started up.

For the most part, ethylene is captively used for Borealis' polyethylene applications. It is also sold to customers in the acetaldehyde value chain for vinyl acetate monomer.

Propylene is captively used for Borealis' polypropylene applications, and is also sold to customers across several value chains, including acrylonitrile (for ABS, nitrile rubber and plastics); acrylic acid (for superabsorbent fibers such as diapers); butyraldehyde (for solvents, plasticizers, acrylic esters); and propylene oxide (for polyols, polyurethane and polyester resins).

Borealis sources the required feedstock and olefins from its owners, or purchases them on the market. A range of co-products from the steam cracking process are also sold on international markets. These include butadiene, butene raffinate 1, ethyl tertiary butyl ether (ETBE), benzene and pyrolysis gasoline (pygas).

Borealis produces hydrogen in its own PDH plant in Kallo and at its steam crackers in Stenungsund (Sweden) and Porvoo (Finland). As one of nature's essential building blocks, hydrogen combines easily with other elements and molecules. These combinations give rise to many other things, including energy. Hydrogen is, thus, crucial to global decarbonization efforts. It is a viable alternative to conventional fossil-fuel feedstock, and will become a key enabler for sustainable chemicals, such as renewable syngas, or methanol from CO_2.

Phenol and Acetone

In the Nordic and Baltic regions of Europe, Borealis is the leading producer of phenol and acetone. Used in industry as a starting material for plastics, phenol is commonly found in adhesives, construction materials, carpets, mobile phones and household appliances.

The phenol, benzene, cumene and acetone produced by Borealis in Finland are mainly sold to its Northern European industry customers for the manufacture of adhesives, fibers, epoxy resins and polycarbonates. Acetone is frequently used in acrylics, fibers, pharmaceuticals, and in paint solvents. Benzene is often used as a base chemical for other chemical processes, such as cyclohexane for nylon, and styrene for polystyrene.

Circular Base Chemicals

One way in which Borealis is proactively accelerating the transition to a circular economy is through circular base chemicals. These materials lessen our dependence on fossil fuels, drastically lower the environmental footprint of manufactured products, and reduce CO_2 emissions.

The Borvida portfolio comprises Borvida™ B, which are circular base chemicals (such as ethylene, propylene and phenol) made from non-food waste biomass. Borvida™ C materials are made using chemically recycled post-consumer waste. In the future, Borvida™ A will offer sustainable base chemicals derived from atmospheric carbon capture.

In line with the mass balance accounting method, the ISCC PLUS-certified materials in the Borvida portfolio can be tracked, traced and verified across the entire value chain. This ensures circularity from feedstock to end product.

Power, Natural Gas and Utilities

The Borealis Base Chemicals business unit is responsible for sourcing renewable power and natural gas for all European Base Chemicals and Polyolefins production locations, in addition to managing primary utilities. The business unit, thus, plays a crucial role in ensuring that Borealis achieves its ambitious, long-term Energy & Climate goals. These include using an ever higher share of renewable power in its own operations. By 2030, 100% of electricity used in Borealis Polyolefins and Base Chemicals operations should be renewable in origin, thanks to a diverse renewable energy portfolio based on wind, solar and hydropower. Scope 1 and Scope 2 emissions shall be reduced from 5.1 million metric tons per year (from a 2019 baseline) to 2 million metric tons by 2030, with expanded use of renewable power sources making up the majority of Scope 2 emissions reductions.

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Global Growth Projects



Bayport Polymers LLC (Baystar™) Joint Venture

- 50/50 joint venture with TotalEnergies
- Location: Texas, US
- 625,000 metric tons per annum Borstar® polyethylene (PE) plant in Pasadena, started up in 2023
- State-of-the-art Borealis Borstar third generation (3G) technology is now licensed in North America for the first time, serving the energy, infrastructure and consumer products industries

World-scale propane dehydrogenation (PDH) plant

- 100% Borealis ownership
- Location: Kallo, Belgium
- 740,000 metric tons per annum propylene production
- PDH is a vital process step in the production of propylene from propane. As one of the most important building blocks in the entire chemical industry, propylene is the raw material used to produce polypropylene (PP)
- Start-up expected in 2025

Borouge Joint Venture: Further expansion with Borouge 4

- Borouge is listed on the Abu Dhabi Securities Exchange (ADX)
- 54/36 joint venture with ADNOC
- Locations: United Arab Emirates (UAE), Singapore

Borouge 4

- One 1.5 million metric tons per annum ethane cracker, to be the fourth cracker in Borouge's integrated petrochemical complex in Ruwais
- Two Borstar PE plants, each with a production capacity of 700,000 metric tons per annum, using state-of-the-art Borealis Borstar 3G technology
- One 100,000 metric tons per annum cross-linked PE (XLPE)
- One Hexene-1 unit, producing comonomer for certain PE grades
- Start-up expected at the end of 2025



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Non-financial Report 2023

About the Non-financial Report

The Consolidated Non-financial Report 2023, as part of the Combined Annual Report 2023, has been prepared in accordance with the GRI Universal Standards 2021, as well as the legal requirements for the publication of a consolidated non-financial report (Section 267a of the Austrian Commercial Code). In 2021, Borealis joined the United Nations Global Compact (UNGC). This report also covers the ten universal principles of the UNGC.

The report provides information for the period from January 1, 2023 to December 31, 2023, following an annual reporting cycle, which aligns with the reporting period of the financial report. The last report for 2022, was published in March 2023.

The Executive Board and Supervisory Board have reviewed and approved the Strategy 2030, which has sustainability at its core, and are also responsible for the final approval of the non-financial information.

A reference table sets out which chapters of the report contain the material topics, other important topics and non-financial matters specified by Section 267a (2) of the Austrian Commercial Code, and links these topics to the relevant UNGC principles (→ Overview of Material Topics, p. 41). The GRI Content Index of this consolidatd non-financial report outlines where specific GRI reporting elements and indicators are addressed in the report (→ GRI Content Index, p. 191).

Scope of the Non-financial Information
As described in the Notes to the Consolidated Financial Statements, Borealis has divested its nitrogen business unit, consisting of fertilizers, technical nitrogen and melamine products. Like last year, this has resulted in the business being classified as a "discontinued operation" in the Consolidated Financial Statements. Accordingly, turnover, capital expenditure and operating expenditure, as presented in the chapter EU Taxonomy (→ chapter EU Taxonomy, p. 92), do not include the nitrogen business unit.

As a result of the divestment, the corresponding non-financial data for fertilizer, melamine and technical nitrogen products are reported only for the first half of 2023.
The non-financial data is presented separately, as was the case last year. In previous years, data was presented consolidated at Group level. Non-financial data are reported for those activities where Borealis is the operator or where Borealis has a stake of more than 50% and exerts controlling influence.

Exceptions
In general, Rialti S.p.A. and Renasci N.V. are not covered within the non-financial data for 2023, as the acquisitions took place during 2023 and the necessary data collection processes are still being set up, with the exception of general employee data (number of employees), which already includes Rialti S.p.A. and Renasci N.V.. Rosier Group is also not included within the non-financial data, as the divestment completed on January 2, 2023.

In addition, the following exceptions are made:
- Procurement of Feedstock, Electricity and Utilities: Borealis Polyolefine GmbH, Borealis Polymers N.V., Borealis Antwerpen N.V., Borealis Kallo N.V., Borealis Brasil S.A., Borealis Polymers Oy, Borealis Polymere GmbH, BOREALIS ITALIA S.p.A., Borealis AB, DYM SOLUTION CO., LTD and Borealis Compounds Inc. are excluded from all indicators.

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- Logistics: Ecoplast Kunststoffrecycling GmbH, Borealis Brasil S.A., mtm compact GmbH, mtm plastics GmbH and DYM SOLUTION CO., LTD are excluded from polyolefins (PO) CO_2 consumption, number of partners and safety index. With regard to PO CO_2 consumption, Borealis Compounds Inc. is also not included.
- People & Culture: DYM SOLUTION CO., LTD, Ecoplast Kunststoffrecycling GmbH, mtm compact GmbH and mtm plastics GmbH are excluded from the ratios regarding annual total compensation, performance and parental leave. DYM SOLUTION CO., LTD, mtm compact GmbH and mtm plastics GmbH are not included within the coverage of collective bargaining agreements.
- Occupational Health & Safety: DYM SOLUTION CO., LTD is excluded from the sick leave rate.
- Process Safety: DYM SOLUTION CO., LTD is not covered within the response rate on process safety incidents, as well as high-severity and medium-severity accidents.
- Energy & Climate: ETS emissions are not applicable for Ecoplast Kunststoffrecycling GmbH, Borealis Brasil S.A., mtm compact GmbH, mtm plastics GmbH, BOREALIS ITALIA S.p.A, DYM SOLUTION CO., LTD and Borealis Compounds Inc. DYM SOLUTION CO., LTD and Borealis Compounds Inc. are excluded from energy consumption indicators.
- Environmental Management: DYM SOLUTION CO., LTD is excluded from all environmental indicators.
- Ethics & Compliance: DYM SOLUTION CO., LTD, mtm plastics GmbH, mtm compact GmbH and Ecoplast Kunststoffrecycling GmbH are excluded from e-learning courses.

The exclusions listed above are not material to the Group's total non-financial performance. However, Borealis will work on further increasing the scope of its non-financial reporting in future.

Changes from the Previous Report
There were no material changes from the previous report, apart from the inclusion of Health & Safety as a material topic. This decision was based on the preliminary results of the materiality analysis according to CSRD and ESRS requirements and represents an essential step towards complying with the European Sustainability Reporting Standards (ESRS). Restatements of data are indicated with footnotes in this report or in the GRI Content Index.

The Consolidated Non-financial Report 2023 has been subject to an independent assurance engagement by KPMG Austria GmbH Wirtschaftsprüfungs- und Steuerberatungsgesellschaft, whereby key sections were audited with limited assurance. The limited assurance engagement was conducted in accordance with the International Standard on Assurance Engagements 3000 (revised), issued by the International Federation of Accountants, and in conformity with Austrian Standards for Independent Assurance Engagements (KFS/PG 13). The Independent Limited Assurance Report on the Consolidated Non-financial Report describes the exact scope of the audit (→ Independent Assurance Report, p. 206).

For questions regarding sustainability or social responsibility, please contact → sustainability@borealisgroup.com.

Sustainability Management

Materiality Assessment

Goals and Planned Key Actions in 2023	Key Achievements in 2023
Refresh the materiality assessment and matrix	Initiated materiality assessment project across all three OMV Group companies, i.e. OMV, OMV Petrom and Borealis
Fine-tune the roadmaps for strategy implementation, in particular reducing Scope 1 and 2 emissions and increasing production capacity for circular volumes	Began project on the asset network strategy to translate the Group roadmap to location specific roadmaps, with strategic options now developed and under evaluation
Further assess opportunities to reduce Scope 3 emissions	Assessed the key drivers for Scope 3 reduction and evaluated their potential impact on Scope 3 emissions up to 2030, as the basis for strategic decision-making
Amplify public affairs advocacy, to support the increase of recycled plastics in packaging	Developed broad stakeholder support in industry associations along the value chain for the uptake of mandatory minimum recycled content for plastic packaging in the EU
Implement new elements potentially being introduced to the EU Taxonomy	Assessed the EU Taxonomy regulation updated in 2023 and determined that climate change mitigation and climate change adaption remain the relevant objectives for Borealis
Prepare to implement the Corporate Sustainability Reporting Directive (CSRD) and European Sustainability Reporting Standards (ESRS), which are mandatory starting from the 2024 reporting year	Conducted a thorough gap and needs analysis, to understand the current maturity level versus CSRD and ESRS, as the basis for an integrated action plan for 2024
Establish a biodiversity management framework, together with OMV Group, and enhance knowledge and awareness of this topic in the organization	Began a joint project with OMV Group to monitor the development of biodiversity-related regulations, define the Group's ambition towards biodiversity and determine how to integrate biodiversity-related aspects into the decision-making process

Goals and Planned Key Actions for 2024	
Ensure all necessary tools, information and data are available, so the Annual Report 2024 complies with CSRD and ESRS	Conduct a Scope 3 campaign in the organization, to support inclusion of these emissions in decision-making
Leverage the updated materiality assessment as the basis for defining the focus topics for the Annual Report 2024 and create awareness in the organization about how the company contributes to the identified levers	Initiate a project to develop a dedicated ESG risk and opportunity assessment process and onboard the key stakeholders in the organization
Institutionalize biodiversity management by integrating the relevant aspects in Borealis' processes.	Upgrade processes and tools for Life Cycle Assessment and Product Carbon Footprinting

Borealis is committed to building a prosperous and sustainable future for all, by placing sustainability at the core of everything it does. This is expressed clearly in the Group's purpose statement "Re-inventing essentials for sustainable living", a spirit shared across the OMV Group of companies.

Improving Borealis' sustainability performance will enable the Group to achieve its purpose, while at the same time ensuring growth and building on Borealis' robust foundations of safety, people and culture, innovation and technology, and performance excellence.

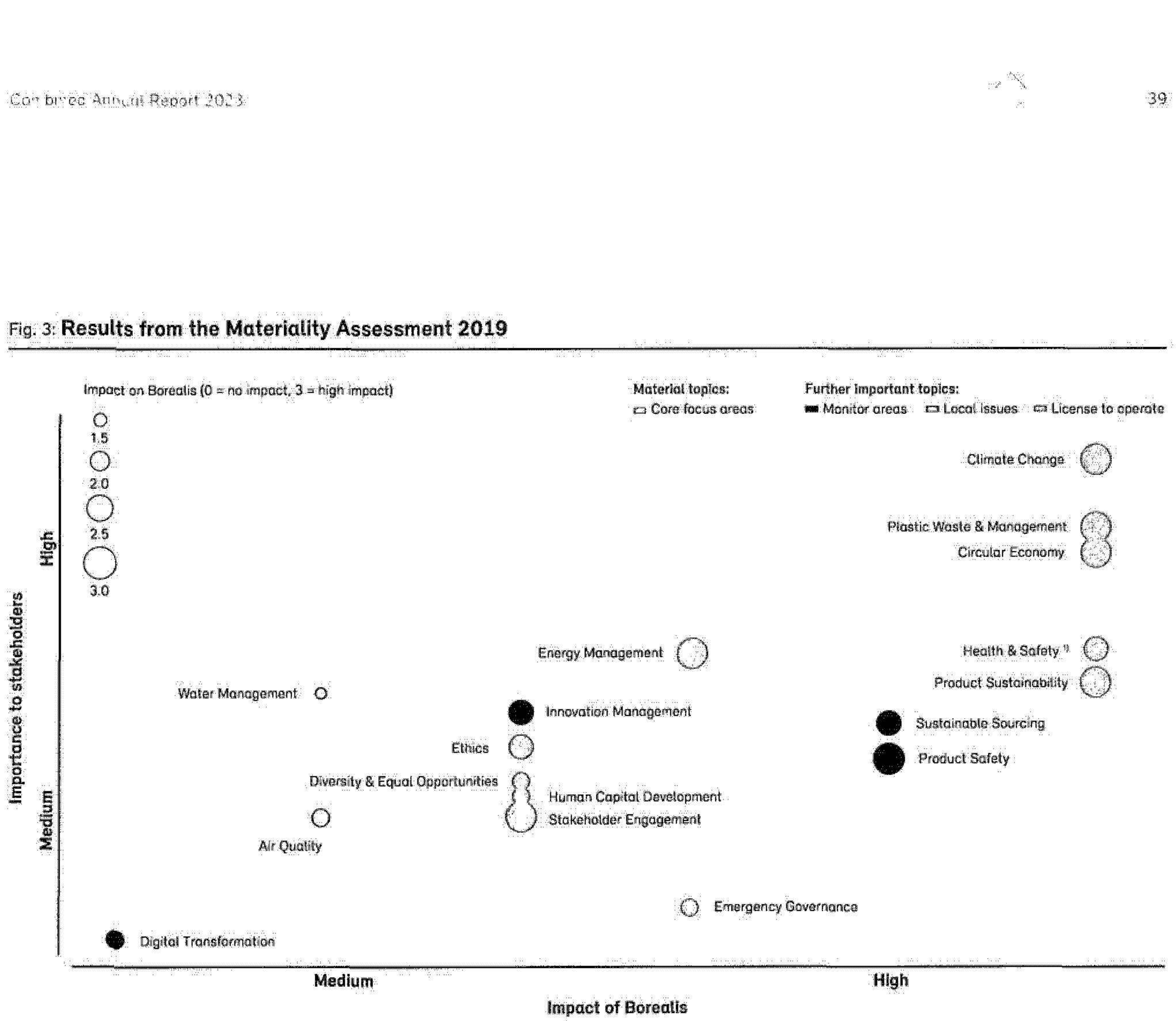
Governance

Sustainability is an integral part of the Borealis Group Strategy. The Executive Board is Borealis' highest governance body for sustainability. The Executive Board has delegated the routine management of social, environmental and economic issues to senior leaders in their respective functions and business divisions.

Borealis' Sustainability Function is led by the Director Sustainability & Public Affairs, who reports to the CEO. The Function leads the development of the Group's Sustainability

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Fig. 3: **Results from the Materiality Assessment 2019**



1) Due to its great importance for Borealis and the preliminary results of the materiality analysis according to CSRD and ESRS requirements, Health & Safety has been included as a core focus area. Further details can be found in sub-chapter Determining Material Sustainability Topics, p. 41

Strategy and supports Borealis' leaders with developing sustainability-driven roadmaps and activities, and implementing them through capability building, expertise, consultancy and dedicated methodologies and tools. For key topics, such as energy and climate or microplastics, the Group has established committees or issue teams.

Each Group function reports on sustainability topics to the respective Executive Board member, including progress with activity implementation and related targets, seeking approval of budget and activity plans, as well as key concerns, risks and opportunities (→ chapter Sustainability Governance, p. 68).

Stakeholder Engagement

As a responsible company that aims to lead the transformation towards circularity and climate neutrality, Borealis creates constructive and respectful dialogues with internal and external stakeholders. This is essential for achieving its vision and implementing its Group Strategy 2030, including its related sustainability goals.

Borealis therefore places great importance on regular exchanges with stakeholders, to learn about their views and concerns, listen to their expectations of Borealis, and communicate about the Group's activities in a transparent and informed manner. This helps Borealis to mitigate potential risks or leverage opportunities for cooperation in a timely way and to reflect the insights in the Group's materiality assessment.

Borealis' business activities and sustainability issues involve a diverse and complex range of stakeholders at global, regional and national levels, with different interests and concerns. The Group therefore uses a broad range of engagement channels, driven by Borealis' respective functional departments.

Mapping and prioritizing Borealis' stakeholders is a continuous and dynamic process. Borealis regularly runs stakeholder mapping and related issue, risk and opportunity assessments at Group level and at its major locations. The Borealis Management System details the processes for the

Group's materiality and stakeholder assessments and its community-related issue and risk management. These processes were updated in 2020 to comply with the requirements of ISO 50001 and ISO 45001.

At Group level, stakeholder mapping and engagement is the responsibility of the respective business areas, such as Procurement, People & Culture, Innovation and Public Affairs. At a local level, this is the responsibility of location leaders.

Determining Material Sustainability Topics
To integrate stakeholder views and concerns and develop its sustainability roadmap, Borealis conducts sustainability materiality assessments, in compliance with the legal requirements related to the disclosure of non-financial information in Austria (Nachhaltigkeits- und Diversitätsverbesserungsgesetz; NaDiVeG), as well as Global Reporting Initiative (GRI) Standards.

Borealis carried out its first systematic assessment of this kind in 2013, followed by a refresh in 2019 which mainly reconfirmed the previous results.

In the 2019 materiality assessment, 17 sustainability aspects that are relevant for the chemical industry were assessed to understand their economic, environmental and social impact (both on Borealis and by Borealis). Relevant internal and external stakeholder groups were interviewed or assessed via desktop research, including customers, suppliers, brand owners, employees, non-governmental organizations, regulators and investors. The assessment was conducted with an external consultant, to maintain an objective and independent view.

The following four materiality topics were identified as the most important to Borealis and its stakeholders, and were subsequently acknowledged by the Executive Board and defined as "Core focus areas for sustainability acceleration":

1. Climate Change: This is the most highly rated topic, in terms of Borealis' impact on climate change and its importance to all stakeholders.

2. Circular Economy: This is one of the main drivers transforming plastics and chemicals industry business models and increasing their sustainability. It provides Borealis with opportunities to differentiate itself from other companies in the industry.

3. Plastic Waste & Management: This is an issue of high importance for Borealis, at both corporate and operational level. Proactive engagement by Borealis reaffirms its commitment to zero plastics leakage into the environment.

4. Product Sustainability and Product Safety: These are key drivers for developing and improving the sustainability of Borealis' products, to minimize stress on the environment and protect public health.

In addition, although not identified as material topics, Borealis designated three topics as "monitor elements" (further important topics). These are sustainability topics that the Group wants to monitor and continuously improve:

1. Responsible Sourcing: This is key to ensuring suppliers adhere to Borealis' ethical standards and supply sustainable raw materials and renewable energy, as well as to the Group's ability to accelerate the transformation towards a circular economy and carbon neutrality.

2. Innovation Management: Innovation is at the heart of Borealis, providing the Group with opportunities to further differentiate itself from its industry peers, in respect of technological capabilities and research and development investments that lead to innovative and sustainable solutions.

3. Digital Transformation: Increasing digitalization will be a transformational enabler for Borealis to deliver its strategy to 2030. Digitalization will increase productivity, improve the customer experience and, in particular, accelerate the transformation towards a circular economy and CO_2 neutrality for the Group.

Air quality and water management were identified as "local issues" which require attention at an operational level, in conjunction with national authorities, laws and regulations, while all the topics categorized under "license to operate" are fully integrated into Borealis' corporate culture and management processes and do not require specific additional focus at Group level.

Borealis planned to conduct a follow-up materiality assessment in 2022. However, this was postponed until 2023 due to the need to prioritize the development of the new Group Strategy. This enabled OMV Group to initiate a Group-wide materiality assessment project in mid 2023

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across OMV, OMV Petrom and Borealis, according to CSRD and ESRS requirements. The preliminary results do not show any significant differences to the currently reported material topics, with the exception of Health & Safety, which is expected to become material. The materiality assessment is due to be finalized in Q1 2024.

In the interim, Borealis has cross-referenced the material topics from the 2019 assessment with the required topics in the GRI 2021 Oil & Gas Sector standard, due to the relevance for the parent company, and ensured all the corresponding requirements have been included in this report. Due to its great importance for Borealis and the preliminary results of the materiality analysis according to CSRD and ESRS requirements, Health & Safety has been included as a core focus area. The list of material topics has been expanded accordingly.

In addition to reporting on material topics in this report, Borealis also discloses further important topics. This information is needed to provide a full picture.

Overview of Material Topics

This overview provides the link between the material topics, the respective chapters in this report, the principles of the UN Global Compact (UNGC) and the sustainability aspects according to the Nachhaltigkeits- und Diversitätsverbesserungsgesetz (NaDiVeG), the Austrian law on non-financial reporting based on the European Non-Financial Reporting Directive.

Sustainability Focus Area	Topic	Chapter of reference	Non-financial matters according to NaDiVeG	UNGC United Nations Global Compact
Material topics				
Core focus areas for acceleration	Climate Change	Energy & Climate, Environmental Management	Environmental matters	7, 8
	Circular Economy	Circular Economy	Environmental matters	9
	Plastic Waste & Management	Circular Economy, Environmental Management	Environmental matters	7, 8
	Product Sustainability	Product Safety, Sustainability Management, Procurement	Environmental matters, social matters	–
	Health & Safety	Process Safety, Occupational Health and Safety, Product Safety	Employee-related matters	–
Further important topics				
Areas that are important to monitor	Responsible Sourcing	Logistics, Procurement of Feedstock, Electricity & Utilities, Procurement of Raw Materials, Packaging and Technical Supplies	Environmental matters, respect for human rights, social matters	1, 2
	Innovation Management	Innovation	Social matters, environmental matters	9
	Product Safety	Product Safety	Environmental matters, social matters,	–
	Digital Transformation	Digital Transformation	Social matters	–
Local issues	Air Quality	Environmental Management	Environmental matters	7, 8
	Water Management	Environmental Management	Environmental matters	7, 8
	Energy Management	Energy & Climate, Environmental Management	Environmental matters	7, 8
	Ethics	Ethics & Compliance	Anti-corruption and bribery, respect for human rights	1, 2, 4, 5, 10

Sustainability Focus Area	Topic	Chapter of reference	Non-financial matters according to NaDiVeG	UNGC United Nations Global Compact
Further important topics				
License to operate	Diversity & Equal Opportunities	People & Culture	Employee-related matters	6
	Human Capital Development	People & Culture	Employee-related matters	3, 4, 5, 6
	Ethics & Compliance	Ethics & Compliance	Ethics and Compliance matters	-
	Stakeholder Engagement	Sustainability Management	Social matters	-
	Emergency Governance	Process Safety, Sustainability Governance	Employee-related matters, social matters	-

Sustainability Framework and Targets

Following the 2019 materiality assessment, Borealis built its Sustainability Framework around three focus areas: Health & Safety, Circular Economy and Energy & Climate. The fourth pillar, Growth, is seen as enabling prosperity for Borealis and society and supports implementation of the Group's plans in the three focus areas. To ensure the realization of the Group's strategy and its sustainability ambitions, Borealis has set the following long-term goals, in addition to the goals it defined and communicated earlier (see Fig. 4, p. 44).

Greenhouse Gas Emissions Goals

Borealis aims to reduce its Scope 1 and Scope 2 emissions from 5.1 million metric tons (base year 2019) to less than 2 million metric tons by 2030. The emission reduction portfolio includes increased use of electricity from renewable sources throughout the decade, as well as carbon capture projects, which will come on stream in the second half of this decade. The reduction target also includes the divestment of Borealis' fertilizers, technical nitrogen products and melamine business, which was completed in 2023. In 2023, Borealis emitted 2.2 million metric tons of GHG emissions (Scope 1 and Scope 2 market based).

Circular Economy Goals

In 2023, Borealis processed around 116,300 metric tons of circular feedstock in Europe. By 2025, Borealis is targeting a capacity increase of circular product solutions to 600,000 [1] metric tons. These include recycled and renewable polymers and chemicals, as well as renewable hydrocarbons. By 2030, the capacity of circular products and solutions is set to reach 1.8 [1] million metric tons globally, turning today's plastic waste into a valuable resource to be reused. Moving from a linear towards a circular economy will also significantly reduce the Group's Scope 3 [2] greenhouse gas emissions.

Energy Consumption Goals

In 2023, around 38% of the electricity Borealis used in its own operations was derived from renewable energy sources, such as wind and solar power. By 2025, the share of renewables in the electricity mix will increase to 40%. By 2030, 100% of the electricity used in Borealis' operations will be of renewable origin. Furthermore, Borealis sees the energy-efficiency-first principle as a cornerstone in achieving its climate strategy. The defined energy ambition is to implement 10% energy savings of the consumption of 2015 by 2030.

Environmental goals

The Group aims to achieve zero non-emergency flaring, and continues to strive towards zero loss of plastic pellets from its operations.

Health & Safety Goals

Borealis will continue to work towards its targets of achieving zero work-related and process safety incidents or accidents. In addition, the Group strives to proactively substitute substances of concern.

1) Global capacities including non-consolidated Joint Ventures (Borouge). This target is under review. // 2) Scope 3 are indirect GHG emissions that are a consequence of company activities but occur from sources outside or not controlled by the company.

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Group Scorecard: Incentivizing the Organization to Drive Sustainability

In 2020, a sustainability KPI was added to the Group Performance Scorecard, reinforcing the importance of sustainability performance to Borealis' successful development and growth. In 2022, this KPI was further strengthened and refined, to fit the new Group Strategy 2030. It consists of GHG emission intensity (addressing Scope 1), renewable energy sourced (addressing Scope 2) and circular volumes sold (addressing Scope 3).

Sustainability is also reflected in scorecards for the business groups. For Polyolefins, the scorecard includes occupational and process safety, as well as the delivery of the circular economy strategy. For Base Chemicals, the scorecard includes renewable electricity sourcing, safety incidents including supply chain, and delivering on circular economy milestones.

A set of sustainability-related KPIs is integrated into the Bonus Incentive Plan (BIP), where the above-mentioned sustainability KPI is one of ten KPIs on the Group scorecard (all equally weighted). Sustainability also has a 20% weighting in the Long Term Incentive Plan (LTIP 2023–25) including KPIs on circular capacity, GHG scope 1 and 2 emissions, and diversity (→ chapter People & Culture, p. 106).

Sustainability Rating

Borealis has participated in the EcoVadis annual sustainability assessment since 2014. EcoVadis is a global platform that uses one of the most accepted methodologies for assessing a company's sustainability, providing trusted business sustainability ratings and helping companies to evaluate and continuously improve their sustainability performance, including their customers and suppliers. In 2023, Borealis received a scorecard rating of 73 points. In 2022, due to the incident in Kallo, Belgium, EcoVadis revoked Borealis' previous Platinum medal.

Outlook

In 2024, Borealis will continue to reinforce its commitment to supporting the Group's sustainable development. In addition, Borealis will further enhance the implementation of its Group Strategy 2030, with a particular focus on sustainability, by:

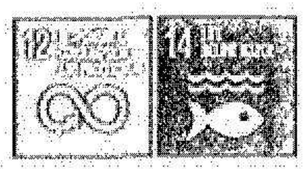
- Leveraging the updated materiality assessment, as the basis for defining the focus topics for the Annual Report 2024 and to create awareness in the organization about how the Group contributes to the identified levers;
- Institutionalizing biodiversity management, by integrating the relevant aspects into the Group's processes and enhancing knowledge and awareness of this topic in the organization;
- Conducting a Scope 3 campaign in the organization, to support the inclusion of these emissions in decision-making;
- Initiating a project to develop a dedicated ESG risk and opportunity assessment process and onboard the key stakeholders in the organization;
- Upgrading processes and tools for Life Cycle Assessment (LCA) and Product Carbon Footprinting; and
- Preparing to implement the CSRD and ESRS, which are mandatory from the 2024 reporting year.

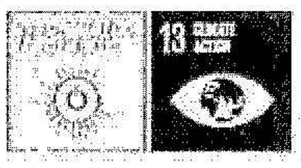
Fig. 4: **Borealis' Strategic Sustainability Framework**

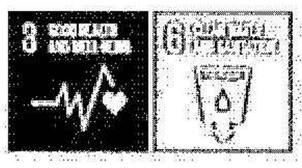
Growth



Circular Economy — **Energy & Climate** — **Health & Safety**







Our goals

Zero
pellet loss

Zero
work-related incidents or accidents

Zero
non-emergency flaring

Zero
harmful substances in our products according to REACH (Registration, Evaluation, Authorization and Restriction of Chemicals)

by 2030

100%
of electricity from renewable sources

-10%
energy savings of the consumption of 2015 implemented by 2030

< 2 million metric tons
of Scope 1 & 2 emissions [1]

1.8 million metric tons
of circular products and solutions

1) From 5.1 mn metric tons in 2019 including the nitrogen business. The divestment process for the Borealis nitrogen business which comprises fertilizers, technical nitrogen, and melamine was concluded in July 2023. Scope 1 are direct GHG emissions that occur at the source and are controlled by Borealis. Scope 2 are GHG emissions stemming from the generation of energy purchased by the company.

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Fig. 5: **Stakeholder Engagement**

Stakeholder Group	How Borealis engages	Key topics of interest for the stakeholder and Borealis	How Borealis responds	Chapter
Customers and Value Chain Partners	– Customer visits – Customer feedback and satisfaction surveys – Customer webinars – Trade fairs and conferences – Meetings, workshops and working groups at industry associations – Cooperation and partnerships to codevelop products and solutions – Responding to customers' ESG questionnaires	– Product price, availability, quality and safety – Supply reliability and customer service – LCAs, carbon footprint of Borealis products, and in particular circular product portfolio – Value chain cooperation and joint innovation – Borealis' sustainability strategy and commitments	– Customer webinars on topics such as emission reduction and circular economy; individual follow-up workshops or sessions with customers – Participation in the annual EcoVadis sustainability assessment	– Innovation – Product Safety – Procurement of Raw Materials, Packaging, Technical Suppliers and Services – Circular Economy – Energy & Climate
Suppliers	– Borealis Supplier Relationship Management Program – Supplier assessments/audits (Together for Sustainability and EcoVadis) – Workshops, training sessions – Cooperation with selected suppliers, such as sourcing of renewable feedstock – Collaboration on risk mitigating actions for substances of concern	– Reliable and sustainable sourcing – Advancing sustainability and the circular economy – Lower environmental footprint – Compliance with environmental and social standards – Adherence to the Borealis Supplier Ethics Code of Conduct	– Annual Supplier Sustainability and Innovation Day – Annual meeting with strategic suppliers – Sharing of expertise in collaboration platforms and industry associations	– Sustainability Governance – Procurement of Raw Materials, Packaging, Technical Suppliers and Services – Logistics
Industry & Trade Associations	– Membership of numerous national, EU and global associations – Active participation in working groups and board meetings – Associations' conferences – Participation in webinars	– Participating in policy debates – Exchanging expertise and experience – Monitoring trends and developments – Industry transformation towards a circular economy and climate neutrality	– Visits to Borealis' production and recycling sites to demonstrate the concepts of industrial symbiosis and circular economy – Contribution of expertise and experience related to circularity of polyolefins and sustainable base chemicals	– Public Affairs – Circular Economy – Energy & Climate – Product Safety
Employees	– Regular performance reviews and feedback between employees and line managers, including development, training plans and wellbeing aspects – Involvement and information sessions through the intranet, townhall meetings, annual Executive Board tour, CEO webinars, etc. – Regular employee "Pulse Check" surveys – Idea management on the intranet and local idea boxes – Organization of Safety Days, to stress its importance and create awareness	– Company vision, strategy, targets and performance – Individual and team contribution to the Group's success, as well as sustainability topics – Safe and healthy workplace – Work-life balance – Career opportunities – Equal and fair remuneration – Opportunity to engage/ inclusiveness – Job security	– Regular Pulse Checks completed in Q4 2023 across the entire organization with opportunity for all employees to contribute – Held a joint Diversity, Equity and Inclusion (DE&I) month in October 2022 with OMV, including panel discussions, keynote speakers, a theater play and experience exchanges – Presented Borealis Excellence Awards in 2023, for employees who significantly contributed in areas such as innovation, customer solutions, commercial excellence, HSE, and OPEX	– People & Culture – Occupational Health & Safety

Stakeholder Group	How Borealis engages	Key topics of interest for the stakeholder and Borealis	How Borealis responds	Chapter
Works Councils	– Regular meetings and annual conference with Executive and Senior Management, works councils and the European Works Council	– Employee health, safety and wellbeing – Working conditions, environmental measures such as Operation Clean Sweep, process improvements – Transparent and early information, as well as involvement in key decisions – Opportunity to provide input and raise concerns	– Regular European Works Council (EWC) meetings (joined council of OMV, OMV Petrom and Borealis), focusing on work-life balance and how to make this happen	– People & Culture – Occupational Health & Safety
Local Communities	– Ongoing dialogue with communities through channels best suited to local needs, including face-to-face meetings with community representatives and local authorities, newsletters, Open Door Days and site tours – Regular assessment of potential social and environmental impact on the communities	– Employment and infrastructure investments – Potential impact on local communities such as emissions (flaring), spills (pellet loss), noise or traffic – Grievance mechanism	– Neighborhood newsletters	– Ethics & Compliance – People & Culture – Environmental Management
Governments and Regulators	– Sharing Borealis' views on upcoming policies and regulations, their opportunities and potential challenges in their practical application – Interaction at EU and national level through different channels, such as: face-to-face meetings, public consultations, regular reporting to local authorities (as required by law) as well as site visits	– Sustainable finance, Taxonomy and sustainability reporting – Borealis' targets and performance regarding climate change and circular economy – Reduction of pellet loss – Product safety and sustainable chemicals – Compliance with laws and regulations	– Participated in public consultations via industry associations – Engaged with governments, regulators and value chain, endorsing the Business Coalition for a Global Plastics Treaty – Participated in meetings with EU stakeholders on packaging, waste framework directive, mass balance allocation models for recycled content, non-intentional release of microplastics and other topics relevant to Borealis' 2030 Strategy	– Sustainability Governance – Ethics & Compliance – EU Taxonomy – Circular Economy – Energy & Climate – Product Safety
Owners	– Regular Supervisory Board meetings, including sub-committees – Bi-annual Senior Leaders meetings, to share strategy and decisions made by Owners with the leadership team – Individual face-to-face interactions at executive level, project level or expert level	– Group strategy and business plan – Group policies – Remuneration, including for the Executive Board and Senior Management – Internal and external audits – Internal controls and risk management – Financial reporting	– Held five ordinary and one extraordinary Supervisory Board meetings, preceded by five Owners' Controllers meetings – Three ordinary Audit Committee meetings – Four ordinary and one extraordinary Remuneration Committee meetings – Regular Executive Board meetings	– Sustainability Governance – ESG Risks and Opportunities – People & Culture – Ethics & Compliance – Financial Report
Investors and Capital Providers	– Borealis Annual & Interim Financial Reports – Borealis Bankers & Investors Days – Participation at treasury, funding and investor relations forums and associations – Face-to-face meetings with Borealis' Senior and Executive Management	– Sustainable finance/Taxonomy – Credit rating aspects – Borealis' growth strategy – ESG strategy, commitments, performance, risks and opportunities and their management – Provision of regular, transparent and comparable company information	– Investor calls in conjunction with Borealis, Borouge and Baystar™ – Meetings with financial institutions and other key stakeholders on Borealis transformation strategy – Coverage of Borealis in the OMV Group Capital Market Communications and Annual General Meeting – Annual meetings with credit rating agencies	– Sustainability Management – EU Taxonomy – ESG Risks and Opportunities – Innovation – Financial Report

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Stakeholder Group	How Borealis engages	Key topics of interest for the stakeholder and Borealis	How Borealis responds	Chapter
Academia and Science	– Collaboration around open research and scientific studies – Participation in symposia, panel discussion, working groups and advisory committees – Participation in think tanks	– Generating scientific background and knowledge to advance circular economy and climate change – Fostering and accelerating R&D, to develop solutions such as carbon capture and storage, green hydrogen and renewable feedstock	– Joint science and research projects in Austria, Finland and Sweden – Borealis Student Innovation Award – Scholarship programs sponsored by Borealis – Supporting Open Chemistry Labs	– Circular Economy – Energy & Climate – Environmental Management – Innovation
Media	– Frequent interaction via established channels, including: media briefings and press conferences, one-to-one interviews, press releases and publication of Annual Report	– Borealis' strategy and financial results – Product launches and other strategic company news – Borealis' sustainability performance, with regard to the circular economy and climate change – Borealis' views and opinions on relevant sustainability, industry and company issues	– Bi-annual business and project updates, with the CEO and CFO holding one-to-one interviews with tier-1 trade media/analysts – Press and media releases on latest developments	– Sustainability Management – Circular Economy – Energy & Climate – Innovation – Financial Report
Non-Governmental Organizations	– Roundtable discussions – Face-to-face dialogue at events and conferences – Collaboration projects and memberships such as with Ellen MacArthur Foundation (EMF) – Reporting Borealis' circular economy performance and progress	– Borealis' sustainability strategy and performance, transparent reporting – Borealis' activities and views on sustainability aspects such as plastic waste, recycling, single-use plastics, climate change, chemicals safety and renewable feedstock – Social impact and compliance	– Participated in the meetings of the Business Coalition for a Global Plastics Treaty convened by WWF/EMF – Participated in Advisory Board meetings of EMF's Global Commitment network Participated in ZeroWasteEurope, ReLoop and European Committee of the Regions event in support of mixed waste sorting to recover recyclable plastics – Reported progress on circular economy in the Ellen MacArthur's Global Commitment Report	– Public Affairs – Circular Economy – Energy & Climate – Product Safety
General public	– Leveraging news via social media (LinkedIn and X) – Leveraging circular economy topics via Borealis' EverMinds™ social media channels – Promoting audio-visual materials (mainly videos) through YouTube	– Safe product use, chemicals safety – Plastic waste and pollution – Climate change – Recycling and circular economy	– Updates on social media channels (LinkedIn and X) on the Borealis and EverMinds™ accounts – Published a video on YouTube how Borealis contributes to circular economy and climate neutrality	– Circular Economy – Energy & Climate – Product Safety – Innovation – Digital Transformation

Public Affairs

Goals and Planned Key Actions in 2023	Key Achievements in 2023
Actively engage in policy dialogue on the revisions of the Packaging and Packaging Waste Directive, the End-of-Life Vehicles Directive and the Waste Framework Directive	Worked with stakeholders on these important proposals for plastic circularity, including helping to establish broad support for key concepts in the proposed Packaging and Packaging Waste Regulation (replacing the former Directive), such as mandatory design for recycling
Support the development of the UN Treaty to Stop Plastics Pollution	Actively participated in the Business Coalition for a Global Plastics Treaty, to support development of an effective, legally binding global instrument
Engage in the implementation of the Single-Use Plastic Directive, to establish how to measure and report chemically recycled plastics in products	Worked with all stakeholders to build greater consensus on how to measure recycled plastic from chemical recycling, through credible and transparent use of third-party certified mass balance allocation
Support the development of a regulation for non-intentionally generated microplastics	Provided expert advice based on operational experience to the European Commission regarding Borealis' continuous efforts to achieve zero pellet loss
Participate in debates regarding upcoming EU legislation and collaborate with stakeholders to advance the circular economy of plastics	Worked with stakeholders along the full lifecycle of plastics to advance regulation that supports a faster transition to a circular economy, with clear and credible communication to consumers, safe and sustainable use of chemicals and access to recycled and renewable feedstocks

Goals and Planned Key Actions for 2024	Goals and Planned Key Actions Beyond 2024
Continue to support negotiations for a UN instrument to end plastic pollution	Collaborate with stakeholders to advance the circular economy of plastics, through a predictable regulatory framework
Engage in policy discussions and review of legislation to support a faster transition to a circular economy for plastics in Europe	Engage in discussions and share expertise to support the further development and implementation of regulations that make Europe attractive for investment, deliver a climate-neutral, circular industry and transition to safe and sustainable chemicals
Monitor the EU elections and respective changes in the EU institutions, working with incoming leaders to continue to deliver a more sustainable, circular and competitive European economy	

Borealis aims to play a pivotal role in transforming its business and the industry from a linear economic model to a circular and climate-neutral one, in line with the Group Strategy 2030. Well-designed legislation and regulation can help to accelerate this transformation and provide solutions to challenges such as resource efficiency, climate change, increased product safety and plastic waste management.

To fulfill its purpose of "Re-inventing essentials for sustainable living", Borealis needs to understand the policy and regulatory environment at national, international and EU levels, as well as the expectations and concerns of key stakeholders in the value chain and civil society.

Borealis aims to create a constructive dialogue with all stakeholders about its activities and performance, and to contribute its knowledge and insight to regulation and legislation that can support businesses in their transformation to more circular and more sustainable models. This helps policymakers to create more impactful policies, which in turn will help the industry to support the overall EU strategy for a competitive and more sustainable Europe.

Borealis directly engages with relevant stakeholders including policymakers, value chain actors, academics and non-governmental organizations. The Group also engages through collaborative projects and via memberships of organizations and industry associations.

Governance

Borealis' Public Affairs function is part of the Sustainability & Public Affairs Department, reporting directly to the CEO.

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The Director of Public Affairs' responsibilities include:
- preparing and leading an effective EU advocacy strategy, managing European-wide regulation and policy, and actively contributing to the development of an effective UN instrument to end plastic pollution;
- monitoring, analyzing and reporting on relevant EU regulations and policy developments;
- building sustainable relationships with key stakeholders;
- coordinating and optimizing the Group's participation in industry associations, forums and platforms, to support implementation of the Group's strategy and its stakeholder engagement;
- coordinating the Group's positions on key issues and opportunities relevant to its business and its key stakeholders, including alignment with OMV Group; and
- chairing the two Public Affairs Coordination Teams (PACT), PACT Locations and PACT Circular Economy & Climate, which share information on upcoming EU and national policy, identify arising issues, and define, prioritize, coordinate and implement public affairs activities that support the Group 2030 Strategy.

Borealis develops its positions on public affairs issues by consulting the wide range of expertise available across the business, from operations and sales to product stewardship, innovation and health, safety and the environment. This is primarily done via the PACTs, which also ensure regular follow-up on issues relevant to relations with governments, authorities, regulators and NGOs. PACT Circular Economy & Climate meets monthly with colleagues who have expertise in priority topics, such as the circular economy, climate, energy, sustainable finance and sustainable products. PACT Locations holds bi-monthly meetings with the leaders of each location, to discuss issues arising from the Group's operations or national stakeholder engagement.

Sustainability & Public Affairs regularly interacts with the Borealis Executive Board members, sharing results from its stakeholder engagement and reporting concerns. In addition, Executive Board members directly participate in dialogue with the Group's key stakeholders, or are themselves Board members of industry associations, such as Plastics Europe.

Memberships
Borealis' significant memberships include the following organizations and associations (in alphabetical order). A significant membership is one where Borealis either has a seat on the board or is a very active participant.

EU-Level Associations
- EUROPEN (European Organisation for Packaging and the Environment)
- PCEP (Polyolefins Circular Economy Platform)
- Plastics Europe
- PE100+
- PRE (Plastics Recyclers Europe) and RecyClass

National Associations
- Essencia (Federation for Chemistry and Life Sciences Industries, Belgium)
- FCIÖ (Fachverband der Chemischen Industrie Österreichs, the Association of the Austrian Chemical Industry)
- IKEM (Innovations- och kemiindustriena I Sverige)
- IV (Vereinigung der Österreichischen Industrie, the Federation of Austrian Industries)
- Kemianteollisuus ry (The Chemical Industry Federation of Finland)
- WKO (Wirtschaftskammer Österreich, the Austrian Federdl Economic Chamber)

Non-Governmental Organizations and Cooperation Bodies
- Business Coalition for a Global Plastics Treaty
- CEFLEX (A Circular Economy for Flexible Packaging)
- Ellen MacArthur Foundation
- RCI (Renewable Carbon Initiative)
- SPIRIT (Sustainable Plastics Industry Transformation)
- WBCSD (World Business Council for Sustainable Development)
- WPC (World Plastics Council)
- WSUP (Water & Sanitation for the Urban Poor)
- UN Global Compact

Borealis also participates in CEFIC (European Chemical Industry Council) and TfS (Together for Sustainability), as part of the OMV Group membership.

In line with its Ethics Policy, Borealis strictly follows political corporate governance practices in public affairs and does not join political parties or make financial contributions to them or their candidates.

Activities 2023
Circular Economy, Climate and Energy
During 2023, Borealis continued to work with its industry associations and value chain partners on revising legislation, with a focus on:

– access to waste for Borealis' recycling operations;
– driving uptake of recycled and sustainably sourced renewable plastics in products;
– ensuring credible chain of custody systems, to create trust in recycled and renewable plastics;
– developing reuse markets;
– increasing design for recycling; and
– policies related to achieving the European Climate Law goal to reach net zero by 2050.

Borealis was particularly active in discussions on the proposal to revise European legislation on packaging, supporting measures to ensure circularity of all plastic packaging through mandatory design for recycling, reuse targets, recycling at scale, minimum recycled content in all packaging formats, and the development of well-designed business models to encourage uptake of reusable packaging.

During 2023, Borealis remained active in the Ellen MacArthur Foundation's Global Commitment and the Business Coalition for a Global Plastics Treaty. The Coalition is convened by the Ellen MacArthur Foundation and the WWF and advocates for global action to stop pollution, by creating a circular economy for plastics. Borealis took part in webinars, conferences and the second international negotiating committee meeting, to support development of an effective, legally binding global instrument in line with the Coalition's vision statement.

In 2021, the European Commission proposed a sweeping set of legislative reviews and new regulations known as the Fit for 55 package. During 2023, Borealis monitored and supported the final negotiations of these policies via its associations, in particular Plastics Europe and CEFIC.

Borealis also engaged to support the implementation of the Single-Use Plastic Directive. In particular, the Group worked with all stakeholders to build greater consensus on how to measure recycled plastic from chemical recycling, through credible and transparent use of third-party certified mass balance allocation. Borealis was one of 33 organizations that cosigned a letter outlining the importance of rapid adoption of rules to measure chemically recycled plastics in products. The Group also helped to bring the debate to life through site visits to recycling facilities.

Health & Safety

In 2023, Borealis continued to play an active role in discussions on how to develop regulatory frameworks that ensure products are sustainable by design and to work towards zero pollution. The Group contributed to these discussions through its associations.

Increasing numbers of substances are being scrutinized under EU REACH for their hazardous effects and risks related to their use. Some of these substances are critical to Borealis' products or their production process. Any change in

Fig. 6: **EU policy initiatives affecting Borealis' business**

Circular Economy

– Recycled plastics in food contact materials
– Packaging and Packaging Waste Regulation
– Construction Products Regulation
– Ecodesign for Sustainable Products Regulation
– End-of-life Vehicles Regulation
– Implementation of Single-Use Plastics Directive
– Waste Shipment Regulation
– Waste Framework Directive
– Sustainable carbon cycles
– End-of-waste criteria for plastics
– Environmental claims
– Critical Raw Materials Act

Energy & Climate

– EU Emission Trading System
– Carbon Border Adjustment Mechanism
– Renewable Energy Directive
– Hydrogen
– Electricity market reform
– Carbon removal certification
– 2040 Climate Target

Health & Safety

– REACH
– Chemicals hazard classification
– Measures to reduce microplastic pollution
– Industrial Emissions Directive
– Urban Waste Water Directive

Growth

– Implementation of Taxonomy Regulation
– National taxes on plastic products
– Corporate Sustainable Reporting Directive
– Net Zero Industry Act
– Transition pathway to a sustainable future for petrochemicals industry

European Union

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regulation will therefore have a substantial impact on the Group's business with the value chain, potentially requiring significant investments and research and development efforts. Borealis therefore actively follows these developments, as well as social or customer concern regarding chemical substances, and applies its hazardous chemicals strategy to ensure it is well prepared. This includes engaging in discussions to inform policymakers, share expertise and ensure any measures follow a cost-benefit approach, so they do not create competitive disadvantages versus non-EU suppliers. In 2023, a proposal was put forward to restrict the use of per- and polyfluoroalkyl substances (PFAS) in the EU. Borealis supported the detailed analyses conducted by associations in this regard and will monitor the development of this restriction over the coming years.

Non-Financial Reporting Requirements and Sustainable Finance

Throughout 2023, Borealis continued to closely monitor the policy developments on the EU Taxonomy, in particular the relevant screening criteria for the circular economy and other environmental indicators. The Group also closely followed the development of the update of the EU Corporate Sustainability Reporting Directive and the related European Sustainability Reporting Standards, developed by the European Financial Reporting Advisory Group. Preparations are ongoing to comply with these updated reporting obligations, which will gradually come into force.

Microplastics

The Group is fully committed to zero pellet loss. It supports regulatory measures to prevent plastic leaking into the environment and engages to ensure that best practice in avoiding pellet loss is shared and encouraged at local, national, regional and international levels. Borealis participates in working groups at CEFIC and Plastics Europe in developing an Operation Clean Sweep (OCS) reporting scheme, as well as a third-party audit and certification scheme, which it piloted in two of its plants in Belgium. By the end of 2023, the Antwerp and Kallo sites received the OCS certification, which was communicated externally in early 2024 (→ chapter Environmental Management, p. 146).

Borealis also follows and engages in regulatory developments related to microplastics, such as the Restriction of intentionally added microplastics under REACH, the proposal for a new Regulation on preventing pellet losses to reduce microplastics pollution, discussions at the International Maritime Organization, and within the context of the UN instrument to end plastic pollution.

The REACH restriction on synthetic polymer microparticles was adopted in September 2023. It bans the use of intentionally added microplastics with various derogations, including one for the use of plastic pellets on industrial sites. However, there are supply chain communication and reporting obligations to the European Chemicals Agency that will apply to Borealis' polyolefin products as of 2026. Preparations are under way to support compliance with these new reporting requirements.

Outlook

In 2024, Borealis Public Affairs will:

- continue to support negotiations for the future UN Instrument to End Plastic Pollution, encouraging effective, legally binding global action in line with the vision of the Business Coalition for a Global Plastics Treaty;
- engage in policy discussions and a review of legislation, to support a faster transition to a circular economy for plastics in Europe, prioritizing climate neutrality, circular product policy, sustainable chemicals and addressing microplastics;
- monitor proposed EU policies for their impact on Borealis' Group 2030 Strategy and take part in public consultations as appropriate; and
- monitor the EU elections and respective changes in the EU institutions, working with incoming leaders to continue to deliver a more sustainable, circular and competitive European economy.

In 2024 and beyond, Borealis Public Affairs will continue to support initiatives to drive a carbon-neutral circular economy in Europe, such as:

- collaborating with stakeholders to advance the circular economy of plastics, through a predictable regulatory framework that supports the transition to a circular economy, increases the supply and uptake of circular feedstocks for chemicals and materials, and encourages recycling of plastic waste and the use of sustainable biomass and captured carbon; and
- engaging in discussions and sharing expertise to support the further development and implementation of a regulatory framework that makes Europe an attractive area for investment, delivers a climate-neutral, circular industry, and the transition to safe and sustainable chemicals.

ESG Risks and Opportunities

The table below summarizes Borealis' significant risks and opportunities relating to sustainability matters (according to the NaDiVeG) and the mitigation measures in place.

Topic NaDiVeG	**Sub-topic**	**Risk Description**
Health & Safety		
Employee-related matters, social matters	**Occupational Health & Safety**	**Outside-in** **Pandemics** If extensive measures are not taken against global pandemics employees and workers may be exposed to significant short- and long-term physical and mental health risks, leading to labor unavailability due to increased sick leave. This may impact Borealis' manufacturing capacity and timely supply to its customers, as well as resulting in other business disruptions, ultimately impacting Borealis' profit and cash flows.
Employee-related matters, social matters	**Occupational Health & Safety**	**Inside-out** **Impact on People's Health and Safety** Chemical operations involve highly flammable, toxic and hazardous substances that could pose a significant risk to employees if not handled correctly. Ensuring occupational health and safety is therefore the number one priority for Borealis
Employee-related matters, social matters	**Chemicals Safety**	**Inside-out** **Health and Environmental Impact** If they are not handled properly and according to their intended use, chemical substances can lead to unintentional health impacts. Unintentional release of chemical substances can cause environmental pollution, leading to regulatory and compliance breaches, as well as to loss of reputation and image. **Outside-in** **Increased Costs and Product Bans** Possible future regulations and stricter exposure limits could increase complexity and the costs of ensuring regulatory compliance. Emerging and more stringent EU regulation might also lead to bans and/or restrictions on chemicals, potentially leading to loss of market share if a replacement is not developed in time, making investments and R&D necessary. **Reputation Loss and Fines** The Group could face loss of reputation and possible fines if an environmental incident happens related to Substances of Concern.

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Opportunity Description	Examples of Measures
– Increased resilience and flexible working environment The COVID pandemic demonstrated Borealis' agility and flexibility in adapting to the situation. Digital technologies have enabled faster and easier processing of approvals, contract management and invoicing, and enabled more flexible working. **– Business opportunities** During the COVID pandemic, Borealis proved to be extremely flexible in adjusting its production processes to reflect changes such as increased demand for medical supplies and started to produce a new product, filtration media fabrics for reusable FFP2 face masks.	– Establishment of a crisis team coordinating mitigation actions – Group-wide campaigns focused on mental, physical and social wellbeing – Preventive measures to ensure continuity of supply, both inbound and outbound; and measures to balance and avoid staff absences, such as a rotating back-up system and strict separation of shifts, hygiene measures, a process for handling actual or suspected cases, offering vaccinations and/or test kits, and behavior
– Strong safety culture and good place to work Borealis can increase employee engagement if its employees feel safe at work, while healthier employees are likely to perform better and have higher satisfaction. A strong safety culture can reinforce Borealis' reputation as a responsible company and combined with continuous awareness-raising campaigns, can also improve employees' safety behavior in their private lives. **– Business opportunities** Leading the transformation towards circularity and sustainability by reducing hazardous chemical synthesis, designing safer chemicals and using safer solvents and auxiliaries can create additional business opportunities and boost the Group's reputation.	– Incident prevention through risk management tools; awareness campaigns; safety training; regular audits – Health, Safety and Environment management system designed for prevention – "B-Safe" program rolled out across Borealis – Health initiatives addressing e.g. back pain, blood pressure and weight management; providing on-site flu vaccinations; stress prevention activities; help to quit smoking – Regular workplace health surveys
– Competitive advantage If Borealis anticipates legislative changes and reacts in time, this can provide a competitive advantage, such as being the first to market with alternative solutions. **– Creating trust and taking the lead** Borealis could take a leading role in defining the boundaries to guarantee the safety of post-consumer recycled plastics in different applications, since there are no established standards available yet.	– Signatory of the chemical industry's Global Charter for Responsible Care® – Product Stewardship Council evaluates all substances the Group uses, defines risk mitigation measures and ensures products going into regulated applications such as food contact or medical applications are fully in line with applicable legislation and standards – All new and changed raw materials and products assessed in terms of classification and labeling, and Safety Data Sheets and workplace safety cards prepared for all classified materials – Going beyond legal compliance, for example, replacing azodicarbonamide (AD-CA) in cable solutions and halogen-free cable compounds

Topic NaDiVeG	**Sub-topic**	**Risk Description**
Emergency Governance		
Employee-related matters, social matters	**Process Safety**	⊂ **Inside-out** **Environmental Pollution and Impact on Human Health** Sudden and uncontrolled release of explosive material, e.g. due to vessel or tube ruptures, could lead to leaks, fires or major explosions. Failure of process equipment could result in the uncontrolled release of harmful toxins into the community. Process safety incidents have a direct link to health and safety of Borealis' employees and surrounding communities as well as lost working time and damage to assets, both of which could affect the Group's ability to supply its customers, and its profitability and performance. **Asset Integrity** Borealis' operations are heavily focused on improving their reliability, as production interruptions are the main cause of unplanned activities such as flaring, which in turn impact the Group's environmental performance and greenhouse gas (GHG) emissions. ⊃ **Outside-in** **Legal Requirements and Inspections by Authorities** There is a tendency towards stricter inspections by authorities and increasing legal requirements.
Responsible Sourcing		
Environmental matters, respect for human rights, social matters	**Logistics/ Transportation**	⊂ **Inside-out** **Safety of People and Transported Goods** The Group faces a number of potential transportation safety risks, in particular accidents and spills, as well as smoking, speeding, alcohol use and a severe incident on the road. ⊃ **Outside-in** **Increasing Transportation Costs** Costs for Borealis may increase in the future due to stronger regulation of vessel and road transportation and higher CO_2 prices for fuels. Marine shipping typically relies on heavy fuel oil (HFO) for transport. *TCFD risk type classification: transitional – market*
Environmental matters, respect for human rights, social matters	**Compliance with Borealis Ethics Policy**	⊂ **Inside-out** / ⊃ **Outside-in** **Non-Compliance with Human Rights Principles** Poor labor practice in the supply chain, such as forced labor, human trafficking, wages below standards or child labor, as well as non-compliance with Borealis' Ethics Code of Conduct can lead to severe and long-lasting impact on workers' physical and mental health as well as damage to Borealis' reputation, potential legal liability, demoralization of the Group's employees, business loss and disruption of business and/or production continuity.

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Opportunity Description	Examples of Measures
– Competitive advantage If Borealis maintains safe and continuous plant operation, this can provide a competitive advantage, such as being a reliable business partner and neighbor.	Stringent measures to prevent and mitigate process safety incidents, such as – regular inspections to ensure the integrity of installations – process safety training – awareness campaigns – critical inspection plans – regular testing of the functionality of safety devices and instrument protection loops – regular deep dives in the Process Safety Committee – audits and performance measurement via clear safety indicators
– Reduction of GHG Emissions Marine shipping typically relies on HFO for transport. By creating options for alternative fuels (ethane, propane and biofuels), the Group can reduce its carbon footprint. In road transport, hydrotreated vegetable oil can be introduced as an alternative to diesel or gasoline. *TCFD opportunity type classification: resilience*	**Actions include, for example** – Logistic partners either Safety & Quality Assessment for Sustainability (SQAS) qualified, certified by maritime or other qualification bodies, or being qualified via the EcoVadis assessment – Base Chemical fleet's safety performance and energy efficiency tracked and environmentally friendly solutions promoted – Regular vetting inspections on sea-going tankers and inland barges – Actions taken to move transport from road to intermodal or internal waterways – Requirement for all logistics partners to report accidents – Extra-high precautionary safety measures in place and followed up with supply chain contractors to mitigate the risks of spills – Drivers transporting dangerous goods require special license and training, and operate under restrictions
– Resilience, trust and reputation *A strong applied ethics culture can enhance the Group's reputation,* avoid financial and reputational damage, increase Borealis' profitability and increase the engagement of employees. A strong commitment to compliance and ethics and non-acceptance of misconduct leads to a consistent and trustworthy relationship with business partners.	– Ethics Policy requires all Borealis business partners, including suppliers *and contractors, to strictly observe human rights-related requirements* – Ethics Policy mandates thorough compliance due diligence and ongoing monitoring of all business partners, and includes sustainability performance and key performance indicators (KPIs) in contract-awarding criteria – Human Rights Country Entry Check conducted before launching operations in a country, as well as regular human rights assessments in countries of operation, including labor rights aspects – Human rights aspects (including labor rights) included in the prequalification phase and supplier/contractor audits

Topic NaDiVeG	**Sub-topic**	**Risk Description**
Responsible Sourcing		
Environmental matters, respect for human rights, social matters	**Supply chain**	⊂ **Inside-out** **GHG Emissions** The carbon footprint arising from the services and materials Borealis purchases substantially increase the Group's total carbon footprint, which may put its ability to achieve its climate change targets at risk, potentially leading to a financial impact and not being acknowledged as a sustainable business partner. Suppliers with a significant carbon footprint who fail to improve will lose their attractiveness to Borealis as preferred suppliers. **Non-GHG Emissions** Non-GHG and chemical emissions in the upstream supply chain can return to the environment as acid rain, negatively impacting natural resources. Direct impacts on air quality compromise human health. *TCFD risk type classification: transitional – reputation* ⊃ **Outside-in** **Disruption of Supply Chain** Climate change could lead to physical impacts on Borealis' supply chain. Low water levels in inland waterways can impact supply chains, especially for riverine transportation. Road blocks after natural disasters such as flooding or hurricanes can result in delivery delays. *TCFD risk type classification: physical* **Increased costs** Low emission production is expensive and the cost will be passed on to Borealis from its suppliers. Not all suppliers will be able to reduce their emissions in the way expected and will potentially stop production. **Ensuring decent working conditions in the supply chain** If the supply chain (upstream and downstream) does not comply with human rights principles or the International Labour Organization's fundamental conventions on rights at work, such as poor labor practices, harassment or threats, forced labor, human trafficking, substandard wages or child labor, this could lead to severe long-lasting impact on workers' physical and mental health, as well as damage to Borealis' reputation, potential legal liability, demoralization of the Group's employees, business loss and disruption of the business and/or production continuity.
Economic Impacts and Business Principles		
Data Protection, social matters	**Compliance with Borealis Ethics Policy**	⊃ **Outside-in** / ⊂ **Inside-out** **Reputational damage and costs** Failing to protect general personal and business data and ensuring cybersecurity (such as protecting against phishing attacks) can lead to litigation costs, fines, market disruption, impact on business continuity and reputational damage. Ensuring compliance with evermore stringent regulation will increase the need for investments in information security and cybersecurity.

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Opportunity Description	Examples of Measures
– Reducing Scope 3 emissions Together for Sustainability (TfS) provides opportunities to collaborate with other chemical companies and take the first steps to standardize supply chain carbon footprint data. More standardized data can provide a better picture of the actual emissions, in order to target reductions effectively. Borealis is also starting different collaboration projects with suppliers to reduce its Scope 3 carbon footprint. *TCFD opportunity type classification: resource efficiency*	– Sustainable procurement targets – Increasing supplier engagement through CDP and TfS – Increasing transparency through reporting, including Scope 3 – Supplier audits and evaluations, as part of TfS and EcoVadis – Sustainability performance included as part of Borealis' contract-awarding criteria – Digital solutions for data collection and measurement
– Increase robustness of supply chain Borealis can create a more robust supply chain by working with professional and more-local suppliers, who manage their own risks proactively. Applying a risk management process in collaboration with strategic suppliers can give a long-term competitive advantage.	
– Enhanced reputation Taking the lead in implementing social compliance matters can enhance Borealis' reputation with the public and benefit other business areas, such as recruiting.	

Topic NaDiVeG	**Sub-topic**	**Risk Description**
Economic Impacts and Business Principles		
Corruption prevention, environmental matters	**Compliance with Borealis Ethics Policy**	➲ **Outside-in** **Environment** Non-compliance with environmental, emissions and water laws and regulations may result from unexpected changes or different interpretations of the legislation. **Corruption** Corruption-related convictions (such as insider trading or other market abuse practices) or non-compliance with laws such as anti-corruption and bribery laws or the EU Money Laundering Directive, can lead to significant fines and serious reputational damage for Borealis as well as financial damage due to legal violations.
Circular Economy		
Environmental matters	**Circular Economy**	⊂ **Inside-out** **Environmental Pollution and Socioeconomic Impact** Plastic waste, if not collected, sorted and disposed of properly, can end up in the environment including rivers and oceans, causing environmental pollution, harming animals and ultimately ending up as microplastics in drinking water and food. Environmental pollution impacts economic development and tourism, and puts jobs at risk in certain industries, such as the fishery industry. The costs to society from plastic pollution, including environmental clean-up and ecosystem degradation, are estimated to exceed USD 100 billion per year, according to research published by Minderoo. ➲ **Outside-in** **Uncertainties Regarding New Legislation** New laws and regulations currently under development make long-term investments difficult and risky. Innovation and new technology development need substantial time, which is typically longer than in other industries. Planned CAPEX projects could be delayed and their costs increased, limiting Borealis' volume scale-up and impacting its ability to achieve its circular economy targets in the set time. Furthermore, if Borealis cannot achieve a rapid transformation, there is a risk of market share loss due to a shift to alternative, more circular products
Environmental matters	**Compliance with Borealis Ethics Policy**	➲ **Outside-in** **Limited Availability of Renewable Feedstock** There is currently not enough renewable feedstock available at an affordable price This may impact Borealis' ability to achieve its circularity targets. *TCFD risk type classification: transitional – policy & legal* **Product Bans or Restrictions** There is a risk that Borealis is unable to respond in time with alternative solutions, resulting in it losing market share and an adverse impact on Borealis' reputation and image.

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Opportunity Description	Examples of Measures
– Resilience and reputation Continuous engagement in preventing breaches of Borealis' Ethics Policy increases the Group's resilience to corruption, strengthens its legal compliance, avoids the risk of financial damage and ultimately leads to increased confidence on the part of external stakeholders and an enhanced reputation as an ethical company.	– Corruption risk mitigated through a compliance-management system, certification to ISO 37001 (Anti-Bribery Management System), continuous awareness-raising campaigns and yearly training for the entire workforce, and additional training for employees who are specifically exposed to corruption and/or compliance risks – Environmental compliance risks mitigated through engagement with regulators to ensure laws are correctly interpreted and upheld, process safety measures and maintenance, continuous training of staff and implementation of best available technologies
– EU Green Deal drives transformation The EU Green Deal may have a positive impact on Borealis, as the Group provides solutions for a transition to a circular economy, in sectors such as electrification of the transport industry, the medical industry, the packaging industry, as well as wind and solar farms. **– Business Opportunities** Borealis is taking the opportunity to lead the transformation to a circular economy and has established an integrated approach to circularity, offering a broad range of circular product solutions. As the market grows and legislative standards change in favor of renewable materials, Borealis aims to increase its profits and market shares in such product groups. *TCFD opportunity type classification: markets, resource efficiency*	– Range of low-emission and bio-based product portfolios: Bornewables™, Borvida™ and Borcycle™ M. – Collaboration with industry partners and public funding opportunities, to jointly develop and scale up innovation, technologies, products and digitalization, and accelerate action and solutions including feedstock sourcing programs for plastic waste, bio-based feedstock and renewable oil – Increased mechanical recycling capacities, through Borealis' investment in its existing plants and the acquisition of additional recycling plants. – Project STOP program to support cities in Indonesia to develop and implement low-cost, circular waste collection and sorting systems, thereby reducing waste leakage, increasing resource efficiency and creating green jobs
– See below under material topic Environmental Management	– See below under material topic Environmental Management

Topic NaDiVeG	**Sub-topic**	**Risk Description**
Human Capital Development		
Employee-related matters, social matters	**Employer attractiveness**	➲ **Outside-in** **Difficulty of Attracting, Retaining and Replacing Qualified Personnel** The chemicals industry is facing shortfalls of experienced technical professionals over the next several years, due to attrition and retirement, and new competencies will be needed to drive circularity transformation. This might lead to key functions not being filled or with short handover periods, leading to the risk of plants not being able to operate reliably or business declining. Employee training and development will help to mitigate this risk but will also lead to rising OPEX. ➲ **Inside-out** **Job Security** Crises such as pandemics or civil or political conflicts are creating insecurity and uncertainty. As a large employer in a steady industry, Borealis has the position and means to ensure job security for its employees.
Employee-related matters, social matters	**Diversity, Equity & Inclusion (DE&I)**	➲ **Outside-in** Employees, and in particular the younger generation, have clear expectations that companies will focus on DE&I and they take this into account in deciding who to work for. A company that does not ensure DE&I will face reputational loss, be seen as an unattractive employer, risk cultural dissonance and not meet potential upcoming legal requirements.
Environmental Management		
Environmental matters	**Water quality**	➲ **Outside-in** **Increasing Regulatory Requirements** Changes to regulations, such as the scope of Best Available Techniques Reference Document (BREF) on Large Volume Inorganic Chemicals (LVIC) being extended to water emissions, could lead to increased financial and administrative burdens on Borealis. ➲ **Inside-out** **Negative Environmental Impact** Soil and groundwater pollution could affect the environment, biodiversity and the local community.
Environmental matters	**Water availability**	➲ **Outside-in** **Water Access** Borealis' feedstock supply chain in the Oil & Gas sector consumes a significant volume of water and operates mainly in water-stressed areas, where water restoration is very difficult. Although Borealis' water consumption is not significant, insufficient water availability due to climate change (resulting from periods of low or no precipitation on surface or subsurface water supplies) could lead to the inability to access water for Borealis' day-to-day operations. Furthermore, this could lead to a reduction in the legal permit levels for water extraction, impacting Borealis' supply chain and operations. Low water levels in rivers could lead to restrictions on transporting products by rivers.

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Opportunity Description	Examples of Measures
– Driving transformation Borealis' focus on the circular economy means it has entered a new era, with the ability to attract a new group of candidates who are motivated to be part of this transformation journey.	– Promoting Borealis' transformation and focus on people, with the new People & Culture strategy – Recruitment campaign, including for example a series of videos accompanying employees on a typical day at work – Employee referral bonus motivates existing employees to refer people they know – Flexible and home working arrangements – Focus on wellbeing, personal needs and health, offering medical services, such as massages and vaccinations – Training and development programs, to focus on individual career steps and future job satisfaction – Evolution of Employer Branding
– Employer attractiveness Awareness of and actively promoting DE&I and implementing associated activities strengthen Borealis' culture and respectful relationships among colleagues, have a direct impact on employee engagement, retention and wellbeing, increase creativity and productivity through diverse leadership styles and make Borealis an employer of choice.	– Diversity and employee engagement goals included in the Group Scorecard – Actions to increase awareness and provide role models through the "It's in our DNA!" video series – DE&I ambassador network to actively advocate the right mindset on this topic
– Water efficiency Increasing water recycling will lead to greater resource efficiency and less dependence on external water sources. It will also help the Group to overcome the burden of ever more stringent water emission levels, as emission limits are only applied at the point of discharge, which does not occur when the water is recycled.	– Systematic annual risk and opportunity assessments for every plant, followed by action plans – Continuous improvement to the quality of discharged water, through filtration, neutralization, osmosis, gravimetric and biological wastewater treatment – Water management plans being developed and implemented – Roadmap for 2025 and 2030 being built, with concrete targets
– Resource efficiency and resilience Increasing Borealis' water efficiency will lead to greater resource efficiency, reduce dependence on external water sources and make the Group more resilient in any future water crisis.	– Use of recycled water and increasing reuse of water where feasible, such as using recycled water or rainwater in some cooling towers – Discharge of used water into the same water body it was drawn from – Water management framework being implemented – Wastewater flows and contaminants monitored – Alternative shipping options being evaluated – Storage capacities and locations being evaluated

Topic NaDiVeG	Sub-topic	Risk Description
Environmental Management		
		Conflicts Between Water Users Temporary water scarcity could lead to conflicting water use and lead to regulatory restrictions / prioritization of water withdrawals across users, reducing Borealis' access to permits for water withdrawal and/ or discharges.
Environmental matters	**Operational waste**	➲ **Outside-in** **Circularity Challenges** Revisions of the EU Waste Framework Directive and the Packaging Waste Directive will significantly drive the transformation towards a circular economy. This provides great opportunities but comes with uncertainties and costs. Reusable transport systems for chemicals, especially dangerous chemicals, are mostly unavailable. Returning reusable systems either requires significant cleaning (increasing water use) or additional transport. ➲ **Inside-out** **Environmental Pollution** Operational waste, if not treated and disposed of properly, could end up in the environment, causing pollution and a health and safety impact on the local community.
Environmental matters	**Air quality**	➲ **Outside-in** **Increasing Regulatory Requirements** With the publication of the Common Waste Gas Treatment in the Chemical Sector (WGC) BREF, PO plants will face stringent requirements for waste gas handling and emissions to air, requiring investments and a significant increase in OPEX. Other increasing regulatory requirements include the new BREF LVIC for fertilizer production. ➲ **Inside-out** **Additional Air Emissions Caused by Unplanned Events** If plants do not operate according to engineered process levels, unplanned emissions to air can occur, resulting in noise, odor and other disturbances to the local community, and an impact on air quality. *TCFD risk type classification: transitional – policy & legal*
Environmental matters	**Spills** (Pellet loss)	➲ **Outside-in** **Regulatory Restrictions** The presence of plastic waste and microplastic in the environment has increased the negative public image of plastics and the industry. EU restrictions on microplastics under REACH will apply to industrial pellets, with mandatory supply chain and reporting obligations for Borealis, leading to increased costs and administrative burden. National and local authorities are faced with ever-increasing regulations and public pressure, resulting in increased complexity and difficulty to get additional permits around emissions. ➲ **Inside-out** **Health, Safety and Environmental Impact** The presence of microplastics in the environment, food and the human body is a major concern. Unintentional loss of plastic pellets is also a safety issue and can result in environmental pollution, with microplastics ultimately ending up in soil, ground water, rivers and seas, where they can harm biodiversity, marine species and potentially even human health.

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Opportunity Description	Examples of Measures
– **Resource efficiency and new business models** *Closing the loop will keep precious resources in use and lead to new business models and applications. Overall, it will reduce resource intensity and, in many areas, it will also reduce the environmental impact.*	– 4R rules followed: reduce, reuse, recycle and recover – *Waste production monitored and controlled, based on legal requirements and ISO 14001* – Waste management plans for each site – Integrated manufacturing processes – Co-products are reused and recycled where possible – Waste used as material in Borealis' recycling plants – *Non-recyclable waste made available as a secondary fuel for steel or cement production*
– **Improved plant reliability** Improving the reliability of Borealis' operations, and thus their operability and profitability, helps improve environmental and operational performance. *TCFD opportunity type classification: resource efficiency*	– Quality management procedures, to prevent and remediate any unplanned emissions – Proactive risk management – *Cross-learning of best practices* – Speed of leak detection and repair being increased – Reliability being improved, to reduce production interruptions and further reduce emissions – Compliance with the Emission Directive for Fertilizers and the revision of BREF LVIC – Ensuring compliance with WGC BREF
– **Taking a leadership role** Borealis has taken a leadership role in the industry on mitigating the risk of pellet spills, promoting Operation Clean Sweep® (OCS) along the value chain and contributing to further strengthening the program. This has been positively acknowledged by the industry, NGOs and authorities, contributing to Borealis' positive image and reputation. – **Increasing occupational safety and resource efficiency** Reducing pellet spills ultimately increases occupational safety, as well as reducing operational waste.	– Implemented OCS, a program to prevent pellets and powder leaking – Developed and implemented an OCS self-assessment – Piloted OCS third-party certification scheme – *Two key sites in Belgium (Antwerp and Kallo) successfully completed third-party audits on OCS* – Continuous improvements to operational excellence through awareness raising, training, reinforcing work practices and behaviors, and investing in retention measures, such as sieves, pellet separators, skimmer ponds and filtration units, based on best available technology – *Zero pellet loss approach*

Topic NaDiVeG	Sub-topic	Risk Description
Climate Change		
Environmental matters	**Operations & Market**	**Outside-in** Climate change leads to physical impacts on Borealis' operating sites. Flooding can lead to plant damage and droughts and the consequent unavailability of cooling water can reduce plant output. Borealis sites located by the sea might be affected by an increase in sea level. **Societal Expectations** Society is increasingly demanding that companies such as Borealis become climate neutral and deliver climate-neutral solutions. Not achieving this risks Borealis' market potential as well as its license to operate. **Inside-out** Borealis still requires fossil resources, which are mainly manufactured using fossil energy and generate GHG emissions, contributing to climate change. Important contributors are emissions from feedstock and end-of-life emissions of Borealis' products.
Climate Change & Energy Management		
Environmental matters	**Operations & Market**	**Outside-in** **Risk of Not Achieving Reduction Targets** If Borealis is not able to transition towards low-carbon production quickly enough to achieve the aims of the Paris Agreement, in alignment with the latest climate science, this could result in loss of business, permits and reputational damage. **Increased Costs for CO_2 Certificates** Large parts of Borealis' business are included in the EU Emission Trading Scheme (ETS). CO_2 certificates are traded in the marketplace and their price is subject to supply and demand. Under the assumption that to meet EU climate targets the costs of CO_2 emissions will increase, Borealis' expenditure for buying certificates will increase in the future. **Reputational Risk and Product Bans** The chemicals industry is one of the largest and most diversified industries in Europe and is a significant emitter of GHGs. This could affect Borealis' image and potentially lead to a shift of consumer preferences to alternative materials. Borealis also expects more stringent legislation and obligations, reflected in higher taxes or even banning products that have a climate impact during their lifetime. **Inside-out** **Climate Impact** Borealis' energy consumption in its operations results in direct CO_2e emissions that contribute to climate change. Borealis also consumes externally generated energy that has a climate impact when produced. *TCFD risk type classification: transitional – reputation, policy & legal, reputation*

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Opportunity Description	Examples of Measures
– **Securing market position** Future business will be based on carbon-neutral production and sustainable products. When customers are affected by the consequences of global warming, Borealis' products can play a role in adaptation measures, such as filters and piping material used in cooling appliances. Being a leader in driving the transition towards climate neutrality and circularity will secure or increase Borealis' position in the market.	– Transformation to circularity will significantly reduce GHG emissions in Borealis' value chain – Ambitious medium-term target to keep Scope 1 and 2 emissions below 2 million metric tons in 2030, as key step towards climate-neutral operations in 2050 – Changing to renewable power will significantly reduce Borealis' Scope 2 emissions
– **Market opportunities** Implementing alternative technologies (such as electrification), bio-feedstock and increasing the circularity of plastics will reduce Borealis' direct carbon emissions. This could give Borealis market advantages and increase its market share, due to reduced costs for CO_2 certificates under EU ETS. Driving energy efficiency improvements will lower Borealis' energy consumption and contribute to its climate targets. Borealis' products create a positive impact (e.g. in cars) due to their light weight, reducing CO_2 emissions, as well as supporting energy transition (e.g. cable insulation). – **Leveraging synergies through partnerships** Borealis can engage in partnerships, such as forming industry clusters to optimize assets. For example, heat generated by Borealis can be used as an energy input in another factory. *TCFD opportunity type classification: markets*	– Climate Strategy 2030 in place, with clear targets for Scope 1 and 2 emissions, renewable energy sourcing and energy efficiency – Actions such as carbon capture and use/storage initiatives, including the Antwerp@C and Schwechat CCU development projects – Farmers helped to optimize their fertilizer use, given that the biggest GHG impact in the fertilizer business is during the use phase

Topic NaDiVeG	Sub-topic	Risk Description
Climate Change & Energy Management		
Environmental matters	**Energy Efficiency & Energy Transition**	**Outside-in** **Pressure on Use of Fossil-Based Feedstock** The transition to a low-carbon economy requires the installation of renewable energy sources. Costs for renewable energy are decreasing but demand for renewables is increasing. With supply not following the same trajectory as demand, this may lead to higher operating costs. Significant technology step-ups, such as electrification of crackers, will increase the electricity demand and may further tighten the demand-supply balance for renewable electricity. Failing to improve energy efficiency could result in higher costs, as a result of uncertainties concerning allowance demand and abatement costs, as well as energy consumption. *TCFD risk type classification: transitional – market*

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Opportunity Description	Examples of Measures
– Cost and emission reductions Borealis is a significant user of energy, so implementing energy efficiency improvements should lead to substantial cost reductions. Shifting to renewable energy will also significantly reduce the impact of Borealis' operations on the climate (Scope 2 emissions). *TCFD opportunity type classification: resource efficiency*	– Ambitious energy roadmap in place, with energy efficiency improvements and increasing renewable energy supplies, to reach 100% renewable electricity sourcing by 2030 – Initiatives under way to electrify steam cracker furnaces (2030 to 2040), such as the Cracker of the Future consortium – Tools to run plants as optimally as possible, such as the Energy Trend Board, which helps operators continuously focus on energy consumption

Governance

Sustainability Governance

Goals and Planned Key Actions in 2023	Key Achievements in 2023
Foster an even closer relationship with the business via Borealis Quality Management, a reviewed Customer Support Team (CST), encompassing greater focus on customer awareness and closer cooperation with the sales managers	Business representatives join selected CSTs to strengthen the relationship Customer Response Team redesigned to maintain and enhance partnership with the business and continuously promote customer awareness in the organization
Expand and strengthen network activities with Borouge, with the focus on healthcare products and joint markets, such as India	Customer complaint handling interface between the two companies is well established and documented in the BMS, with regular meetings and exchanges Monthly Borealis and Borouge reporting focuses on healthcare, to support the combined view and highlight the synergies of the network
Continue to onboard new locations into the Borealis Management System (BMS), including acquired companies such as DYM SOLUTION CO., LTD and new assets such as the dehydrogenation plant being constructed in Kallo, Belgium, to ensure they adopt the Group's quality thinking and way of working, by close cooperation with the local stakeholders	Quality Boost Program launched in Q2 2023 at DYM SOLUTION CO., LTD (South Korea), identifying the gaps to be bridged for full integration into the BMS Activities targeting full integration continue in mtm plastics GmbH (Germany) and Ecoplast Kunststoffrecycling GmbH (Austria)

Goals and Planned Key Actions for 2024	Goals and Planned Key Actions Beyond 2024
Implement Group BMS Enhancement Project phase II, to improve alignment and compliance between the Group BMS and local BMS	Implement new content management system application for the BMS
Include Itatiba (Brazil) in the scope of ISO certifications at Group level	
Obtain ISO 45001 certification for the Stenungsund (Sweden) location	
Develop business case for a new content management system application for the BMS	

Good governance creates a system of management and control that is accountable, transparent and geared to creating sustainable, long-term value. It therefore serves the needs of all stakeholders who are interested in or impacted by Borealis, including employees, customers, suppliers, governments, capital markets and the general public. The BMS documents Borealis' approach to governance. Managing risks and opportunities is integral to the BMS, to ensure the Group continuously improves and identifies mitigating actions where needed.

The Group's governance is supported by compliance with industry-accepted standards, such as ISO. Being certified to these standards provides independent confirmation that Borealis applies best practices in its daily activities.

Embedding ISO standards also requires Borealis to continuously improve, so it generates more value for customers and other stakeholders.

The Borealis Supervisory Board

The Supervisory Board (SVB) of Borealis AG consists of five members representing Borealis' shareholders, with three members from OMV and two from ADNOC. The members are elected by the Annual General Meeting, with the SVB then electing a chairperson and a vice chairperson. The SVB has two subcommittees, the Remuneration Committee and the Audit Committee.

The SVB supervises Borealis' management, approves the Group's strategy, business plan and policies, and appoints the members of the Executive Board, including the Chief

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Executive Officer (CEO). Furthermore, it exercises powers and authorities under Austrian law, in particular, the Austrian Stock Corporation Act (Aktiengesetz), the Articles of Association of Borealis AG and the Rules of Procedure. Under the Austrian Stock Corporation Act, SVB members must not:

- make decisions that pursue their own interests, or the interests of persons close to them or related companies, where those interests conflict with the Company's interests; or
- take advantage of business opportunities to which the Company is entitled.

SVB members must disclose potential conflicts of interest immediately to the chairperson of the SVB. Possible consequences, to be decided on a case-by-case basis, can vary from banning the individual from participation, abstention from voting, restrictions on information sharing and transferring the matter to the SVB's subcommittees. In 2023, the SVB held five ordinary and one extraordinary meeting. Neither the SVB, the Executive Board nor the Audit Committee members held shares in Borealis or the majority of the shares in a holding company, thereby preventing any related conflicts of interest.

The Borealis Executive Board

The Executive Board makes the decisions and takes the measures necessary to conduct Borealis' business, under its own responsibility. The Executive Board consists of five members, one female (20%) and four males (80%), the members' ages range from 48 to 60, with one member in the 30 to 50 age group (20%) and four (80%) above 50 years old. Two nationalities are represented on the Executive Board. [1)]

The Executive Board's tasks include, without limitation:

- managing, organizing and administering the Company according to Austrian law, the Articles of Association of Borealis AG, the resolutions of the SVB, the Rules of Procedure of the Executive Board, the budget and the business plan;
- representing the Company according to Austrian law, its Articles of Association and the Rules of Procedure of the Executive Board of Borealis AG, and implementing the decisions of the shareholders' meeting and the SVB's meetings, respectively;
- developing, proposing and implementing the Group's strategy, in conjunction with and subject to the oversight of the SVB;
- organizing and administering the Company's bookkeeping and financial, fiscal operations and other controls;
- implementing appropriate insurance coverage for the Company, in line with the requirements mandated by the SVB; and
- reporting to the Audit Committee at least once a year on the auditing plan and any material findings.

The Executive Board must also immediately inform the SVB and the shareholders of all situations which are of material importance for the Group's profitability or liquidity.

Each Executive Board member shall disclose to the SVB and the other Executive Board members any material personal interests in transactions of the Company or Group companies, as well as any other conflicts of interests. Should any matter to be decided in an Executive Board meeting refer to an Executive Board member's personal or economic interests, the relevant member is excluded from exercising their voting right and the matter shall be decided by the non-conflicted members.

The Executive Board meets at least 12 times a year, in an extended monthly meeting. The Executive Board also holds shorter, biweekly approval sessions and meets on an ad-hoc basis, if required.

Membership of the Executive Board

The Executive Board has five members, including the CEO and CFO. Their areas of responsibility are as follows:

Chief Executive Officer

Thomas Gangl (appointed in April 2021)

- Chairman of the Executive Board
- People & Culture
- Corporate Communications, Brand & Reputation
- Strategy & Group Development
- Sustainability & Public Affairs
- Legal
- Group Health, Safety, Environment & Quality (HSEQ)
- Internal Audit
- Fertilizers, Melamine and Technical Nitrogen Products (TEN) (Business Unit fully divested in July 2023)

1) The composition of the Executive Board changed with the resignation of Lucrèce Foufopoulos-De Ridder per December 31, 2023 and the appointment of Craig Arnold as of February 1, 2024. The Executive Board now consists of five males (100%), the members' ages range from 48–60, with one member in the 30 to 50 age group (20%) and four (80%) above 50 years old. Three nationalities are represented.

Chief Financial Officer
Daniel Turnheim (appointed in June 2023)
– Finance & Controlling
– Program and Project Management Office
– Procurement
– Tax, Treasury & Funding
– IT & Digitalization

Executive Vice President Polyolefins, Circular Economy Solutions and Innovation & Technology
Lucrèce Foufopoulos-De Ridder
(appointed in January 2019 – until December 2023)
– Polyolefins Marketing & Sales
– Commercial Excellence
– Business Optimization and Supply Chain
– Borealis Brasil
– Borealis North America
– Innovation & Technology
– New Business Development
– Circular Economy Solutions

Executive Vice President Base Chemicals & Operations
Wolfram Krenn (appointed in July 2021)
– Business Unit Base Chemicals
– Operations Polyolefins and Base Chemicals
– Technical Development & Engineering
– Plant Availability & Turnaround
– Manufacturing Excellence and Improvement

Executive Vice President Joint Ventures and Growth Projects
Philippe Roodhooft (appointed in November 2017)
– Joint Ventures
– Growth Projects from feasibility study onwards and Technical Support
– Borealis Middle East and US Representation Offices

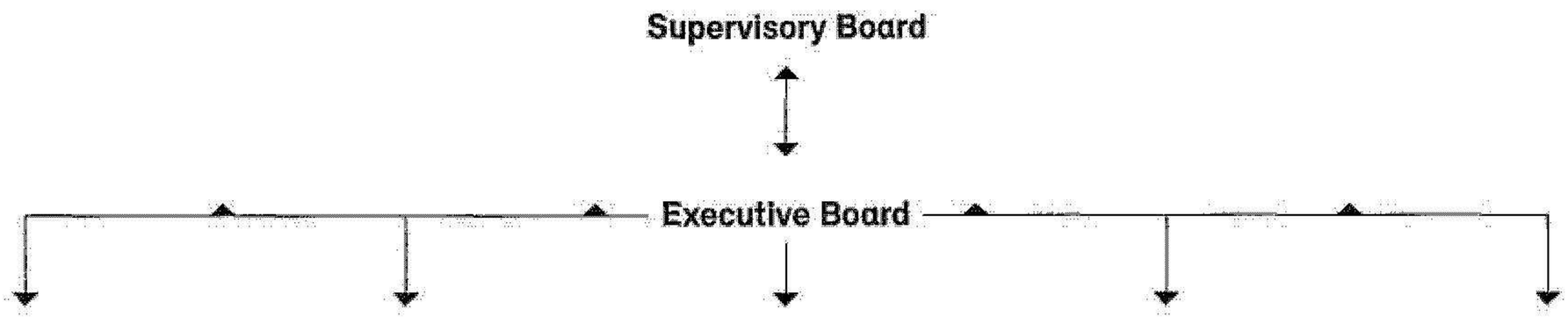
Criteria for Nominating and Selecting the Executive Board
The SVB nominates and selects the Executive Board members, supported by the Remuneration Committee. The criteria considered include the competencies required for the role, experience, diversity, independence and internal succession planning. While the SVB considers nationality, gender and age in determining the Executive Board's composition it does not have quantitative targets in these areas. Their tenure with Borealis also varies, while their terms of office range from six months to six years.

To maintain continuity on the Executive Board, the members' mandate periods have different end dates. Each year, the succession planning for all five Executive Board positions is reviewed and updated, after a bottom-up process to identify candidates.

Collective Knowledge, Skills and Experience of Sustainable Development
The Director Sustainability & Public Affairs and the Executive and Senior Management functions continuously monitor emerging ESG developments and discuss them with the Executive Board members, using existing regular meetings (such as the Sustainability and Responsible Care® Committee) and platforms. Internal experts as well as ESG consultants are invited to contribute background information on specific topics and share updates on the latest developments and trends, as well as relevant industry reports. Strategic projects are also an effective way to continuously drive the collective knowledge, skills and experience of the Executive Board and the leadership teams. A constructive dialogue with non-governmental organizations is also important, to understand their expectations and share updates on progress, best practices and plans. The interaction is mostly via OMV Group but also includes direct contact by Borealis (see Fig. 7 ESG Governance Structure Part 1, p. 71: Executive Board member's responsibilities overseeing the organization's management of impacts on the economy, environment and people; Fig. 8 ESG Governance Structure Part 2, p. 72: Executive Board delegation of responsibilities to committees for overseeing the management of the organization's impacts on the economy, environment, and people.

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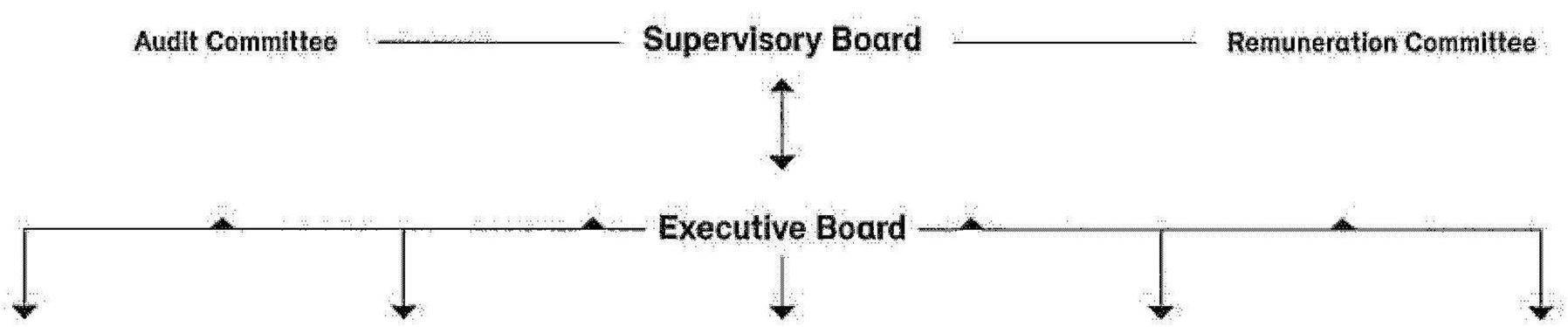
Fig. 7: **ESG Governance Structure – Group functions responsible for the management of sustainability aspects**



Chief Executive Officer	Chief Finance Officer	EVP Polyolefins, Circular Economy Solutions and Innovation & Technology	EVP Base Chemicals & Operations	EVP Joint Ventures & Growth Projects
Health, Safety, Environment & Quality	Procurement	Circular Economy Solutions & New Business Development	Energy & Feedstock Sourcing	Asset Technology (Borcycle™, CCU, cracker electrification)
Sustainability & Public Affairs	Tax, Treasury & Funding	Innovation & Technology	Manufacturing Excellence & Transformation (roadmap for decarbonization)	Industrial Digitalization
Internal Audit	IT & Security	Transformation Office	New Business Development (Renewable Feedstock)	Circular Polyolefin Solutions Projects
Strategy & Group Development	Digital Solutions	Product Asset & Supply Chain Management (Logistic Sourcing)	Operations Polyolefins and Base Chemicals	Projects (technology selection and execution)
Legal & Compliance & Ethics	Finance & Controlling	Polyolefins Marketing & Sales	Technical Development & Engineering	Joint Ventures (drive sustainability in Borouge and Baystar™)
People & Culture (Remuneration, Employee Acquisition & Development, Transformation, Diversity, Equity & Inclusion)	Program and Project Management Office	Commercial Excellence	Plant Availability & Turnaround	
Corporate Communications, Brand & Reputation		Business Optimization and Supply Chain		
		Borealis North America & Brasil		

EVP: Executive Vice President

Fig. 8: **ESG Governance Structure – Committees & Councils responsible for management of sustainability aspects**



Chief Executive Officer	Chief Finance Officer	EVP Polyolefins, Circular Economy Solutions and Innovation & Technology	EVP Base Chemicals & Operations	EVP Joint Ventures & Growth Projects
Quality Committee/ Chair: VP HSEQ	Raw Materials & Packaging Buying Team/Chair: Director Direct Procurement	CES Portfolio Meeting/ Chair: Head of CES Innovation Studio	Process Safety Committee/ Chair: EVP Base Chemicals & Operations	CES projects Growth Councils
Sustainability and Responsible Care Committee/Chair: Director Sustainability & Public Affairs	Authority Schedule Owner: CEO (document owner)	Innovation Portfolio Meeting/Chair: Head of Innovation Management	Energy & CO_2 Committee/ Chair: EVP Base Chemicals & Operations	Growth Projects/Studies Steering Committee
Product Stewardship Council/Chair: VP HSEQ	IT & Digitalization Committee/Chair: CFO			Joint Venture Councils
Ethics Council/ Chair: Head of Group Compliance & Ethics	Pension & Benefits Council/ Chair: CFO			
Public Affairs Coordination Team/Chair: Director Sustainability & Public Affairs	Risk Coach Network/ Chair: CFO			
Climate Strategy Coordination Team/ Chair: Director Sustainability & Public Affairs				
Technology Council/ Chair: VP Innovation & Technology				

EVP: Executive Vice President

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Executive Board Remuneration

Remuneration for Executive Board members consists of fixed and variable elements. The fixed element is their base salary, in accordance with their contracts. The variable element comprises an annual bonus, which is a percentage of the annual base salary, and the Long-Term Incentive (LTI) plan. Other senior management remuneration also comprises a fixed base salary, annual bonus and the LTI plan. Retirement benefits for the Executive Board and Senior Leaders are defined in their contracts.

Payouts under the annual bonus and LTI plan are linked to key performance indicators (KPIs), including multiple KPIs connected to ESG. Executive Board criteria for the LTI plan include diversity targets and carbon emissions. The structure of bonuses and the LTI incentivize everyone from the Executive Board down to ensure Borealis is sustainable (→ chapter Sustainability Management, p. 38).

The Remuneration Committee independently sets the targets for Executive Board members and tracks and evaluates Executive Board members' performance each year, based on their behaviors, the Group's values and the KPIs set for them, and takes action if targets are not reached. In 2023, the Remuneration Committee decided to make two main changes to the Short- and Long-Term Incentive schemes applicable to Executive Board members. For the Borealis Incentive Plan (BIP), this allowed for more individual targets. For both the BIP and the Long-Term Incentive Plan (LTIP), the Committee introduced a health, safety and environment (HSE) malus system as well as a claw back mechanism, covering one year after pay out. Evaluations did not lead to any further adjustments.

The contracts with Executive Board members contain customary termination clauses and terms. These include payments in case of termination, which depend on the reason for termination and are capped at a maximum payout.

Executive Board members recruited from outside Borealis may receive a sign-on bonus. There is no Group-wide guideline for such payments, and they are determined on a case-by-case basis.

Supervisory Board Subcommittees

The Supervisory Board has established Remuneration and Audit Committees and delegated the respective responsibilities to them.

Remuneration Committee

The Remuneration Committee consists of at least three SVB members, with two being nominated by OMV and one by ADNOC. It assists the SVB in fulfilling its oversight responsibilities of certain matters concerning the Executive Board members, as outlined in the Remuneration Committee Charter. The Remuneration Committee is also responsible for approving remuneration processes for Borealis as a whole.

The Remuneration Committee is authorized to deal with all matters concerning the Executive Board members' remuneration and employment contracts, taking into account input from shareholders and remuneration consultants. It is specifically authorized to approve, amend and terminate employment contracts with Executive Board members, as well as to decide on and approve:

- the Executive Board member's targets for each business year;
- their actual achievement against targets;
- whether other remuneration elements are to be granted to the Executive Board members; and
- the amount of any annual bonus, LTI and other remuneration elements.

The Remuneration Committee is also authorized to approve any remuneration project or program which proposes a major change to the Group's remuneration principles, such as:

- Borealis' overall positioning versus the market;
- eligibility and compensation target changes for annual bonus and LTI plans; and
- a shift in the overall retirement and risk insurance plan policy.

The Remuneration Committee held four ordinary meetings and one extraordinary meeting in 2023.

Audit Committee
The Audit Committee consists of at least three SVB members, who are appointed by the entire SVB. Each Audit Committee member must be independent, meaning that they cannot be a member of, or in any way take part in, Borealis' day-to-day management.

The Audit Committee assists the SVB in fulfilling its oversight responsibilities, as outlined in the Audit Committee Charter. This includes monitoring:
- the effectiveness of internal control, internal audit and risk management;
- the integrity of the Company's financial statements;
- the Company's compliance with legal and regulatory requirements, as relating to Audit Committee responsibilities;
- the external auditor's qualifications, independence and performance; and
- the performance of the Company's internal audit function.

The Audit Committee held three ordinary meetings in 2023.

Committees and Other Bodies Supporting Borealis' ESG Governance
To ensure sound governance and continuous improvement in key ESG areas, Borealis has set up cross-functional committees, councils and other functions, which are overseen by Executive Board members.

Internal Audit Coordination Forum
The Internal Audit Coordination Forum is headed by the Director Internal Audit. It coordinates and aligns the approach for audits and issues a consolidated audit program. The Forum decides on the timing and sequence of audits in the locations and the resources assigned to them.

The permanent members of the Forum are:
- Director Internal Audit
- Development Manager Group Quality
- Group Insurance Officer
- Head of Optimization & Supply Chain, BU Base Chemicals
- Head of Quality Management
- HSE Group Process Safety Expert
- Internal Auditor
- Process Owner Operations Assurance
- VP HSEQ (optional)

Ethics Council
The Ethics Council is sponsored by the CEO and the General Counsel and chaired by the Group Compliance & Ethics Officer. It consists of senior leaders or senior representatives from Legal, Internal Audit, HSE and People & Culture, as well as from each business group. The Council aligns the Group's approach to ethics and provides updates on compliance and ethics matters, to ensure consistent Group-wide ethical standards. It also has the exclusive right to decide on important ethics-related matters, such as disciplinary actions, high-value sponsorships and conflicts of interest, which are binding for the Group.

The Group's Compliance & Ethics function has both preventative and controlling roles. It looks to prevent infringements of laws, ethical principles and compliance matters, and to mitigate risk, react to issues and implement lessons learned. The function is headed by the Group Compliance & Ethics Officer, who reports to the VP Legal & Compliance and also has a reporting line to the Audit Committee, which receives an annual report on compliance and ethics issues. In addition, Group Compliance & Ethics provides regular ethics-related information and updates to the CEO and the Audit Committee. This includes major new projects, substantiated unethical conduct, updates on training conducted and any other major developments.

The Group Compliance & Ethics Officer is supported by a team of compliance managers and a network of more than 60 Ethics Ambassadors. The Ethics Ambassador network is a key tool for promoting and strengthening Borealis' ethics culture. The network has global coverage, with one ambassador at almost every location and across all hierarchy levels.

Borealis' Group Compliance & Ethics function regularly exchanges information with its counterparts at the Group's owners, OMV and ADNOC. The function also consistently seeks guidance and advice from the Executive Board and the Audit Committee, to further enhance the effectiveness of the Compliance Management System.

Sustainability & Responsible Care Committee
The Responsible Care® Committee was renamed to Sustainability & Responsible Care Committee in 2023, following the broadening of its remit to reflect the wider context of sustainability-related topics. The Committee is sponsored by the CEO and the Director Sustainability &

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Public Affairs became its chair in 2023. Its permanent members include all of the Executive Board members and the VP HSEQ. The Committee's responsibilities include overseeing the implementation of the Group's Responsible Care Policy. Borealis has committed itself to advancing sustainable development, assessing the positive and negative consequences of its activities on People, Planet and Profit, and taking responsible decisions. The Responsible Care Policy sets the guiding principles for implementing these standards.

The Committee now also covers ESG governance, target setting and performance management of ESG-related indicators, as well as the implementation of the sustainability elements of the Strategy 2030. In addition, it monitors new ESG-related regulatory requirements (such as the EU taxonomy, Corporate Sustainability Reporting Directive and European Sustainability Reporting Standards) and decides on the implementation approach.

Climate Strategy Coordination Team
In 2022, Borealis established a Climate Strategy Coordination Team to drive its transformation to a net-zero business. The team is led by the Director Sustainability & Public Affairs, with the CEO as sponsor and the Executive Board as its Steering Committee. As sustainability is a core part of the Group Strategy, the topic is integrated into almost all areas of the organization. The team is therefore cross-functional and brings together expertise and initiatives from throughout the Group in a focused way. The approach also fosters transparency and ownership, to enable Borealis to effectively execute its climate strategy. The Climate Strategy Coordination Team regularly reports progress to the Sustainability & Responsible Care Committee.

Product Stewardship Council
The Product Stewardship Council is responsible for managing product safety aspects. It is chaired by the VP HSEQ and brings together experts from across the Group, including areas such as Product Stewardship, Sustainability & Public Affairs, Ethics, Innovation & Technology and operations, as well as all of Borealis' business sectors. This range of competencies ensures holistic risk assessments that consider market needs, legal and technological requirements and stakeholder views. The Council meets monthly and reports to the Sustainability & Responsible Care Committee. It defines and executes the Group's strategy for dealing with hazardous substances and identifying and addressing the biggest risks and opportunities that result from using or substituting hazardous substances. The team's decisions impact the innovation project portfolio, the Borealis Banned Substances List and existing uses of substances (→ chapter Product Safety, p. 134).

Quality Committee
The Quality Committee comprises all the Executive Board members. It is sponsored by the CEO and chaired by the VP HSEQ. The Committee sets the Group's quality management priorities and drives implementation of all quality management programs and initiatives. It also evaluates the BMS's effectiveness and efficiency each year during the management review and develops continuous improvement actions. In particular, the Committee discusses market requirements, customer feedback and changes to industry standards as input for improvement programs.

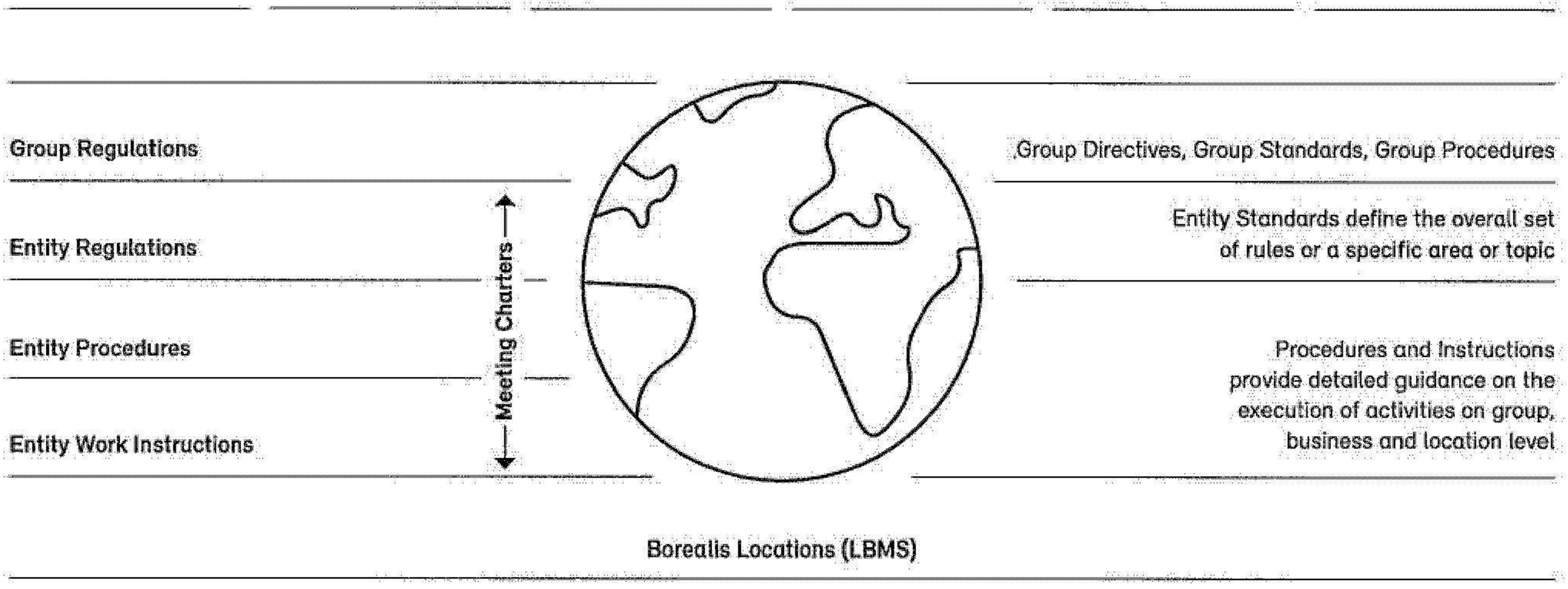
Process Safety Committee
The EVP Base Chemicals and Operations chairs the Group-level Process Safety Committee. The Committee's members are directors and departmental leaders from all the relevant operational streams: Group HSEQ, Manufacturing Excellence, Operations Polyolefins, Operations Base Chemicals and Project & Expert Support. Each production location also has its own HSE Assurance Team, chaired by a nominee appointed by local management. Its members come from different areas within the location, to ensure cross-learning and a link to Group developments (→ chapter Process Safety, p. 130).

Borealis Management System
Borealis' corporate governance model is based on its company values (We Care, We are Curious and We Progress™) and is supported by five governance principles:

1. Borealis is managed as one cross-cultural Group;
2. The Executive Board steers the Group through directional guidance and empowerment of its people;
3. Borealis is structured as centrally organized functions and businesses;
4. Borealis promotes a performance culture based on clear accountabilities for delivery; and
5. Borealis' leaders follow explicit processes and pursue transparent and effective decision-making.

The BMS is the Group's governance framework. It applies to all Borealis entities, subsidiaries and affiliates, and defines Borealis' standards and ways of working.

Fig. 9: **The Borealis Management System (BMS)**



The Group BMS contains all Group-controlled documents and is steered by the Group's values, mission and vision, the governance principles described above, and the need to define clear roles and responsibilities for each employee. Borealis' locations also have Local Management Systems (LBMS), which apply at a particular location. Together, the Group BMS and LBMS establish the basic rules of compliance for Borealis.

The BMS is set up as a layered pyramid of documents, with the hierarchy containing the following categories:

- Group Regulations (OMV documents providing high-level principles and guidelines)
- Entity Regulations (strategic and tactical documents, such as policies and Group-wide procedures)
- Entity Procedures (documents that describe processes and explain what needs to be done and when)
- Entity Work Instructions (documents focused on operatives, describing how activities in Borealis' business units are performed and who is responsible)
- Meeting charters (documents to ensure effective decision-making and communication in critical interface areas and foster cross-functional collaboration).

Controlled documents in the LBMS are revised at least every five years. Any new Group regulation or change to an existing regulation requires Borealis' involvement and approval before it becomes obligatory. Approvals need to be given by the document issuer, document owner and document approver related to the subject covered by the document. This ensures Borealis maintains its independence as a company.

The Authority Schedule defines how Borealis delegates authority in all business and functional areas and establishes the approval levels for senior management within key processes. The Authority Schedule is a controlled document in the BMS and any material change to it must be approved by the CEO as the document owner, the CFO as the document issuer, the Executive Board and subsequently by the SVB.

Ensuring Compliance with the Borealis Management System
Compliance with the BMS is monitored at multiple levels and by various stakeholders:

- Process owners across the organization use performance indicators to continuously monitor the effectiveness and efficiency of their respective processes. Processes are also reviewed regularly through internal system audits.
- The BMS's effectiveness and efficiency is reviewed annually at Group level by the Quality Committee and at location level by the local leadership teams.
- External certification bodies and governmental institutions carry out mandatory audits. In addition, some Borealis customers audit locations as part of their supplier qualification and review process. Borealis uses these

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audits as a key source of continuous improvement initiatives. In 2023, Borealis successfully passed all mandatory audits and pursued voluntary audits, such as customer audits, as requested.

Internal Controls and Audit

Borealis has a system of internal controls, which is in line with EU regulations and owned by the CEO and senior management. These controls assess the robustness of the Group's systems and processes, and support the monitoring, management and reporting of related risks. Internal controls are defined for core processes and require control owners to complete self-assessments.

Borealis' Internal Audit function follows the Institute of Internal Auditors' guidelines. In 2023, Internal Audit performed more than 20 audits, special investigations and internal control reviews for key processes. The 2023 audits encompassed: compliance; operations; strategic and financial topics including risk management, ethics and management control; sustainability; circularity; inventory management; information technology and security management; procurement; strategy execution; project management and audits of joint ventures; and innovation. Internal Audit also conducted prevention, risk management and process safety-related audits at Borealis' locations.

Risk Management

Borealis' risk management approach is based on the core objectives of identifying, assessing and managing risks that could impact its economic performance, the environment or society, as well as understanding how the explicit consideration of risk may affect the Group's strategy and performance. Risk management is therefore designed to enrich dialogue with internal and external stakeholders and contributes to achieving Borealis' long-term strategy and short-term goals, as well supporting its sustainability journey.

Enterprise Risk Management (ERM) also enhances Borealis' enterprise resilience, which is the ability to anticipate and respond to change. The Treasury & Funding department drives the Group-wide ERM process, which identifies, assesses and reports both financial and non-financial risks. Borealis continuously updates the ERM process, to ensure compliance with developing regulatory reporting standards. The process also helps the Group to assess business opportunities systematically, by considering financial, market, operational, tactical, strategic and reputational risks.

Risk Management Governance

Borealis' objective is to deliver value through risk-based management and decision-making, by establishing sound risk management practices in all of its business areas and locations. The Group's approach is based on a "three lines model", where the first line is business management, the second line is risk management, and the third line is Internal Audit. Ultimately, each Borealis employee is responsible for managing risk within their own areas of activity.

The CFO owns the Risk Management Policy, ensures compliance with it and is responsible for the Group-wide implementation and execution of sound risk assessment practices. The CFO also chairs the Risk Coach Network, which comprises senior representatives from across the Group.

The Group's risk management process ensures that all parts of Borealis routinely identify and assess their risks, and develop and implement appropriate mitigating actions. Business units and functions are provided with risk assessment guidelines, procedures and tools, which cover all key risk elements within their business areas. The guidelines allow Borealis to map the risks in its risk landscape, based on their potential business impact and the probability of the risk occurring. The common risk categories are defined in the Risk Management Policy.

Key risks across the Group are periodically discussed at a Group-wide level and consolidated to produce the Group's overall risk landscape, which is owned by the Executive Board. At least twice a year, the Executive Board reviews the key risks, validates the Group's risk tolerance levels and risk appetite, monitors the implementation of mitigating actions and ensures that they are integrated into strategic planning. The process starts with risk identification, followed by analysis, evaluation, treatment, reporting and review, through to continuous monitoring of changes to the risk profile.

Twice a year, the Executive Board reports to the SVB on the consolidated Group risk landscape, including the status of mitigating actions. The SVB reviews the effectiveness of Borealis' risk management practices and processes, the Group's risk exposure and the effectiveness of its mitigating actions. The key risks of each business unit and function are owned by their respective EVPs and/or VPs/Directors. They are responsible for continually identifying potential risks and opportunities within their area. The VP Treasury & Funding supports the Group-wide adoption of comprehensive

and effective risk management processes and practices, and is responsible for providing training or risk management briefings for senior management, facilitating the risk management process and supporting the Audit Committee in reviewing Borealis' risk landscape and risk mitigation activities.

Immediate risk escalation is a key element of Borealis' continuous risk management process, to ensure the Group reacts promptly to any sudden increase in risk exposure. Risk owners are required to report to the relevant EVP when they identify major increases in the business impact or probability of a particular risk, whether caused by internal or external factors. The EVP then reviews the new risk and decides whether escalation to the Executive Board is necessary, to facilitate immediate reprioritization of the mitigation actions. The Executive Board regularly discusses and addresses high-risk issues.

ESG Risk Assessment

In addition to the Group's regular ERM process, the Sustainability Department has developed a Group-wide assessment process for sustainability risks and opportunities.

During 2023, OMV kicked off an OMV Group-wide ESG risk assessment, alongside a refreshed materiality assessment. This project will be finalized during 2024, with updates of the BMS process and instruction documents and integration into the ERM system.

Fig. 10: **ESG risk and opportunity assessment categories**

Probability	Time horizon	Financial impact	NaDiVeG matters	Risk type	Climate risk/opportunity classification
– Likely (>50%, more often than once in 2 years) – Very Possible (20–50%, once in 2 to 5 years) – Rare (10–20%, once in 5 to 10 years) – Very Rare (1–10%, once in 10 to 100 years) – Extremely Rare (<1%, less than once in 100 years)	– Short-term (<3 years) – Mid-term (3–5 years) – Long-term (>5 years)	– High Impact (>EUR 5,000 mn) – Severe (EUR 1,000–5,000 mn) – Major (EUR 500–1,000 mn) – Significant (EUR 100–500 mn) – Considerable (EUR 50–100 mn) – Moderate (EUR 10–50 mn) – Minor (EUR 1–10 mn) – Negligible (< EUR 1 mn)	– Environmental matters – Employee matters – Social matters – Anti-corruption and bribery – Human rights	– Outside-in risk (on Borealis) – Inside-out risk (on environment & society) – Both	– Physical – Transitional – policy & legal – Transitional – technology – Transitional – market – Transitional – reputation

ESG risks and opportunities for the most relevant Borealis business areas have been identified and qualitatively and quantitatively assessed in terms of their probability, time horizon (short-term, mid-term, long-term), financial impact (high, severe, major, significant, considerable, moderate, minor, negligible) and classified according to the NaDiVeG and TCFD frameworks.

Borealis' expert departments also identified risks and opportunities, by monitoring the external environment through continuous stakeholder dialogue, desk research of industry reports, peer analysis and topic-related studies (→ ESG Risks and Opportunities, p. 52).

Activities 2023

Reviewing the Borealis Management System

Over time, around 10% of the documents in the Group BMS had become outdated, mostly as they did not property address the changes in Borealis' ownership. In 2023, the Group Quality Team organized an initiative to confirm the owners and issuers of the 600 documents in the Group BMS and guided them to review and republish their documents.

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By the end of August 2023, all documents in the Group BMS were accurately published. New booklets were also created for document issuers and owners, revisiting their roles and responsibilities in the BMS.

In addition, the Group Quality Team worked with the OMV Governance Team to reformulate how OMV Regulations are incorporated into the BMS. As of September 1, 2023, new or updated OMV Regulations are introduced to the BMS as externally controlled information, and Borealis conducts and documents a gap assessment regarding future compliance before the Regulation is introduced.

Maintaining ISO Certifications

In 2023, Borealis concluded the three-year cycle of ISO certifications for the relevant standards in scope, namely ISO 9001 (Quality), ISO 14001 (Environment), ISO 45001 (Safety) and ISO 50001 (Energy). The Group completed successful surveillance audits, which reported zero major findings.

For IATF 16949, the specific standard for automotive businesses, Borealis successfully completed the first surveillance audit in seven locations and effectively onboarded Taylorsville (US) into the corporate certification scheme.

Enhancing the Quality System through Internal Audit's internal management system audits are a key mechanism for detecting nonconformities and identifying potential areas of improvement in the Integrated Management System. Borealis takes a multidisciplinary approach, to meet the requirements of ISO 9001, ISO 45001, ISO 14001, ISO 50001 and IATF 16949.

Many professionals across different areas of Borealis' organization volunteer to act as internal auditors. They are trained and qualified according to defined requirements, to perform auditing work. Group Quality's Auditors Pool comprises around 125 qualified auditors across the different locations.

From Q3 2022 to Q2 2023, Borealis planned and conducted ten internal system audits at Group level and around 50 audits at the locations. The findings and observations are documented in the tool Synergi and there were lessons learned in every cycle, confirming effective gap closing. In 2023, zero major nonconformities were reported, demonstrating that the Group's robust internal system audit program ensures the BMS remains compliant and up to date.

Securing Business Continuation in India

Selling in the Indian market can require the Group to meet very specific regulatory requirements. During 2023, Borealis and Borouge have been running a project to obtain the necessary certifications, in close cooperation with the Bureau of Indian Standards (BIS). Borealis' sites at Porvoo (Finland), Stenungsund (Sweden), Antwerp (Belgium) and Schwechat (Austria), plus the DYM SOLUTION CO., LTD (South Korea), are in scope to become BIS PE certified, which will allow the Group to continue to sell in India under new regulations.

Through collaboration with Product Management, Legal, Group and local leadership, and Borouge, Group Quality supported the planning and successful realization of the audits in Stenungsund and Porvoo in 2023. Audits at the remaining sites in scope are planned for Q1 2024.

Outlook

For 2024 and beyond, the Group's governance objectives are to:

- continue to roll out the Group BMS to new sites, including subsidiaries and affiliates;
- assess alternatives to the current BMS system application in SharePoint; and
- run ISO recertification at Group Level for all locations in scope, and a certification audit for ISO 45001 in Stenungsund. Surveillance audits for IATF 16949 will also take place for the automotive sites.

Responsible Care®

Borealis' determination to control sustainability risks is stipulated in its Responsible Care® Policy Statement, which is available on the Borealis website. The statement is the basis for all of Borealis' activities and for developing processes in areas such as occupational health and safety, energy and environmental management, process safety and product stewardship, with the aim of achieving world-class performance and being a recognized leader.

The Group meets or exceeds the legal and other requirements to which it subscribes. The Group has a Responsible Care management system, based on continuous improvement and verification of its performance, and openly discusses Responsible Care issues with its stakeholders to further promote health, safety and the environment and to save energy along the value chain.

Borealis is committed to implementing the guidelines of the Responsible Care Global Charter, which is the chemical industry's voluntary initiative aimed at continuous improvement in HSE performance. The charter's guidelines, such as efficient use of natural resources and avoiding waste production, are also among the principles guiding Borealis.

Through Responsible Care, Borealis commits to:

- ensuring it has a corporate leadership culture which proactively supports safe chemical management, through the global Responsible Care initiative.

- safeguarding people and the environment by continuously improving the HSE performance and security of Borealis' facilities, processes and technologies, and by driving continuous improvement in chemical product safety and stewardship throughout the supply chain.

- strengthening chemicals management systems by participating in the development and implementation of life cycle-oriented, science- and risk-based chemical safety legislation and best practices.

- influencing business partners to promote the safe management of chemicals within their own operations.

- engaging stakeholders, understanding and responding to their concerns and expectations for safer operations and products, and communicating openly on Borealis' performance.

- contributing to sustainability through improved performance, expanded economic opportunities and the development of innovative technologies and other solutions to societal challenges.

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Digital Transformation

Goals and Planned Key Actions in 2023
Support Borealis' business strategy and transformation by developing digital solutions and services that improve and transform the way Borealis works
Embrace agile methodology and work with the business with even greater emphasis on user centricity, innovation, security and data science
Prepare for future steps in digitalization through a large investment in PCs and networks

Key Achievements in 2023
Continued to develop sustainability reporting tools and customer solutions, launched Neoni CO_2 footprint calculator and further increased customer use of the MyBorealis portal
New operating model put in place, to introduce leaner interfaces and new ways of working Digital Solutions teams reorganized to support focus on safety, efficiency, the circular economy, sustainability and value-add customer solutions
Replaced 4,200 PCs, 1,700 smartphones and 900 active network components

Goals and Planned Key Actions for 2024
Accelerate the delivery of reliable, innovative digital solutions for Borealis and its stakeholders
Implement a significant cybersecurity improvement program, to reduce Borealis' overall cyber risk exposure and form the basis for obtaining ISO27K and NIS2 certifications in 2024

Goals and Planned Key Actions Beyond 2024
Continue to accelerate the development of reliable, innovative digital solutions for Borealis and its stakeholders

Increasing digitalization will help Borealis to transform its business and deliver its strategy to 2030. Digital Solutions can increase productivity, improve the customer experience and, in particular, accelerate the transformation towards a circular economy and CO_2 neutrality for the Group.

For that reason, Borealis decided in 2023 to merge the Borealis Digital Studio, its Digitalization incubator organization, with the Group's IT organization. The department has been renamed Digital Solutions and is now a united and empowered function, consisting of diverse, cross-functional teams of IT professionals with profound business, project management and platform knowledge. Borealis' digital professionals include agile facilitators, designers, usability experts, software developers, engineers and innovation specialists. The organization will also look to leverage OMV Group's synergies.

Digital Strategy

The digital teams focus on having a single, robust portfolio of digital tools that are as fast and as secure as possible. The portfolio supports the delivery of the Group's business objectives, while putting the user at the heart of every solution, whether they are customers, employees, suppliers or others.

When reviewing ideas and requests for new digital projects, Borealis aims to score each one consistently, objectively and transparently, based on the following key factors:

- Strategic fit: does this fit the Group's strategy?
- Business viability: what value does it bring to Borealis and at what cost?
- Technological feasibility: can Borealis do it?
- User desirability: do users want it?
- Architectural and security fit: is it secure and a good fit for Borealis' digital landscape?

To support innovation, the business-value exercises explore and create proofs of concept. At this stage, Borealis requires one of its businesses to be committed to and involved in the project, to find the right route for innovation.

Activities 2023

Digital Solutions to Advance the Circular Economy

During 2023, Borealis has further developed Neoni, a digital tool that calculates CO_2 equivalent (CO_2e) emissions for its products. The materials covered range from virgin fossil feedstock-based solutions to renewable feedstock-based grades in the Bornewables™ portfolio of circular polyolefins, to the Borcycle™ portfolio of mechanically recycled polyolefins.

Neoni is the first digital tool in the industry to offer CO_2e emissions data down to the grade level for polyolefins, so Borealis' customers can make informed decisions about which materials best meet their circularity goals. This is in line with Borealis' EverMinds™ approach to accelerating circularity by working with its value chain. The carbon footprint Neoni calculates includes all CO_2e emissions incurred up to the moment the product leaves Borealis' facilities. The tool offers customers the option to calculate CO_2e emissions that take place from Borealis to their own operations, making it even more useful.

Having introduced Neoni in 2022, Borealis rolled out the tool during 2023 and added data on hydrocarbons, in addition to polyolefins grades. Customers can access the results from the tool on MyBorealis (see below).

Digital Customer-Centered Solutions to Add Value

MyBorealis is the Group's online platform for engaging with its polyolefins customers. It is designed to blend seamlessly with Borealis' offline commercial processes, to enhance the customer experience. The portal supports customer service representatives and sales managers in their daily interactions with customers and puts order management at the customer's fingertips, along with a complete library of order, product or complaint documentation. The application works 24/7, providing instant access to up-to-date information, with ordering fully integrated with Borealis' supply chain and IT processes. The portal supports eight languages, allowing organizations in Europe, North America and South America to use it. By the end of 2023, 26% of the business's order volume was placed via the portal, up from 20% at the start of the year, with almost half of customers now active on MyBorealis.

Digital People and Plant Solutions for a Strong Foundation

Borealis looks to develop new tools that improve safety performance and support its Goal Zero objective. The Group is also exploring new digital ways of working to increase efficiency in Operations, focusing on asset intelligence, field excellence, data and connectivity, and value-chain optimization. Various initiatives are contributing to this, including:

- The Data and Document Management System (DDMS) initiative, which has been successfully piloted and is now being rolled out across Borealis. The initiative has created a fit-for-purpose, sustainable and affordable technical DDMS, which enables Operations to harmonize documentation, standardize work processes and close gaps in current tools. The tool also makes further digitalization possible, such as upcoming engineering projects.
- The ongoing Mobile Operator journey, which gives operators powerful, simple and purpose-built tools to assist them in the field. For example, it can provide real-time data and information to help them to make safe and correct decisions and allows them to input data directly.
- An initiative to compare different ways of detecting corrosion under insulation, to determine the best technologies.
- A project to support the Group's sustainability strategy, by implementing a tool to structure the validation process for energy data, reducing the risk of errors and ensuring data quality and traceability.

During 2023, the Group also continued its Borstar® Digital Twin program, which began in 2021. The Digital Twin is a set of digital solutions for Borstar plants, rooted in Borealis' process expertise and built on the Group's successful applications such as its Proprietary Advanced Process Control and Operator Training Simulators. The aim is to capture Borealis' unique know-how and utilize it in research engineering and production process improvements, while also providing a support and collaboration platform.

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The program has now started delivering its first solutions, which aim to generate significant business value by improving operations in Borealis and its joint ventures, and by enhancing Borstar as a leading technology. New monitoring tools allow the Digital Twin to automatically predict the plant's future state, run simulations and keep the process optimized and under full automatic control.

Borealis has also invested to equip the organization with state-of-the-art hardware devices and improved network performance, to prepare for future steps in its digitalization program. In 2023, the Group replaced 4,200 PCs, 1,700 smartphones and 900 active network components.

Last but not least, in 2023 the Leonardo program in which Borealis embarks upon the SAP S/4HANA journey continued. The program reshapes our enterprise platform to enhance agility, simplicity and transparency to support Borealis' global growth and sustainability strategy by moving our business technology solution to the next generation of SAP. Intense blueprinting and negotiation with implementation partners took place to secure the highest quality of execution during the upcoming roll-out of a future-proof S/4HANA enterprise system forseen by January 1, 2025.

New Operating Model for Accelerating the Delivery of Reliable and Innovative Solutions
As part of the formation of Digital Solutions, Borealis has created new roles and responsibilities in the area, such as performance, governance and value measuring, to work on delivering a single portfolio of value-add services and solutions. The new organization has also introduced lean interfaces to Borealis' end-users, vendors and OMV, and reshaped processes, leading for example to new ways of capturing demands for new services or solutions and approving the start of their delivery.

Outlook
In 2024 the Digital Solutions organization will focus on some key strategic areas. Helping to grow the business is one of those areas and in that respect our flagship project Borealis Digital Twin will be a key enabler to making that happen. Another important focus will be being innovative, using data and AI in such a way that we exploit AI so that it becomes part of our everyday life in the digital workplace for example by using Generative AI Technologies such as CoPilot from Microsoft, CoPilot from SalesForce and ChatGPT. Operating every day in an excellent way is a third important focus area for 2024 and projects such as launching SAP S/4HANA, also document management system initiatives, connectivity projects and continuous enhancements of our customer management and collaboration platform are key components of that operational excellence roadmap. In 2024, Borealis will continue enhancing its cybersecurity by driving compliance and certification initiatives that aim to mitigate risks even more effectively.

Ethics & Compliance

Goals and Planned Key Actions in 2023	Key Achievements in 2023
Implement a dedicated human rights e-learning course, which will be mandatory for all Borealis employees	In cooperation with OMV, established and rolled out an e-learning course on human rights to Borealis' entire workforce. The course also includes learnings and information from the Kallo incident
Implement additional resources with a new team to ensure social compliance across the Group, including newly created roles such as a social compliance manager	Hired a Group Social Compliance Manager and three Regional Social Compliance Managers Established, implemented and independently verified the efficiency of new social compliance processes
Deploy a new governance structure for Ethics & Compliance to put Borealis in the best possible position to monitor and ensure ethical business conduct by the Group's business partners and contractors, with a focus on ethical and legal treatment of their workers	Implemented new policies and processes to manage social compliance and external whistleblowing, including improved due diligence, monitoring, auditing and escalation procedure for business partners Amended and published a new version of the Ethics Policy for Business Partners and included new compliance requirements in supplier contracts
Update and further strengthen Borealis' due diligence process and requirements of its business partners and contractors, and in particular introduce processes to identify critical business partners and intensify monitoring of them	Updated and implemented new due diligence, risk assessment and escalation procedure related to due diligence of business partners
	Obtained annual recertification to ISO 37301 (Compliance Management) and ISO 37001 (Corruption & Anti-Bribery)
	Conducted human rights risk assessments in Belgium and Netherlands

Goals and Planned Key Actions for 2024	Goals and Planned Key Actions Beyond 2024
Obtain new ISO certification for social compliance and obtain recertification for ISO 37301 and 37001	Obtain internationally acknowledged certification for Borealis' values and ethics beyond compliance standards
Achieve Group-wide certification for SA8000 Social Compliance Standard	Continue raising awareness for social compliance and conduct trainings on the new social compliance standards
Conduct environmental legal risk exposure assessment	Implement new legal requirements from the Corporate Sustainability Due Diligence Directive
Hold a Group-wide Ethics Conference	
Undertake a Group-wide check on effectiveness of new social compliance standards	
Conduct assessment on the Corporate Sustainability Due Diligence Directive readiness	

Maintaining the highest standards of integrity is essential for securing and maintaining the trust of Borealis' customers, suppliers, employees, shareholders and society at large. Failure to meet its ethical and compliance obligations could expose Borealis to the loss of stakeholder trust and reputational damage, as well as to fines, legal claims, loss of business, contracts or licenses, or even the imprisonment of management and employees involved. An unethical or non-compliant environment can also affect employees' engagement and job satisfaction.

Borealis is strongly committed to ethical business conduct. The Borealis Ethics Policy provides guidance to Borealis' employees and sets out the Group's ethical principles, most importantly including human rights, ethical business conduct based on respect, honesty and integrity, and compliance with applicable laws.

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Governance
The Group's Compliance & Ethics function has both preventative and controlling roles. It looks to prevent infringements of laws, ethical principles and compliance matters, and to mitigate risk, react to issues and implement lessons learned. The function is headed by the Group Compliance & Ethics Officer, who reports to the Vice President Legal & Compliance and also has a reporting line to the Audit Committee, which receives an annual report on compliance and ethics issues. The Group Compliance & Ethics Officer is supported by a team of compliance managers and a network of more than 60 Ethics Ambassadors. The Ethics Ambassador network is a key tool for promoting and strengthening Borealis' ethics culture. The network has global coverage, with one ambassador at almost every location and across all hierarchy levels.

Borealis' Ethics Council is sponsored by the CEO and General Counsel and chaired by the Group Compliance & Ethics Officer. It consists of senior leaders or senior representatives from Legal, Internal Audit, Health, Safety & Environment (HSE), People & Culture and the different businesses. The Council aligns the Group's approach to ethics and provides updates on compliance and ethics matters to ensure consistent Group-wide ethical standards. It also has the exclusive right to decide on important and strategic ethics-related matters, such as disciplinary actions, high-value sponsorships and clearance of conflicts of interest. Decisions of the Ethics Council are binding for Borealis.

Group Compliance & Ethics regularly provides ethics-related information and updates to the Executive Board and the Ethics Council. This information includes major new projects, a report on substantiated unethical conduct, updates on training conducted and any other major developments. The Executive Board and the Supervisory Board (SVB) annually review the Compliance Management System and provide input to further enhance its effectiveness. In addition, Group Compliance & Ethics regularly exchanges information with its counterparts at the Group's owners, OMV and ADNOC.

Borealis Ethics Policy (Code of Business Conduct)
The Borealis Ethics Policy is accessible to the public on Borealis' website (Ethics and Compliance – Commitments – About Borealis – Borealis (borealisgroup.com). The Policy is available in ten languages and applies to the entire Borealis workforce.

Borealis' contractors, suppliers and other business partners are required to adhere to the Ethics Policy for Business Partners. It defines the Group's approach to key aspects of business ethics when sourcing, such as anti-corruption, anti-slavery, child labor, forced labor, human trafficking and HSE. The Ethics Policy for Business Partners is available from the Borealis website and is also actively communicated to Borealis' business partners.

Key Areas of the Ethics Policy
Corruption and Bribery
Borealis is strongly committed to complying with global anti-bribery and corruption requirements, including but not limited to the US Foreign Corrupt Practices Act and the UK Bribery Act.

Accordingly, Borealis' Ethics Policy strictly prohibits offering, giving or accepting gifts or anything of value, in order to obtain or grant an improper business advantage. Any gift or hospitality in connection with Borealis' business activities must be reasonable and appropriate and must have a legal and reasonable business purpose. In accordance with Borealis' Ethics Policy, gifts and hospitality offered or received by Borealis' colleagues must be registered in an internal gift registry, which is maintained and monitored by Group Compliance & Ethics.

Borealis communicated its anti-corruption policies and procedures to all of its employees (100%) as well as the Executive Board and SVB (100%). All of Borealis' business partners (100%) have been provided with Borealis' Ethics Policy for Business Partners.

Competition
Borealis is committed to healthy, lawful, equitable and ethical competition between companies. The Group applies policies to ensure full compliance with applicable competition laws in all jurisdictions where it carries out business. Borealis also puts special focus on anti-trust and competition requirements in its compliance training and workshops.

Data Privacy
Borealis must treat all personal information relating to its employees and business partners as confidential and in line with legal requirements. The Group takes its obligations under the General Data Protection Regulation (GDPR) and any other applicable data protection laws seriously and

makes sure to prevent unauthorized disclosure. Certain employees may, as part of their role, deal with personal information about other employees or third parties. Those employees receive specific training on what is required from them in relation to such data. Borealis expects all employees dealing with personal data to always treat it as confidential and in accordance with the applicable law. In addition, Borealis implements IT security measures to help ensure data is adequately protected.

Issuer Compliance
As an issuer of bonds traded on the Vienna Stock Exchange, Borealis must comply with the Market Abuse Regulation (MAR). Moreover, as Borealis is an integral part of the listed OMV Group and significantly contributes to its financial performance, Borealis' non-public and important business-related information may constitute inside information in relation to OMV shares. The same applies to Borouge's non-public and important business information in relation to shares that Borealis holds in Borouge Plc and Borouge Pte. Borealis must therefore manage its risk exposure related to the misuse of inside information. In accordance with MAR requirements, Group Compliance & Ethics maintains a list of permanent insiders, requests and collects undertakings on compliance adherence and manages annual MAR training for colleagues who are specifically exposed to issuer compliance risks.

Managing Conflicts of Interest
The Group's process for preventing and mitigating conflicts of interest is outlined in its Code of Conduct, which applies to all Borealis employees, including the Executive Board.

A conflict of interest may occur when an employee's personal interest could interfere with their duties to act in Borealis' best interests. Conflicts of interest can occur in many ways and typically arise in the following situations:
– having outside jobs and affiliation with competitors, customers or suppliers;
– working with close relatives or having an intimate relationship with a colleague who can influence decisions such as salary, performance rating or promotion;
– membership of the board, advisory committee or other governing body of another organization; and
– investments, including sponsorships, that might influence or appear to influence the employee's judgment.

Borealis expects everyone to avoid any activity that creates even the remote appearance of a conflict between their interests and Borealis' interests. Employees must disclose to their line managers, People & Culture and the Group Compliance & Ethics Officer any actual, perceived or potential conflicts that they might have, in order to protect themselves and the Group. Group Compliance & Ethics is responsible for clearing all reported conflicts from a Compliance & Ethics perspective.

All reported conflicts are documented in the Group's Integrity Tool and reported to the Ethics Council each quarter. Where actions are taken, the stakeholders affected and the Executive Board are informed. In 2023, neither the SVB, the Executive Board nor the Audit Committee members held shares in Borealis or the majority of the shares in a holding company, thereby preventing any related conflicts of interest.

The Executive Board and SVB members' cross-shareholdings and cross-board memberships of have been assessed for any potential conflicts of interest. No such conflicts have been identified.

Human Rights
Human rights are universal values and guide Borealis' conduct in every aspect of its activities. Borealis is committed to preventing adverse human rights impacts, addressing any impacts it becomes involved in and taking adequate measures for their prevention, mitigation and, where appropriate, remediation.

Borealis does not tolerate any form of slavery, human trafficking, child labor, forced labor, harassment, bullying, discrimination, disrespect, exploitation of a person's vulnerability or dependency, or any other violation of human rights. In meeting its human rights responsibilities, Borealis strictly complies with applicable national laws. Where national laws fall short of Borealis' standards, which are based on international human rights law, Borealis is guided by its higher standards while ensuring it complies with applicable laws.

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The Group also expects all its suppliers, customers and other business partners to strictly comply with universal human rights and respective national laws. The Group is strongly committed to the Ten Principles of the United Nations' Global Compact and the International Labour Standards of the International Labour Organization, and has an Operative Instruction to ensure compliance with the UK Modern Slavery Act.

Group Compliance & Ethics consistently monitors and checks Borealis' business partners, throughout the time the Group does business with them, using the Diligent automated IT tool. These checks highlight any convictions, ongoing proceedings, suspicions or other red flags with regard to human rights violations. In 2023, Borealis thoroughly reviewed and updated its Operative Instruction which sets out the due diligence requirements and escalation procedure in the event of a higher risk rating or red flags being detected. In addition, Borealis conducts an annual human rights assessment in different regions, to determine local human rights risks and recommend actions to mitigate those risks.

Ethics Hotline: Whistleblowing and Speaking Up

Borealis complies with the EU Whistleblower Directive (Directive (EU) 2019/1937). The Group's stance is that "looking away is not an option" and the Ethics Policy therefore obliges employees to speak up about any actual or suspected ethical or compliance breaches. As part of this, every white-collar employee must confirm, in the course of their Annual Certification, that they have reported all witnessed and suspected violations of the Ethics Policy.

The Group continuously promotes speaking up and creates awareness of its Ethics Hotline and how to use it, in particular through the Ethics Policy, quarterly business updates from the Executive Board, articles on the intranet and in each Ethics training.

The Ethics Hotline is based on an automated cloud-based case management tool, "Integrity", provided by the German service provider EQS. The tool is user-friendly, self-explanatory and practical for both the reporter and the managers of reported cases, and has been well accepted by all relevant stakeholders.

Reports to the Ethics Hotline can be made 24/7 in 24 languages, by following the link: borealis.integrityline.com. The link is published on the intranet and on Borealis' external website, enabling individuals inside and outside Borealis to file reports. These reports can be fully anonymous, in which case the identity of the reporter is not tracked.

All reports to the Ethics Hotline are directly recorded and tracked in the management tool. Each reporter is notified that the report has been received and is being handled. Group Compliance & Ethics is immediately notified of each new report and can then administer it in the management tool. Reports received through other channels are manually set up in the tool by the Group Compliance & Ethics team. Access to the tool is strictly limited to the Group Compliance & Ethics team, the General Counsel and the Director Internal Audit and Risk Management.

Every report is assessed and handled with the utmost priority, in accordance with Borealis' Investigation and Ethics Case Handling Procedure. The Procedure sets out the process for determining whether a report should be investigated and was thoroughly updated in 2023. While Group Compliance & Ethics is responsible for the intake, categorization, documentation and initial handling of each case, Internal Audit, People & Culture and subject matter experts are involved in the investigation, depending on the compliance areas and risks involved. Reports that do not suggest a violation are either forwarded to the department that is best placed to deal with it or, if the report is unreasonable or without serious intent, it is dropped and closed.

The Ethics Council carefully reviews each investigation that substantiates unethical conduct. The Group Compliance & Ethics Officer provides quarterly updates to the Executive Board on all conducted and substantiated investigations, and the Audit Committee receives an annual report of all investigations and remediation actions.

In compliance with the EU Whistleblower Directive, the Ethics Hotline allows Borealis' workforce and external stakeholders to make reports related to the following categories:
- *Anti-bribery and corruption*
- *Human rights violations*
- *Breach of confidentiality*
- *Competition law*
- *Financial crime*
- *Conflict of interest*
- *Data privacy*
- *Fraud and theft*
- *Trade compliance*
- *Labor issues*
- *Violation of policies*
- *HSE*
- *Environmental damage*

Activities 2023

In 2023, Group Compliance & Ethics' activities included:
- recruiting a new Social Compliance team, consisting of a Group Social Compliance Manager and three Regional Social Compliance Managers;
- establishing and implementing new social compliance processes to ensure compliant business conduct by the Group's business partners, particularly relating to the legal and ethical treatment of workers;
- conducting a human rights assessment in all Borealis locations in Belgium and Netherlands, and having the assessment externally verified by Dentons UK; and
- establishing a mandatory human rights e-learning course for the entire Borealis workforce, covering all relevant human rights aspects and including transparent information and learnings related to the PDH Kallo incident in 2022.

The team also introduced new compliance-related policies, including a Social Compliance Procedure, an Operative Instruction covering cooperation with authorities, and a process for handling whistleblower reports from people external to Borealis. In addition, Group Compliance & Ethics thoroughly amended and updated the Ethics Policy for Business Partners, the Compliance Due Diligence Instruction, the Data Protection Procedure, and the Investigation Manual.

Borealis obtained recertification for ISO 37301 (Compliance Management) and ISO 37001 (Corruption & Anti-Bribery) during 2023. To obtain recertification, Group Compliance & Ethics, amongst other measures, worked with Group Quality to conduct a Group-wide compliance audit and thoroughly reviewed the effectiveness of Borealis' compliance management, with discussion and input from the Executive Board and SVB.

Ethics Hotline "Speaking Up"

In 2023, Group Compliance & Ethics received 186 reports, of which 176 cases were investigated. 64 of these investigations substantiated or partially substantiated misconduct by Borealis colleagues. 20 Employees have been dismissed in connection with violation of the Ethics Policy.

Critical concerns are communicated quarterly during the compliance update to the Executive Board and on a yearly basis to the Borealis Audit Committee. Two critical concerns were communicated during the reporting period, as described in the sub-chapter Non Compliance and Legal Actions.

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Update on the Kallo Case

The following is a status update on the Kallo case, as outlined in detail in the Annual Report 2022, p. 35, as well as on the Company website.

Since the events of last year, Borealis has taken many steps across the Group to increase oversight of its Propane Dehydrogenation (PDH) construction site in Kallo, Belgium, and advance its organizational set-up. Overall, these actions can be clustered into three groups: competence, awareness and governance. Borealis also wishes to provide support for victims, as described below.

Competence
The Group has invested in additional capabilities and capacities to reduce the risk of social misconduct and malpractices, such as setting up and implementing a Global Social Compliance Team, with one Group Social Compliance Manager and three Regional Social Compliance Managers. Borealis has also implemented regular alignment meetings with the social inspectorate and work authorities in Belgium and Austria.

Awareness
The Group has improved its ability to detect and address any misconduct. First, awareness of social compliance has been substantially increased and it is now an integral part of the quarterly business review. Borealis has also produced a social compliance video in 14 languages and "Speak up" cards in 27 languages. These are used to promote a speak-up culture within the organization, as well as for supplier onboarding with a focus on social compliance. Furthermore, Borealis has started to pursue social compliance engagement walks in Austria, Belgium, Finland and Sweden. In these engagement walks, the external workers are interviewed on social compliance matters while working on our sites. In cases of alleged grievances or an increased risk profile, audits will be conducted on social compliance matters. In case of concerns, mitigation plans are agreed and closely monitored. Last but not least, the Borealis Ethics Hotline has been opened to external whistleblowers and a process description has been implemented in the Borealis Management System (BMS), explaining in detail how to handle any such reports.

Governance
Borealis has zero tolerance for social malpractices and misconduct.

A management document has been implemented in the BMS, stating the Group's social compliance ambition, the framework for identifying regulatory and social compliance risks, advice on designing and implementing regulatory and legal compliance processes and controls to mitigate such risks, and how to monitor and report the effectiveness of these controls.

The Group has also implemented stricter access checks at the site gates of its production locations in Austria and Belgium, combined with more frequent and risk-based checks.

Support for Victims
Borealis wants to support workers who were negatively impacted by the Kallo case. We have been in contact with the organization that has been mandated by the Belgium authorities to take care of victims of human trafficking in the Flanders region.

In August 2022, via the Borealis Social Fund we offered a donation to this organization in order to ensure that the victims could get all the support needed. The discussions were conducted for several months, and in the end our offer was not accepted.

Performance 2023

Non-Compliance and Legal Actions

As per Borealis' investigation procedure laid down in "Ethics Case & Investigation Handling Procedure", Group Compliance & Ethics needs to assess and consistently update the criticality level of each Ethics & Compliance related incident ranging from Level 1 to Level 4. The most critical cases shall be classified as Level 1 and shall be exclusively reserved for cases which may bear risks for (i) significant damages or fines; (ii) risk of reputational damages; or (iii) involves a senior employee with pay grade 16 or higher. Borealis, to the best of its knowledge, was not involved in any material violations of anti-corruption, anti-trust or competition law, monopoly legislation, human rights or data privacy restrictions during 2023.

There have been two incidents classified as Level 1:

- There was a non-material incident related to the local business in South Korea, where possible attempts to infringe competition law were suspected. No penalties, fines or other permanent sanctions were imposed on Borealis and no legal action was initiated against Borealis or any Borealis employee for non-compliance with these legal requirements by the end of 2023.
- In January and February of 2023, Group Compliance & Ethics investigated with support from Freshfields serious allegations relating to a broader kickback-scheme which occurred in the Fertilizers, Melamine and TEN location in Grandpuits (France). We suspected several external business partners to have colluded with two local Fertilizers, Melamine and TEN employees who were possibly paid kickbacks to secure business for these partners. Said employees have been dismissed and legal action initiated. The matter has subsequently been handed over to Fertilizer, Melamine and TEN's newly established Compliance function to ensure further handling after the Fertilizers, Melamine and TEN carve-out.

Ethics Training

In 2023, Borealis employees (BC/PO) completed 5,983 e-learning courses. Altogether, 88% of the Borealis workforce completed an ethics-related e-learning course. In 2024, Borealis will roll out e-learning courses as illustrated in Fig. 12 E-learning schedule.

Fig. 11: **Courses completed by employees in 2023** [1) 2) 3)]

BC/PO	number	%
Number of Ethics & Compliance e-learning courses completed [4)]	5,983	
Percentage of total workforce that completed Ethics & Compliance e-learning courses		88.0
Number of tailored classroom/virtual training sessions on Ethics & Compliance held	30	
Number of employees who received tailored classroom/virtual training sessions on Ethics & Compliance, which includes training on anti-corruption and bribery and human rights	303	
By employee category		
Senior leaders	3	1.0
Managers	25	8.2
Team leaders	19	6.3
Experts	69	22.8
Administration	116	38.3
Blue-collar	71	23.4

1) Today, security personnel at Borealis sites are exclusively provided by external vendors. In 2023, Borealis has assigned Ethics training (including human rights) to more than 1,500 external contractors, including to security personnel. // 2) DYM SOLUTION CO., LTD and mtm plastics GmbH, mtm compact GmbH as well as Ecoplast Kunststoffrecycling GmbH are excluded from e-learning courses. // 3) Due to the divestment of Fertilizer, Melamine and TEN in the first half of 2023, training figures representing the whole year, the complete annual cycle, are not available and, therefore, are not reported. // 4) Ethics & Compliance e-learning courses subsume various types of courses. Some employees have completed several e-learning courses.

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BC/PO	number	%
By region		
Austria	159	52.5
Belgium	1	0.3
Finland	72	23.8
Sweden	1	0.3
Other Europe	1	0.3
Non-Europe	69	22.8
Number of hours of training on human rights [5]	450	
Number of employees from Sales, Procurement, Legal and eligible project teams who completed specific e-learning courses on anti-corruption	86	
Percentage of Executive Board Members who received training on anti-corruption policies and procedures, human rights and Market Abuse Regulation (MAR) requirements		100
Percentage of Supervisory Board Members who received training on anti-corruption policies and procedures, human rights and MAR requirements		100

1) Today, security personnel at Borealis sites are exclusively provided by external vendors. In 2023, Borealis has assigned Ethics training (including human rights) to more than 1,500 external contractors, including to security personnel. // 2) DYM SOLUTION CO., LTD and mtm plastics GmbH, mtm compact GmbH as well as Ecoplast Kunststoffrecycling GmbH are excluded from e-learning courses. // 3) Due to the divestment of Fertilizer, Melamine and TEN in the first half of 2023, training figures representing the whole year, the complete annual cycle, are not available and, therefore, are not reported // 5) Human rights training has been mandatorily assigned to the entire Borealis workforce.

Fig. 12: **E-learning schedule**

Training title	Target group	Training description	Frequency
Annual Certification	All white-collar employees	Commitment by each white-collar employee that the Ethics Policy is understood and followed	Annually
Code of Conduct	All employees	Principal rules of the Ethics Policy	Annually
Human Rights	All employees	Human rights risks in business conduct	Every second year
Combating Bribery in Business	Managers, Sales & Procurement	Anti-corruption requirements	Annually
Trade Compliance	Managers, Sales, Procurement, Tax & Customs	Sanctions, embargoes and trade control requirements	Every second year
Issuer Compliance	All Borealis managers and employees who have access to Inside Information	Legal requirements related to the EU Market Abuse Regulation (MAR)	Annually

Outlook

In 2024, Borealis will further strengthen its ability to prevent any type of unethical social behavior within the Group and its suppliers. Amongst other initiatives, the Group will:

- seek Group-wide certification for Social Compliance Standard SA8000 and recertification for ISO 37301 and 37001;
- conduct a human rights risk assessment for DYM's operations in South Korea;
- hold an in-person Ethics Conference for Borealis Ethics Ambassadors and managers; and
- further enhance its social compliance procedures, based on experience gained in 2023.

EU Taxonomy

Goals and Planned Key Actions in 2023

Ensure the Borealis Executive Board's commitment to sustainability, as embedded in the Strategy 2030, is reflected in the "taxonomy-aligned" metrics throughout the coming years
Train key supporters in the relevant business and production functions on the EU Taxonomy
Conduct studies to provide the evidence required for the Do No Significant Harm (DNSH) criteria, to be able to report that all qualified activities are aligned
Evaluate opportunities to include the EU Taxonomy in decision-making processes, such as for large CAPEX projects and acquisition projects

Key Achievements in 2023

Borealis' Executive Board reviewed the current and forecast taxonomy alignment and evaluated which drivers to leverage to increase taxonomy alignment, in line with the Strategy 2030 implementation
EU Taxonomy training developed and offered to all employees via the Sustainability Academy platform
Collected the necessary evidence to qualify Borealis' recycling operations at Ecoplast as taxonomy-aligned
Taxonomy criteria are now part of the decision process in Borealis, especially for investments

Goals and Planned Key Actions for 2024

Continue to work on qualifying more running (sustainable) activities as taxonomy-aligned
Proactively provide expert coaching to decision-makers at the portfolio level

Goals and Planned Key Actions Beyond 2024

Evaluate opportunities for digitalizing the EU Taxonomy reporting process
Increase taxonomy-aligned share of investments

Regulation (EU) 2020/852 established an EU classification system for ecologically sustainable economic activities (EU Taxonomy) which came into force on July 12, 2020. The EU Taxonomy is part of the European Commission's Sustainable Growth Financing Action Plan and a key instrument for the EU to encourage companies, investors and policymakers to channel investments to where they are most needed for sustainable development. The EU Taxonomy Regulation will therefore play an important role in scaling up sustainable investments and implementing the European Green Deal.

The EU Taxonomy has six environmental goals:
- climate change mitigation;
- climate change adaptation,
- sustainable use and protection of water and marine resources;
- transition to a circular economy;
- pollution prevention and control; and
- protection and restoration of biodiversity and ecosystems.

The EU Taxonomy delegated acts established the technical screening criteria for determining when an economic activity contributes substantially to one of these goals. They also determine if that economic activity does not cause any significant harm to any of the other environmental objectives.

Following a request from the European Parliament, the so-called minimum safeguards stated in point c) of Article 3 of the EU Taxonomy Regulation have been implemented. These safeguards ensure that entities carrying out taxonomy-aligned activities also meet certain minimum governance standards and do not violate social norms, as laid out in Article 18 of the EU Taxonomy Regulation. In other words, companies claiming taxonomy-alignment must comply with certain fundamental social and human rights, labor principles and minimum governance standards. If companies cannot show that they have adopted adequate measures to reduce human rights concerns in accordance with international standards, their "green activities" will not be considered as environmentally sustainable (taxonomy-aligned).

Reporting Requirements According to Regulation (EU) 2020/852

Applying the EU Taxonomy enables Borealis to be transparent about its sustainable economic activities and to demonstrate the sustainability performance of all business areas within the Group.

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According to the EU Taxonomy Regulation, Borealis must disclose how, and to what extent, its activities are classified as sustainable. For the Annual Report 2023, Borealis needs to distinguish between three types of economic activities: [1]

- taxonomy-aligned economic activity, which means an economic activity that complies with the requirements laid down in Article 3 of Regulation (EU) 2020/852;
- taxonomy-eligible economic activity, which means an economic activity that is described in the delegated acts, irrespective of whether that economic activity meets any or all of the technical screening criteria laid down in the delegated acts; and
- taxonomy-non-eligible economic activity, which means any economic activity that is not described in the delegated acts.

Approach

Borealis' figures for taxonomy-related activities are derived from the Group's consolidated IFRS financial statements. Subsidiaries that are not fully consolidated and joint ventures are excluded, as required by the EU Taxonomy Regulation. Turnover, CAPEX and OPEX avoid double counting by making sure each posting that is in the scope of the EU Taxonomy is assigned only once. For example, the figures exclude maintenance cost centers that are later allocated to production cost centers.

Turnover

The turnover KPI is based on Borealis' consolidated net sales (→ Financial Report, p. 209). Government grants have been excluded according to ESMA's Advice on Article 8 of the EU Taxonomy Regulation.[2] In general, turnover was linked to the revenue streams of the products or services and assigned to the respective economic activity in the EU Taxonomy Regulation.

CAPEX

CAPEX was derived according to the definition in the → Financial Report, p. 209. CAPEX was assigned to economic activities at project level, based on the Borealis CAPEX reporting. Projects with CAPEX below EUR 0.5 million in 2023 were automatically allocated to the economic activity of the associated location.

OPEX

The OPEX KPI consists of R&D expense, building renovation measures, maintenance and repair costs, other direct expenditure related to day-to-day servicing of assets and short-term leases. Every OPEX category was evaluated individually in the EU Taxonomy assessment.

Minimum Social Safeguards

Additional information on the minimum social safeguards can be found on p.11 and p. 68 regarding the Supervisory Board diversity, p. 69 regarding Executive Board diversity and on p. 113 concerning the gender pay gap.

Taxonomy-Alignment Assessment

Borealis assessed the taxonomy alignment for its activities using available data wherever possible. If the necessary documentation was not available, it was obtained via interviews with Borealis' experts. Borealis' economic activities included in the EU Taxonomy alignment assessment are all related to the environmental objective of climate change mitigation.

Eligible Activities for Borealis and Performance 2023

Borealis' core business consists primarily of economic activities 3.17 "Manufacture of plastics in primary form" (in the Polyolefin (PO) segment) and 3.14 "Manufacture of organic base chemicals" (in the Base Chemicals segment). The Group also derives revenue from activity 5.9 "Material recovery from non-hazardous waste".

For Borealis:

- activity 3.17 represents the manufacturing of resins, plastics materials and non-vulcanizable thermoplastic elastomers, as well as the mixing and blending of resins on a custom basis;
- activity 3.14 mainly relates to the production of high-value chemicals (ethylene and propylene); and
- activity 5.9 refers to the turnover for accepting plastic waste as input material for the mechanical recycling of plastics, at mtm plastics GmbH and Ecoplast Kunststoffrecycling GmbH.

1) See Regulation (EU) 2021/2178 // 2) See: ESMA Final Report, 2021 – note 58

The installation of a photovoltaic plant in Schwechat is shown under economic activity 4.1 "Electricity generation using solar photovoltaic technology" and the leasing of company cars falls under economic activity 6.5 "Transport by motorbikes, passenger cars and light commercial vehicles".

Parts of Base Chemicals production are non-eligible economic activities, namely the phenol and acetone business, as well as Borealis' catalyst business and technology transfer.

Turnover

For Borealis' turnover KPI, 86% can be classified as taxonomy-eligible. The largest share of turnover relates to economic activity 3.17 and reflects the activities of the Polyolefins segment. The second largest turnover share stems from economic activity 3.14, which reflects part of the external revenue of the Base Chemicals business. Activity 5.9 is listed under other eligible activities.

Non-eligible activities include the trading of Borouge products, feedstock trading and the manufacture of non-eligible products, such as phenol and acetone, catalysts or turnover from technology transfer.

During 2023, Borealis obtained previously missing data related to the DNSH criteria for its mechanical recycling sales from Ecoplast, and has therefore qualified these sales as taxonomy-aligned under activity 3.17.

The fossil-based revenue reported under activity 3.17 cannot be claimed as taxonomy-aligned. The eligible turnover reported under activity 3.14 is not taxonomy-aligned, as either the substantial contribution criterion is not fulfilled or the necessary evidences for the DNSH criteria are not available. Borealis will continue to work on this matter in 2024.

CAPEX

For the CAPEX KPI, 86% of Borealis' total CAPEX can be classified as taxonomy-eligible. A major part of CAPEX can be allocated to economic activities 3.14 and 3.17. There are also other investments in taxonomy-eligible economic activities, such as the installation of a photovoltaic power plant in Schwechat or the leasing of company cars.

Of the eligible investments, 27% (23% of total CAPEX) are taxonomy-aligned. The taxonomy-aligned investments are the investments for the Kallo Propane Dehydrogenation Unit 2 (PDH2), the CAPEX for the photovoltaic power plant in Schwechat as well as the CAPEX for the mechanical recycling plant Ecoplast in Wildon. Compared to 2022, activity 3.14 has a lower share of taxonomy-eligible CAPEX (27.0% vs. 58.8%) and activity 3.17 has a higher share of taxonomy-eligible CAPEX (35.6% vs. 15.3%). For activity 3.14, 2022 was a year with very high capital expenditures and the percentage change is explained by the high numbers in 2022. In 2023, for activity 3.17 the capital expenditures for acquisitions in the Polyolefins sector (Rialti, Renasci) as well as investment projects in Kallo, Schwechat and Antwerp contributed to the higher CAPEX compared to 2022.

Fig. 13: **Share of taxonomy-aligned investments (calculated as share of taxonomy-eligible numbers)**

Location	KPI share CAPEX	OPEX	TO	Substantial contribution	DNSH	Minimum social safeguards
Kallo PDH2	26.6%	–	–	✓	✓	✓
Ecoplast	0.1%	0.8%	0.4%	✓	✓	✓
Photovoltaic plant Schwechat	0.1%	–	–	✓	✓	✓

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Fig. 14: **CAPEX plan** [1)]

Environmental objective	Economic activity	CAPEX 2023 in EUR mn	CAPEX 2024–2027 in EUR mn
Climate change mitigation	3.14 Manufacturing of organic base chemicals	277	398

1) CAPEX plan numbers are based on the latest approved business plan whereas time horizon reflects the maximum five-year period for a CAPEX plan mentioned in Annexes 1–5 to the commission delegated regulation (EU) 2020/852.

All of the taxonomy-aligned CAPEX is registered as an addition to property, plant and equipment. According to the definition in point 1.1.2.2. of Annexes 1–5 to Regulation (EU) 2020/852, the CAPEX for the photovoltaic power plant in Schwechat and for Ecoplast belongs to "(a) related to assets or processes that are associated with Taxonomy-aligned economic activities" whereas the Kallo PDH2 belongs to "(b) part of a plan to expand Taxonomy-aligned economic activities or to allow Taxonomy-eligible economic activities to become Taxonomy-aligned". The remaining 73% of taxonomy-eligible investments (77% of total CAPEX) cannot be claimed as aligned, as the majority of investments do not fulfill the substantial contribution criterion.

Aligned and eligible CAPEX can be split into additions to the different asset classes as per the table below.

Fig. 15: **Additions split per asset class and economic activity**

EUR mn	Aligned	Eligible (not-aligned)	Not eligible	Total
Additions to property, plant & equipment				**954**
3.14. Manufacture of organic basic chemicals	277	221		498
3.17. Manufacture of plastics in primary form	1	362		363
4.1. Electricity generation using solar photovoltaic technology	1			1
6.5. Transport by motorbikes, passenger cars and light commercial vehicles		3		3
Non-eligible			89	89
Additions to capitalized development costs				**39**
3.14. Manufacture of organic basic chemicals		3		3
3.17. Manufacture of plastics in primary form		17		17
Non-eligible			19	19
Additions to other intangible assets				**223**
3.14. Manufacture of organic basic chemicals		105		105
3.17. Manufacture of plastics in primary form		54		54
Non-eligible			64	64

As the Kallo PDH2 project is still in the construction phase, there is no turnover or OPEX linked to it.

OPEX
For operational expenditures, 90% within the scope of the EU Taxonomy Regulation are related to taxonomy-eligible activities. For the OPEX KPI, the different cost types were assessed separately, so the shares of OPEX attributable to eligible activities vary between the different cost types.

Plant maintenance and repair costs account for the largest share of the taxonomy-eligible OPEX (EUR 215 million). Short-term leases amount to EUR 2.2 million and are fully assigned to eligible activities, with the difference from the reported figure in → Financial Report, p. 209 stemming mainly from eliminations of short-term leases for Group functions. R&D costs total EUR 4.6 million, matching the non-capitalized R&D cost as part of the R&D cost reported in → Financial Report, p. 209, and 55% is assigned to eligible activities. In line with the turnover KPI, Borealis declares the OPEX of Ecoplast as taxonomy-aligned.

Outlook
Borealis' Executive Board has a clear commitment to sustainability, as embedded in the Strategy 2030, forming the core of all Borealis' current and future operations. This commitment will be reflected in the taxonomy-aligned numbers over the coming years, as they are projected to increase steadily, especially for turnover and OPEX.

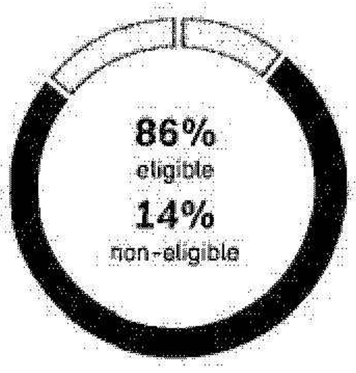
One of Borealis' key goals for 2024 is to obtain any missing information, in order to raise the taxonomy-alignment further. The Group also intends to keep involving key supporters in the relevant business and production functions.

The biggest lever to increase taxonomy-alignment in the long run is making taxonomy-aligned investments, which lead to taxonomy-aligned turnover and OPEX. As Borealis executes its Strategy 2030, it expects to increase the alignment KPI, mainly driven by a higher share of circular capacities. Therefore, beyond 2024, Borealis' goal is to increase its taxonomy-aligned investments. Another medium-term goal beyond 2024 is to evaluate opportunities for digitalizing the EU Taxonomy reporting process.

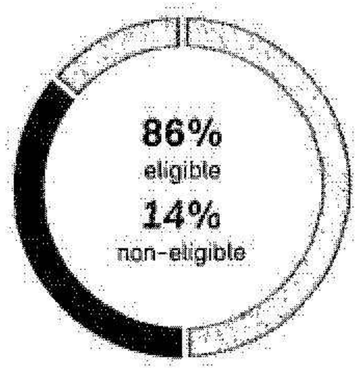
The publication of the EU Taxonomy KPIs according to the reporting forms as specified in Delegated Regulation 2023/2486 can be found in → chapter EU Taxonomy KPIs, p. 98.

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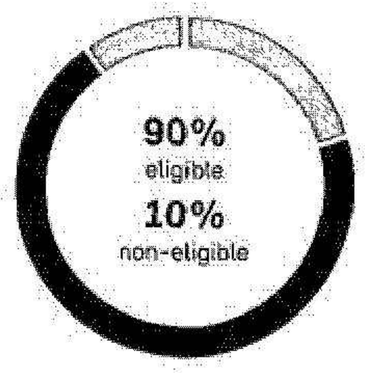
Fig. 16: **Share of eligible and non-eligible economic activities of the Borealis Group 2023**



Turnover	EUR mn
Manufacture of organic base chemicals	785.5
Manufacture of plastics in primary form	5,289.4
Other eligible activities [1]	3.6
Non-eligible [2]	1,003 .7
Total	**7,082.2**

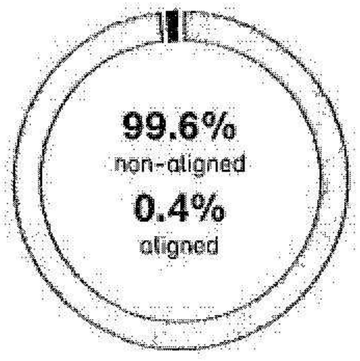


CAPEX	EUR mn
Manufacture of organic base chemicals	605.6
Manufacture of plastics in primary form	434.0
Other eligible activities [1]	3.4
Non-eligible [2]	172.6
Total	**1,215.6**

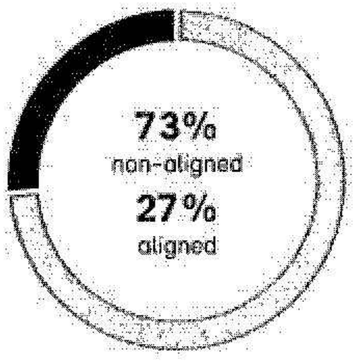


OPEX	EUR mn
Manufacture of organic base chemicals	49.8
Manufacture of plastics in primary form	170.2
Non-eligible [2]	24.0
Total	**244.0**

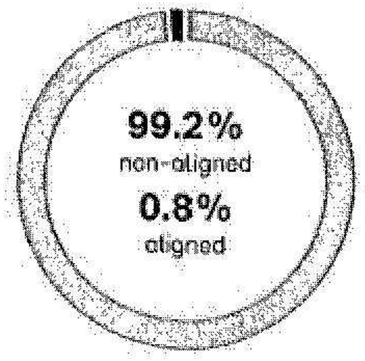
Fig. 17: **Share of aligned and non-aligned economic activities of the Borealis Group 2023**



Turnover	%
non-aligned	99.6
aligned	0.4



CAPEX	%
non-aligned	73
aligned	27



OPEX	%
non-aligned	99.2
aligned	0.8

1) Other eligible activities: 4.1 Electricity generation using from solar photovoltaic technology; 5.9 Material recovery from non-hazardous waste; 6.5 Transport by motorbikes, passenger cars, light commercial vehicles // 2) Phenol & acetone, Borouge products trading, feedstock trading, Innotech catalyst business & technology transfers

EU Taxonomy KPIs

EU Taxonomy overview

in EUR mn	2023					
	Turnover		CAPEX		OPEX	
Environmentally sustainable (taxonomy-aligned) activities	24	0.3%	279	22.9%	2	0.7%
Taxonomy-eligible, but not taxonomy-aligned activities	6,054	85.5%	764	62.9%	218	89.4%
Taxonomy-non-eligible activities	1,004	14.2%	173	14.2%	24	9.8%
Total	**7,082**	**100.0%**	**1,216**	**100.0%**	**244**	**100.0%**

in EUR mn	2022					
	Turnover		CAPEX		OPEX	
Environmentally sustainable (taxonomy-aligned) activities	–	0.0%	205	16.1%	–	0.0%
Taxonomy-eligible, but not taxonomy-aligned activities	7,761	85.4%	950	74.4%	204	89.4%
Taxonomy-non-eligible activities	1,324	14.6%	121	9.5%	24	10.6%
Total	**9,085**	**100.0%**	**1,276**	**100.0%**	**228**	**100.0%**

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EU Taxonomy – summary per environmental goal

In %	2023					
	Proportion of turnover/Total turnover		Proportion of CAPEX/Total CAPEX		Proportion of OpEx/Total OpEx	
	Taxonomy-aligned per objective	Taxonomy-eligible per objective	Taxonomy-aligned per objective	Taxonomy-eligible per objective	Taxonomy-aligned per objective	Taxonomy-eligible per objective
CCM	0.3	85.5	22.9	62.9	0.7	89.4
CCA	–	–	–	62.9	–	89.4
WTR	–	–	–	–	–	–
CE	–	–	–	–	–	–
PPC	–	–	–	–	–	–
BIO	–	–	–	–	–	–

In %	2022					
	Proportion of turnover/Total turnover		Proportion of CAPEX/Total CAPEX		Proportion of OPEX/Total OPEX	
	Taxonomy-aligned per objective	Taxonomy-eligible per objective	Taxonomy-aligned per objective	Taxonomy-eligible per objective	Taxonomy-aligned per objective	Taxonomy-eligible per objective
CCM	0.0	85.4	16.1	74.4	0.0	89.4
CCA	–	–	–	74.4	–	89.4

Proportion of turnover from products or services associated with economic activities that qualify as environmentally sustainable under Articles 3 and 9 of the Taxonomy Regulation – disclosure covering year 2023

		2023		Substantial contribution criteria						
Economic activities (1)	Code(s) (2)	Turnover (3)	Proportion of turnover 2023 (4)	Climate change mitigation (5)	Climate change adaptation (6)	Water and marine resources (7)	Pollution (8)	Circular economy (9)	Biodiversity and ecosystems (10)	
		EUR mn	%	Y; N; N/EL	Y; N; N/EL	Y; N; N/EL	Y; N; N/EL	Y; N; N/EL	Y; N; N/EL	
A. Taxonomy-eligible activities										
A.1 Environmentally sustainable activities (Taxonomy-aligned)										
Manufacture of plastics in primary form	CCM 3.17.	24.1	0.3	Y	N	N/EL	N/EL	N/EL	N/EL	
Turnover of environmentally sustainable activities (Taxonomy-aligned) (A.1)		**24.1**	**0.3**	**Y**	**N**	**N/EL**	**N/EL**	**N/EL**	**N/EL**	
Of which Enabling										
Of which Transitional		24.1	0.3							
A.2 Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities)				**EL; N/EL**	**EL; N/EL**	**EL; N/EL**	**EL; N/EL**	**EL; N/EL**	**EL; N/EL**	
Manufacture of organic base chemicals	CCM 3.14.	785.5	11.1	EL	N/EL	N/EL	N/EL	N/EL	N/EL	
Manufacture of plastics in primary form	CCM 3.17.	5,265.2	74.3	EL	N/EL	N/EL	N/EL	N/EL	N/EL	
Material recovery from non-hazardous waste	CCM 5.9.	3.6	0.1	EL	N/EL	N/EL	N/EL	N/EL	N/EL	
Turnover of Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities) (A.2)		**6,054.4**	**85.5**							
A. Turnover of Taxonomy-eligible activities (A.1 + A.2)		**6,078.5**	**85.8**							
B. Taxonomy-non-eligible activities										
Turnover of Taxonomy-non-eligible activities (B)		1,003.7	14.2							
Total (A + B)		**7,082.2**	**100.0**							

Y: Yes, Taxonomy-eligible and Taxonomy-aligned activity with the relevant environmental objective // N: No, Taxonomy-eligible but not Taxonomy-aligned activity with the relevant environmental objective // EL: eligible, Taxonomy-Eligible but not environmentally sustainable activities // N/EL: not eligible, Taxonomy non-eligible activity for the relevant environmental objective

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	DNSH criteria (Does not significantly harm)									
	Climate change mitigation (11)	Climate change adaptation (12)	Water and marine resources (13)	Circular economy (14)	Pollution (15)	Biodiversity and ecosystems (16)	Minimum safeguards (17)	Proportion of Taxonomy aligned (A.1.) or eligible (A.2.) turnover year 2022 (18)	Category (enabling activity) (19)	Category (transitional activity) (21)
	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	%	E	T
		Y	Y	Y	Y	Y	Y	–		T
		Y	**Y**	**Y**	**Y**	**Y**	**Y**	–		
								–		T

Proportion of CAPEX from products or services associated with economic activities that qualify as environmentally sustainable under Articles 3 and 9 of the Taxonomy Regulation – disclosure covering year 2023

		2023		Substantial contribution criteria						
Economic activities (1)	Code(s) (2)	CAPEX (3)	Proportion of CAPEX (4)	Climate change mitigation (5)	Climate change adaptation (6)	Water and marine resources (7)	Circular economy (8)	Pollution (9)	Biodiversity and ecosystems (10)	
		EUR mn	%	Y; N; N/EL	Y; N; N/EL	Y; N; N/EL	Y; N; N/EL	Y; N; N/EL	Y; N; N/EL	
A. Taxonomy-eligible activities										
A.1 Environmentally sustainable activities (Taxonomy-aligned)										
Manufacture of organic basic chemicals	CCM 3.14.	277.1	22.8	Y	N	N/EL	N/EL	N/EL	N/EL	
Manufacture of plastics in primary form	CCM 3.17.	1.0	0.1	Y	N	N/EL	N/EL	N/EL	N/EL	
Electricity generation using solar photovoltaic technology	CCM 4.1.	0.8	0.1	Y	N	N/EL	N/EL	N/EL	N/EL	
CAPEX of environmentally sustainable activities (Taxonomy-aligned) (A.1)		**278.9**	**22.9**	**Y**	**N**	**N/EL**	**N/EL**	**N/EL**	**N/EL**	
Of which Enabling										
Of which Transitional		278.1	22.9							
A.2 Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities)				EL; N/EL	EL; N/EL	EL; N/EL	EL; N/EL	EL; N/EL	EL; N/EL	
Manufacture of organic base chemicals	**CCM /** CCA 3.14.	328.5	27.0	EL	EL	N/EL	N/EL	N/EL	N/EL	
Manufacture of plastics in primary form	**CCM /** CCA 3.17.	433.0	35.6	EL	EL	N/EL	N/EL	N/EL	N/EL	
Transport by motorbikes, passenger cars, light commercial vehicles	**CCM /** CCA 6.5.	2.6	0.2	EL	EL	N/EL	N/EL	N/EL	N/EL	
CAPEX of Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities) (A.2)		**764.1**	**62.9**							
Total (A.1 + A.2)		**1,043.0**	**85.8**							
B. Taxonomy-non-eligible activities										
CAPEX of Taxonomy-non-eligible activities (B)		172.6	14.2							
Total (A + B)		**1,215.6**	**100.0**							

Y: Yes, Taxonomy-eligible and Taxonomy-aligned activity with the relevant environmental objective // N: No, Taxonomy-eligible but not Taxonomy-aligned activity with the relevant environmental objective // EL: eligible, Taxonomy-Eligible but not environmentally sustainable activities // N/EL: not eligible, Taxonomy non-eligible activity for the relevant environmental objective

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	DNSH criteria (Does not significantly harm)									
	Climate change mitigation (11)	Climate change adaptation (12)	Water and marine resources (13)	Circular economy (14)	Pollution (15)	Biodiversity and ecosystems (16)	Minimum safeguards (17)	Proportion of Taxonomy aligned (A.1.) or eligible (A.2.) CAPEX, year 2022 (18)	Category (enabling activity) (19)	Category (transitional activity) (20)
	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	%	E	T
		Y	Y	Y	Y	Y	Y	15.7		T
		Y	Y	Y	Y	Y	Y			T
		Y	Y	Y	Y	Y	Y	0.3		
		Y	**Y**	**Y**	**Y**	**Y**	**Y**	**16.1**		
								15.7		T
								58.8		
								15.3		
								0.3		
								74.4		
								90.5		

Proportion of OPEX from products or services associated with economic activities that qualify as environmentally sustainable under Articles 3 and 9 of the Taxonomy Regulation – disclosure covering year 2023

		2023		Substantial contribution criteria						
Economic activities (1)	Code(s) (2)	OPEX (3)	Proportion of OPEX (4)	Climate change mitigation (5)	Climate change adaptation (6)	Water and marine resources (7)	Circular economy (8)	Pollution (9)	Biodiversity and ecosystems (10)	
		EUR mn	%	Y; N; N/EL	Y; N; N/EL	Y; N; N/EL	Y; N; N/EL	Y; N; N/EL	Y; N; N/EL	
A. Taxonomy-eligible activities										
A.1 Environmentally sustainable activities (Taxonomy-aligned)										
Manufacture of plastics in primary form	CCM 3.17.	1.7	0.7	Y	N	N/EL	N/EL	N/EL	N/EL	
OPEX of environmentally sustainable activities (Taxonomy-aligned) (A.1)		**1.7**	**0.7**	**Y**	**N**	**N/EL**	**N/EL**	**N/EL**	**N/EL**	
Of which Enabling										
Of which Transitional		1.7	0.7							
A.2 Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities)				EL; N/EL	EL; N/EL	EL; N/EL	EL; N/EL	EL; N/EL	EL; N/EL	
Manufacture of organic base chemicals	**CCM /** CCA 3.14.	49.8	20.4	EL	EL	N/EL	N/EL	N/EL	N/EL	
Manufacture of plastics in primary form	**CCM /** CCA 3.17.	168.5	69.0	EL	EL	N/EL	N/EL	N/EL	N/EL	
OPEX of Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities) (A.2)		**218.3**	**89.4**							
Total (A.1 + A.2)		**220.0**	**90.2**							
B. Taxonomy-non-eligible activities										
OPEX of Taxonomy-non-eligible activities (B)		24.0	9.8							
Total (A + B)		**244.0**	**100.0**							

Y: Yes, Taxonomy-eligible and Taxonomy-aligned activity with the relevant environmental objective // N: No, Taxonomy-eligible but not Taxonomy-aligned activity with the relevant environmental objective // EL: eligible, Taxonomy-Eligible but not environmentally sustainable activities // N/EL: not eligible, Taxonomy non-eligible activity for the relevant environmental objective

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	DNSH criteria (Does not significantly harm)									
	Climate change mitigation (11)	Climate change adaptation (12)	Water and marine resources (13)	Circular economy (14)	Pollution (15)	Biodiversity and ecosystems (16)	Minimum safeguards (17)	Proportion of Taxonomy aligned (A.1.) or eligible (A.2.) OPEX, year 2022 (18)	Category (enabling activity) (19)	Category (transitional activity) (20)
	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	%	E	T
		Y	Y	Y	Y	Y	Y	–		T
		Y	Y	Y	Y	Y	Y	–		
								–		T
								18.1		
								71.3		
								89.4		
								89.4		

Social

People & Culture

Goals and Planned Key Actions in 2023

Employee Experience
- Update and align Borealis' employer value proposition and employer brand, to fit the Group's new strategic direction, and increase employer brand awareness by expanding social media usage
- Continue to launch wellbeing initiatives Group-wide, as part of a common annual calendar
- Finalize the diversity, equity and inclusion (DE&I) strategy and roll it out across the organization

New Ways of Working
- Implement the new Purpose, Values and behaviors throughout the organization, as an important part of the Group's transformation
- Focus on increased flexibility in relation to hybrid working and reward

Organizational Evolution
- Introduce strategic workforce planning to translate Borealis' strategy into a strategic workforce plan
- Implement more elements of Borealis' digitalization journey as self-service workflows
- Support fair remuneration, by implementing OMV Group-wide job families and title structures, and a harmonized OMV Group grading framework

Growing Talent
- Launch a cross-company leadership program, to support transformational leadership and competences
- Enrich the Sustainability Academy program
- Create a modern and fit-for-purpose internal candidate testing toolbox, to expand the assessment possibilities and skills during the selection process

Key Achievements in 2023

- Updated and launched employer value proposition and employer brand, and increased people-related content on Borealis' LinkedIn page
- Implemented annual wellbeing calendar, further developed the wellbeing platform and actively promoted the Group's Employee Assistance Programs
- DE&I Vision and Ambition 2030 defined for whole OMV Group and DE&I Volunteer Network established

- Cascaded the Purpose into the organization and used it to support the creation of the new Values, launched in Q2 2023
- Used employee feedback to revise the Hybrid Workplace Group Guidance, increasing the flexibility to work from home to 50%

- Designed strategic workforce planning approach and format, successfully piloted it in three businesses, carried out training and introduced new analytics tool
- Implemented employee self-service workflows, mainly in the local Rewards area
- Prioritized evaluation of all roles in Borealis that did not have a grade, with the intention to assign approximately 1,600 positions to Borealis grades in nine locations

- Launched new Transformational Leadership Competencies and created a new online learning path for leaders
- Added four learning paths to the Sustainability Academy
- Postponed the candidate testing toolbox project to reflect workload priorities, but enhanced the graduate program using modern testing tools to improve the candidate experience

Goals and Planned Key Actions for 2024

Employee Experience
- Embed new employer value proposition and employer branding and build an Employer Brand Ambassadors network
- Continue to deploy the wellbeing platform and calendar activities
- Implement DE&I Roadmap and annual calendar of events and activities, to address matters in this area, further foster awareness and offer an improved overall employee experience
- Continue the digitalization journey in People & Culture

Growing Talent
- Explore the implementation of an internal marketplace, to stimulate employee mobility and learning within the Group
- Support and promote low-cost learning and improve the quantity and quality of Individual Development Plans

Goals and Planned Key Actions Beyond 2024

Employee Experience
- Develop and deploy a strategy to constantly receive qualified employee feedback
- Progress towards the 2030 DE&I Ambitions:
  - Increase the share of women at management level to 30%
  - Increase the share of international management to 65%
  - Maintain the share of executives with international experience at 75%
  - Increase support for parents, different generations and employees with disabilities

Growing Talent
- Implement and optimize the internal marketplace initiative
- Explore the use of AI tools in talent acquisition
- Optimize the onboarding experience, including for internal moves
- Use more standard testing tools to enhance qualitative and informed hiring decisions
- Increase learning hours to 30 per person by 2030

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Goals and Planned Key Actions for 2024	Goals and Planned Key Actions Beyond 2024
New Ways of Working – Enable employees to work from a different location abroad	**New Ways of Working** – Continuously enhance the flexibility of the workplace and the offered rewards – Define where equal pay and pay transparency fit into the Group's broader Rewards and DE&I agendas and ensure that pay structures and policies follow good practices
Organizational Evolution – Selectively roll-out strategic workforce planning – Support fair remuneration, by implementing job families and title structures (with a top-down implementation approach), and a harmonized grading framework.	**Organizational Evolution** – Complete full roll-out of strategic workforce planning
Transformational Leadership – Embed and strengthen transformational leadership by rolling out of the new leadership profile	**Transformational Leadership** – Embed and strengthen transformational leadership through training and experience sharing

Borealis is proud of its culture and the employees who live it day by day at the Group's locations. People are key to Borealis' daily achievements.

Governance

Borealis' global People & Culture (P&C) organization provides people-related support and guidance to leaders and employees throughout their careers. It is led by the Vice President (VP) P&C, who reports to the CEO. P&C provides the governance frame and services including talent acquisition and onboarding, organizational and individual development, change management, and compensation and benefits.

Together with the Executive Board, the VP P&C identifies how P&C can best support the Group's strategy and initiatives. This informs Borealis' P&C Strategy 2030, which is titled "People Make it Happen". The strategy has four pillars: employee experience, new ways of working, organizational evolution and growing talent, all of which are powered by transformational leadership (see Fig. 18, p. 108).

From January 1, 2024, a new organizational P&C structure to meet future challenges and needs became effective. This will further support the implementation of the P&C strategy.

The Borealis P&C Handbook sets out the Group's P&C governance. This is managed through the Borealis People Policy and a set of Group procedures and operative instructions, covering areas such as performance management, including bonuses and development, the Borealis Incentive Plan, succession planning and talent management. The Borealis Management System (→ chapter Sustainability Governance, p. 68) collates all these documents in one system.

Borealis measures to talent acquisition, performance management, mobility, people engagement and data quality via key performance indicators (KPIs) in the P&C Dashboard. Each of the four pillars in the P&C strategy also has a mix of leading and lagging KPIs.

Based on the output from the Remuneration Committee and the Pension & Benefits Council, the Executive Board gives P&C a mandate to design new concepts for remuneration and to propose changes when needed. The Pension & Benefits Council, which is chaired by the CFO, sets the overall principles for employee benefit programs, monitors their implementation across the Group and decides on significant changes to them.

Fig. 18: **People and Culture Strategy**

1. Employee Experience

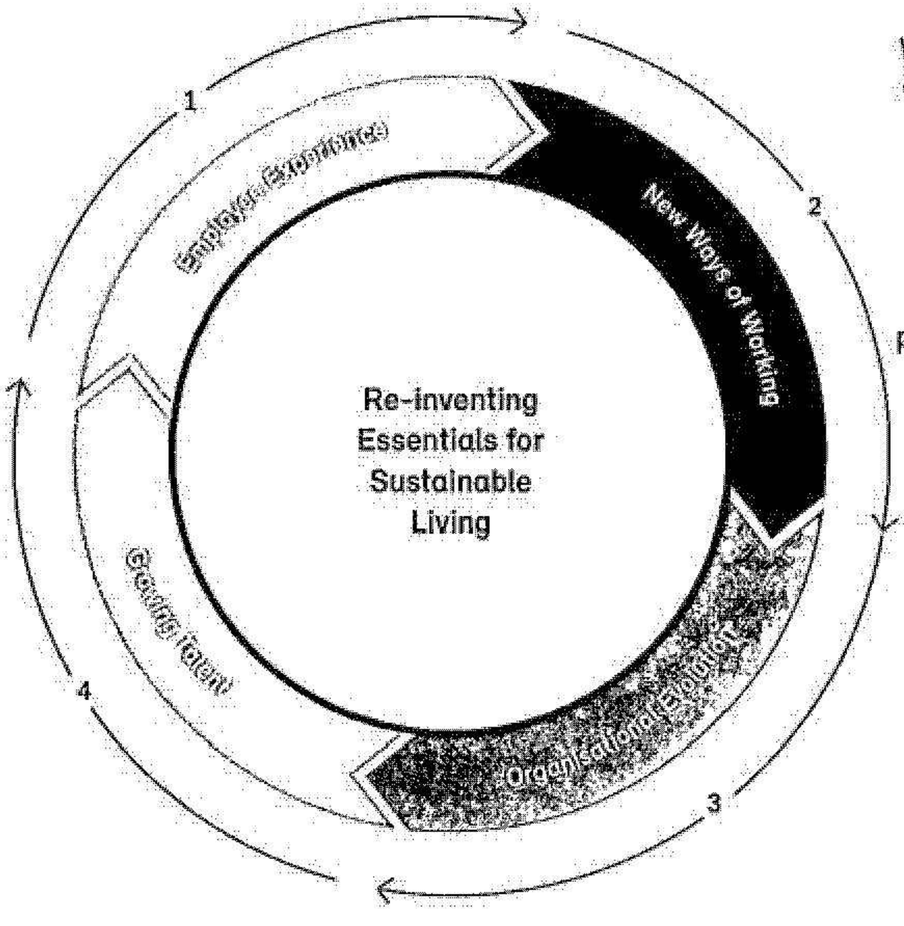
We shape a positive employee experience. Enabling everybody to perform at their best and make a difference

We enhance wellbeing and engagement. Fostering an inclusive and purposeful workplace

2. New Ways of Working

We embrace new forms of collaboration and working. Meeting the changing needs of our people and the organization supported by our high-performance culture

We take ownership and foster a speak-up culture. Creating an atmosphere of trust to pave the way for improvement and innovation



4. Growing Talent

We attract and develop talent, promoting diversity and mobility. Driving sustainable performance across the Group via re- and upskilling opportunities

We strengthen leadership capabilities and foster self-driven learning. Enabling operational excellence, as well as our transformation and growth ambitions

3. Organizational Evolution

We future proof our structure, capabilities and culture. Shaping an adaptable, innovative and resilient organization

We stimulate organizational effectiveness. Ensuring lean processes, efficient interfaces and digital solutions

Powered by Transformational Leadership

Collective Bargaining Agreements
In Borealis, 82% of all employees are covered by collective bargaining agreements. In some countries there are no comparable agreements, especially in Eastern Europe where these mechanisms do not exist. However, Borealis adheres to the applicable industry terms and conditions.

Employee Experience
The P&C Information System
Borealis' core people administration is centrally managed using SAP. The system includes payroll, organizational management, time management, competence management, merit and long-term incentive plans, as well as data on all employees. Digital approval processes support a state-of-the-art employee experience.

Borealis also uses SuccessFactors, a cloud solution interfaced with the SAP system, to help employees and leaders make better use of important P&C processes. SuccessFactors includes Employee Profile, Learning, Succession Planning and Talent Management, Performance and Recruitment modules.

Employee Engagement
Borealis runs open forums and town halls, where all employees are invited to meet Executive Board members and senior management, receive updates and ask questions. Common topics discussed include the Group's financial performance and Group initiatives. Borealis also regularly uses other information and engagement channels, including announcements via the intranet, leadership conferences followed by leaders cascading information to their teams, and Executive Board Open Forums held by the CEO, another Executive Board member or a VP. These channels were still important during 2023, to keep employees informed about economic developments.

Since 2020, Borealis has also offered employees the opportunity to provide feedback through the annual Pulse Check, a short employee survey with specific questions. The 2023 Pulse Check again covered the whole OMV Group, enabling Borealis to understand employee engagement and drive meaningful actions (including changes of procedures if needed) based on lessons learned sessions with the teams. Within Borealis, the 2023 Pulse Check achieved

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a 3-percentage point increase in response rate from 77% to 80%, and the Group managed to keep the engagement rate stable, while navigating through its transformation. Nevertheless, this result is not satisfactory and in-depth analysis and action plans were defined in collaboration with the Group's people.

Employee Consultation, Negotiation and Information on Organizational Changes

Borealis adheres to the legal requirements for consultation and negotiations, as part of the collective bargaining embedded in European, national and/or sectoral collective agreements.

Borealis is part of OMV Group's European Works Council (EWC), which cooperates closely with the trade unions representing employees. The Corporate Cooperation Council (CCC) was Borealis' previous forum for exchanging information between the works councils at its locations and top management. From January 1, 2023, the CCC was dissolved and a Borealis subcommittee in the OMV Group EWC has been formed, to handle social topics applicable only to Borealis' employees. This continues the Group's constructive cooperation with its employees and ensures there is sufficient focus on Borealis-specific changes, projects and initiatives that require employee representatives to be informed or consulted.

Significant operational changes affecting employees and their representatives are discussed and aligned through the works councils before implementation. For example, in some locations this could entail the entitlement to form written advice following a consultation approach. In smaller locations, where there are no works councils or employee representatives, the alignment is done with the location leader or representative. There is no common minimum notice period for operational changes throughout the Group and the approach varies depending on the scale and impact of the change and in line with the respective national legal obligations.

Employee Wellbeing

In 2023, Borealis increased its efforts to reach all employees with wellbeing initiatives and to standardize its approach. This included developing and launching a brand name (Care2) for the Group's wellbeing initiatives, to give them a strong and recognizable identity. The brand name links to the Group's values (see below) and to a well-established concept (Take2) from Borealis' Safety standards.

Borealis continued to organize numerous local wellbeing initiatives, to ensure the topic is brought to the attention of all employees. These included massages and yoga sessions, healthy lifestyle workshops, mental health apps, psychological support via external professionals and special rates for gyms.

These activities were complemented by Borealis' annual wellbeing calendar, ensuring Group-wide focus on central wellbeing themes. These themes included a Group-wide step challenge, team dialogues to support social interactions, and theme days on happiness and mind-body wellness. Each year, the calendar will contain both similar and new activities and focus topics, reflecting employee needs at the time.

The Group has Employee Assistance Programs, which enable employees to access support in areas such as coaching and consulting in physical and mental health, professionally as well as privately. During the year, Borealis actively promoted the programs, to raise awareness of the help available.

Strengthening Borealis' Culture

Borealis believes that building the right culture creates competitive advantage, by harnessing behaviors that will lead to future business success. Having clear values underpins a strong culture and signals what is important to everyone in the organization.

In April 2023, new Values were launched. While the Values are common to all three OMV Group companies, they strongly reflect Borealis' culture and employees. The new Values were designed to be straightforward, easy to remember and, most importantly, simple to put into practice.

The Values are:

- **We Care.** Considering the impact of everything we do.
  We show respect, speak up and act responsibly towards each other, our customers and the environment
- **We're Curious.** Defining tomorrow by welcoming new perspectives today.
  We learn by being inclusive, asking questions, sharing our knowledge and having the courage to try new things
- **We Progress.** Overcoming obstacles and finding solutions to deliver high performance.
  We take ownership, trusting and empowering each other to make bold decisions to deliver safely and at speed.

To be effective, the Values need to be well-embedded in the organization and a tangible part of employees' daily lives. To achieve this, Borealis supported the launch of the Values with traditional communication campaigns and a range of other initiatives. These included running tailored team reflection sessions and creating a network of individuals throughout the Group to act as change agents, by cascading and role modeling the Values, both formally and informally. The Group also ran leadership activation sessions, which used behavioral experimentation, peer learning and storytelling to solve real-world business challenges by applying the new Values. This resulted in more than 120 active Values experiments across the OMV Group during Q2 2023.

Diversity, Equity & Inclusion (DE&I)

Diversity and equity of opportunity are integral elements of Borealis' open and inclusive culture. Borealis' DE&I journey began in 2020 and has gained momentum as a result of increasingly close alignment with the OMV Group, resulting in a common DE&I framework and a joint program of activities and events. In 2023, Borealis, OMV and OMV Petrom further aligned their ambitions by defining a joint DE&I vision.

OMV Group DE&I Vision

We want to become an organization where our differences are embraced, and our diversity of thought and experience is used as a catalyst for growth and creativity. We will actively remove barriers to provide equitable opportunity, allowing each one of us to grow and contribute to the success of our companies. We will build a culture of trust and respect, working together to ensure an inclusive and safe space for everyone to be their full selves.

Borealis' approach to increasing diversity includes a continuous focus on encouraging more women to join all levels of the organization. This includes:

- engaging with national institutions such as universities and chemistry schools; and
- actively encouraging line managers to nominate women to take part in Borealis' talent programs.

DE&I is also becoming a more prominent discussion topic in the Group's forums, management meetings and works councils, which fosters insights and accelerates the journey. Borealis' DE&I focus goes beyond gender and includes, but is not limited to, generations; internationality; employees with special needs or impairment; parents and caregivers; and acting as Allies to LGBTQI+ colleagues. This broader scope has been made possible by leveraging the OMV Group's resources and a growing pool of DE&I Volunteers and Ambassadors, from every part of the Group's operations and workforce. Together with them, Borealis is developing a DE&I Transformation Roadmap and delivering an annual calendar of DE&I activities to raise awareness, shift perspectives, and cultivate a curious and inclusive mindset throughout the workforce. This will enable Borealis to access the full breadth of thought and experience available in the organization.

Diversity and employee engagement goals are included in the Group Scorecard to track the effectiveness of the actions taken, which determines management bonuses, and as part of the ESG criteria determining rewards under the Long Term Incentive Plan (LTI), to promote the Group's long-term development. As Borealis is positively improving, the Group's lessons learned show no mitigating actions need to be taken.

Data Protection

Borealis ensures that it protects employee data by following a clearly defined data protection procedure, outlined in an Work Instruction specifically for P&C.

The Work Instruction covers P&C authorization and defines, for example, who has access to which P&C data and how to request authorization and approval workflows. Borealis also ensures that it complies with the 8th EU Directive, which requires the Group to monitor critical authorizations such as salary data and ensure segregation of duties.

P&C closely aligns with the Group Data Protection Experts in the Legal function, to regularly follow up on data protection issues and ensure ongoing training for relevant stakeholders. Trust Arc is the Group's guiding tool for documenting General Data Protection Regulation (GDPR)-relevant processes. The Group also continuously aligns with OMV on data protection topics and, in particular, on intercompany data exchange matters. The Group has a common process for new IT applications, to ensure GDPR conformity.

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Growing Talent

Training and Development

Borealis looks to routinely train and develop employees, as well as external people who work with and for the Group. Providing appropriate training for functional and workplace skills that are rooted in Borealis' values, safety and ethics ambitions helps the Group to protect the health and safety of all employees, conduct business ethically and ensure production processes and products are safe. It also helps employees to advance their careers within Borealis. Some training programs are developed and delivered jointly across the OMV Group, such as global coaching and language offers, and the Online Learning Library provided by LinkedIn Learning.

Every employee has a mandatory annual goal setting dialogue with their line manager, where they set goals for the year ahead, analyze skills gaps and define an Individual Development Plan (IDP), which includes the employee's training needs. Employees with performance gaps have mandatory Performance Improvements Plans.

Training needs are also identified using Borealis' Competence Profiles. These exist for most technical roles and enable the Group to assess employees' skill levels and gaps. The Group has reviewed the Competence Profiles to ensure they continue to fit the Group strategy. Competences are also a basis for the new process of strategic workforce planning.

When new mandatory e-learning solutions are required, they are developed with the relevant internal customers and business owners and reviewed and steered by the Executive Board. Borealis also regularly updates existing training programs, such as the online learning package "Winning Work Skills" through LinkedIn Learning, and the similar "Accelerate Leadership" package, aimed at the leadership level.

Borealis has continued to broaden its sustainability training. This includes expanding the Sustainability Academy, which provides a comprehensive set of training courses that are appropriate to employees' specific roles. In 2023, four new learning packages were released: Climate Change and ESG; Circular Economy and Sustainable Products; Human Rights; and Hydrogen.

The Group has also begun providing an employee guide to sustainability, as a selection of LinkedIn Learning courses, as well as a similar course aimed at the leadership level. When an employee's job at Borealis ends because of retirement or termination of employment, the Group offers transition assistance programs to facilitate their continued employability and the management of career endings.

Fig. 19: **Average hours of training by gender and by employee category in 2023** [1]

hours	Female	Male
BC/PO		
Senior leaders	20	21
Managers	30	29
Team leaders	35	40
Experts	25	27
Administration	24	29
Blue-collar	23	29
Fertilizers, Melamine & TEN [2]		
Senior leaders	0	2
Managers	4	6
Team leaders	11	9
Experts	4	65
Administration	12	8
Blue-collar	10	9

1) DYM SOLUTION CO., LTD, mtm compact GmbH, mtm plastics GmbH, Rosler Group, Rialti S.p.A. and Renasci N.V. are excluded from e-learning courses. // 2) Due to the divestment, only the first half of the year to June 30, 2023 is reported. The figures are, therefore, not fully comparable

Talent Acquisition

To help Borealis attract and recruit the talent of tomorrow, even in difficult markets, the Group promotes diversity and mobility, and focuses on providing a positive candidate experience in every interaction with Borealis. Activities to attract new talent range from proactive talent sourcing and targeted partnerships with external organizations, schools and universities, to using innovative interviewing tools and personal interaction with all stakeholders involved in the process. This enables candidates to experience Borealis' employer brand, values and culture throughout the hiring process.

Fig. 20: **Number of employees participating in group-wide leadership program** [1) 2)]

	Female	Male
Leadership training		
Borealis PO overall	80	136

1) Talent programs: Pool 1, Pool 2, Pool 3, Experts. Leadership programs: IMD Leading for the Future, New Leaders program, Shenergy // 2) Due to the divestment in the first half of 2023, Fertilizer, Melamine and TEN is excluded from this figure.

Fig. 21: **Percentage of total employees by gender and by employee category who received a regular performance and career development review** [1) 2) 3) 4) 5)]

%	Female	Male
BC/PO		
Senior leaders	87.50	70.77
Managers	86.88	87.02
Team leaders	89.58	83.20
Experts	81.37	81.79
Administration	76.01	75.47
Blue-collar	59.39	60.56

1) As the performance and career development cycle ends on March 31, figures are only available from the previous cycle (2022). The rate is influenced by employees that are not eligible for a bonus (e.g. new hires in Q4) and therefore did not participate in performance management within the period. // 2) Numbers are correct to two decimal places in order to maintain granularity. // 3) Employee category grade refers to the internal role classification system (grade 1 to 21): Senior leaders: all line managers grade 16 and above. Managers: all line managers grade 12 to grade 15. Team leaders: all line managers grade 11 and below. Experts: all non-line managers grade 10 and above; Administration (white-collar employees): non-line managers grade 1 to grade 9. Blue-collar employees: non-line managers grade 1 to grade 9. // 4) DYM SOLUTION CO., LTD, Ecoplast Kunststoffrecycling GmbH, mtm compact GmbH, mtm plastics GmbH, Rialti S.p.A. and Renasci N.V. are excluded from this figure. // 5) Due to the divestment in the first half of 2023, Fertilizer, Melamine and TEN is excluded from this figure.

In 2023, Borealis created a new "Employer Value Proposition" and employer branding. These enable Borealis to effectively communicate to potential employees what makes it stand out as an employer. The research phase involved Borealis' employees and leaders, as well as an external market view. This enabled the Group to capture a complete understanding of the unique, authentic and aspirational components of the Employer Value Proposition. In 2024, the Group will continue to integrate the new employer branding into P&C processes, to help create a consistent and positive employee experience. To raise the profile of its employer brand, the Group increased the frequency of people-related posts on its LinkedIn page during the year. As part of Borealis' approach to continuous improvement, the Group reviewed and enhanced its employee referral program in 2023. This is a structured program to find talented people, by asking employees to recommend candidates from their private and professional networks. Based on internal feedback and best practice, Borealis simplified the program to make referrals easier. The ultimate goal is to fill more than 20% of externally filled vacancies via referrals. In 2023, the Group achieved a 10% referral rate, compared to 4.5% in 2022.

Borealis looks to continuously promote and strengthen diversity in its recruitment processes, by consciously focusing on it at each step. This includes actively creating awareness with hiring managers and discussing diversity in the intake with them, offering unconscious bias interview courses, ensuring job advertisements are gender neutral and having diverse panel members at the selection stage.

New Ways of Working

Fair Remuneration

Borealis is committed to providing fair and transparent reward packages for all employees. Fair remuneration means ensuring pay for performance, based on transparent performance evaluation. It supports strong business results by incentivizing high-performing individuals and teams, increasing employees' retention and enhancing Borealis' reputation in the labor market.

Every employee reward package at Borealis consists of a base salary and incentive compensation, with an annual bonus for all eligible employees and the LTI for Executive Board and senior management. The criteria for determining bonus payouts include a sustainability element and the LTI also has ESG criteria, including DE&I and CO_2 emissions. The structure of bonuses and the LTI mean employees

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Fig. 22: **Ratios of standard entry level wage by gender compared to local minimum wage in 2023**

Grades [1] [2]	Austria		Belgium		Finland		Sweden	
In %	F	M	F	M	F	M	F	M
18	–	–	–	–	–	–	–	198
17	345	322	–	–	–	–	–	–
15	258	269	–	459	–	–	–	131
14	231	237	–	428	–	140	–	123
13	274	289	–	335	–	130	–	124
12	246	226	278	320	–	117	123	–
11	192	177	262	289	–	127	136	133
10	154	180	240	238	–	129	131	127
9	193	167	199	233	124	116	130	135
8	176	182	162	170	111	117	119	115
7	173	159	157	–	109	–	116	123
6	171	154	194	–	–	–	123	102
5	165	149	164	–	–	–	–	–
4	136	–	–	–	–	–	–	–
1	–	139	–	–	–	–	–	–

F ... female // M ... male // 1) Employee category grade refers to the internal role classification system (grade 1 to 21): Senior leaders: all line managers grade 16 and above. Managers: all line managers grade 12 to grade 15. Team leaders: all line managers grade 11 and below. Experts: all non-line managers grade 10 and above; Administration (white-collar employees): non-line managers grade 1 to grade 9. Blue-collar employees: non-line managers grade 1 to grade 9. // 2) Some grades may not be depicted or show no data in certain categories due to no new hires in the respective group during the reporting period.

from the Executive Board down are incentivized to ensure Borealis is continuously increasing its sustainability.

The ratio of the annual total compensation for the organization's highest-paid individual to the median annual total compensation for all employees (excluding the highest-paid individual) is 26:1 in 2023. Since this ratio is available for the first time, no comparison can be made to previous years.

The total package is based on the systematic evaluation of roles, using an external evaluation methodology linked to Borealis' internal grading structure. This requires up-to-date role descriptions which define core activities and responsibilities. Each grade in the Group's grading system has a country-specific pay range and the pay position of employees within this range is monitored at both country and Group levels, to control overall gender pay equality. The Group shares this aggregated gender pay analysis with its employees, as legally defined in the various countries. Employees are also entitled to information about how their salary compares to the respective market.

Reward packages are evaluated regularly in the context of insights into national remuneration market data and developments. This ensures that the reward package is competitive both internally and externally. Borealis also performs a yearly equal pay analysis, to identify focus areas for improvement.

Fig. 23: **Ratio of salary and remuneration of women to men in 2023** [1) 2) 3) 4)]

	Austria	Belgium	Finland	Sweden
Senior leaders	1.02	0.79	0.96	–
Managers	0.93	0.95	0.92	0.98
Team leaders	0.93	0.91	1.12	1.01
Experts	0.90	0.98	0.92	0.92
Administration	0.96	0.92	0.89	0.96
Blue-collar	0.92	1.08	0.97	0.95

1) Borealis' significant locations are Austria, Belgium, Sweden and Finland. Definition: Countries with more than 500 employees. // 2) Basic salary and remuneration is composed of the annual base salary plus the Borealis incentive plan. // 3) Additional remuneration taken from last completed cycle 2022. // 4) DYM SOLUTION CO., LTD, Ecoplast Kunststoffrecycling GmbH, mtm compact GmbH, mtm plastics GmbH, Rialti S.p.A. and Renasci N.V. are excluded from this figure.

The Group always pays entry-level salaries that are above the minimum defined in the respective national laws, collective labor agreement or company agreement. Borealis also requires this for leasing employees and has agreements with its leasing agencies in place.

Fair remuneration requires an effective performance management process, including managing low performers. Through the performance evaluation, Borealis assigns each employee a rating, which is calibrated throughout the process in a bottom-up approach, to ensure consistency and a normal distribution. A combination of ratings and potential helps to identify employees for the Talent Leadership and Talent Expert Pools. The outcome of the ratings drives the employee's IDP and the merit process (salary increase) for the following year and is communicated via line managers in the Q1 Performance Dialogue (→ chapter Sustainability Governance, p. 68).

Defined Benefit Plan Obligations and Other Retirement Plans

Borealis has a global framework covering the design, financing, delivery and control of core global and local employee benefit programs, such as pension plans or insurance related to retirement, death, disability or medical benefits. This framework ensures employee benefits comply with Borealis' Employee Benefits Strategy and guiding principles.

Borealis' defined benefit pension plans are in general closed or grandfathered. Due to a legal obligation for a minimum interest guarantee in Belgium, this also includes defined contribution plans.

For the projected defined benefit obligation and the fair value of the plan assets, please refer to Notes to the Consolidated Financial Statements 15. Employee Benefits. As Borealis aims to provide a competitive benefit package, it also contributes to defined contribution pension plans. The level of the voluntary employer pension contribution depends on the local social security pension, as well as market practice. The related costs are disclosed in Notes to the Consolidated Financial Statements 14. Personnel and Share Based Payments.

The Group also sponsors other post-employment benefit plans that provide medical or severance benefits. In addition, it provides other long-term employee benefits such as pre-pension and jubilee benefits in various countries.

Where separate funds for paying the plan's pension liabilities (e.g. Belgium) are available this is shown as fair value of plan assets according to IFRS. Plan assets will be provided in January 2024 when the actuarial reports are finalized. If no fair value of plan assets is indicated, no separate funds for paying the plan's pension liabilities are available.

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Hybrid Workplace
Flexible homeworking benefits both Borealis and its employees. It provides a choice of when and where employees may work for optimal results, with homeworking allowing for increased focus, productivity and execution of tasks, and office working focused on collaboration, interaction and meetings. This hybrid working also supports Borealis' wellbeing commitments to support employees' work-life balance. External benchmarking also shows that hybrid workplace solutions have a positive influence on work performance and productivity, increase employee engagement and loyalty, foster a more diverse workforce and improve overall attraction and retention.

Borealis introduced a Hybrid Workplace Group guideline in 2021 and revised it in 2023, based on employees' feedback. Borealis now provides employees with even greater flexibility, as it allows them to work up to 50% from home, when appropriate.

Organizational Evolution
Strategic Workforce Planning
Strategic workforce planning enables a company to ensure it has the workforce it will need to successfully implement its overall business strategy. The Group designed its strategic workforce planning approach and framework with support from Deloitte. Following Executive Board approval of the approach, Borealis successfully piloted it within a business unit in Polyolefins, as well as in the P&C and Digital/IT organizations. To support the implementation, P&C prepared training materials and carried out training for relevant Heads of Business Partners (BPs) and Stream BPs in P&C. The Group has also introduced a new people analytics tool, to support the strategic planning process. The roll-out of the process will continue in 2024.

Transformational Leadership
Talent Management and Leadership Development
Offering meaningful careers and ways to unlock people's potential is essential for attracting and retaining a highly skilled, qualified and diverse workforce. The Borealis Talent Management Process focuses on attracting, identifying, promoting and developing people with the potential for leadership and expert positions. The Group's leadership and expert talent management programs focus on developing the tools, skills and experiences the employee needs for their future role, along with the respective core competencies and expectations.

The Leading Ahead Top Talent program launched last year with OMV and OMV Petrom has replaced Borealis' most senior leadership talent program and offers the Group's high-potential employees an even broader career platform. In 2023, the first participants graduated and nominations continued for the second and third program runs.

In 2023, a cross-OMV Group project team worked to align and update a set of leadership competencies. These clearly define the expectations of leaders and complete the transformation framework for Borealis, which also comprises the Group Purpose, Strategy 2030 and the Values. The Transformational Leadership Competencies (TLC) were launched in October.

Work was also done to design and tender a comprehensive transformational leadership program, to offer a skills upgrade to all leaders in the Group. However, due to the economic downturn, Borealis paused these activities and will rejoin the program at a later stage. As an alternative, a new online learning path was created to foster knowledge and understanding of the TLC.

Borealis' Workforce
In 2023, Borealis employed 6,012 people in Base Chemicals and Polyolefins (excluding educational contracts). This compared to 5,914 in 2022 (excluding Fertilizers, Melamine and TEN). Of these, 98% (5,887) worked for Borealis on a permanent basis (2022: 97%) and 2% (125) were employed on a temporary basis (2022: 3%). This workforce was supported by 73 (72 in 2022) leasing employees who are not employed by the Group, primarily in Austria and Germany, and some 300 summer workers, job students, apprentices and interns.

Fig. 24: **Benefits provided to employees in 2023** [1) 2)]

	Austria			Belgium		
Benefits	**FT**	**PT**	**T**	**FT**	**PT**	**T**
Life insurance	○	○	○	●	●	●
Health care	○	○	○	●	●	●
Disability and invalidity coverage	●	●	●	●	●	●
Parental leave	●	●	●	●	●	●
Retirement provision	●	●	●	●	●	●
Stock ownership [3)]	○	○	○	–	–	–
Others: company car, cellphones, etc.	●	●	●	●	●	●

	Finland			Sweden		
Benefits	**FT**	**PT**	**T**	**FT**	**PT**	**T**
Life insurance	●	●	●	●	●	●
Health care	●	●	●	●	●	●
Disability and invalidity coverage	●	●	●	●	●	●
Parental leave	●	●	●	●	●	●
Retirement provision	●	●	●	●	●	●
Stock ownership [3)]	–	–	–	–	–	–
Others: company car, cellphones, etc.	●	●	●	●	●	●

FT ... Full-time // PT ... Part-time // T ... temporary // ● ... YES // ○ ... NO // 1) The listed benefits per significant location of operation are standard for full-time employees of the organization but may not apply to temporary or part-time employees. // 2) Definition for significant locations of operation: Austria, Belgium, Finland and Sweden are Borealis' significant locations of operation with more than 500 employees. // 3) Borealis does not have any stocks.

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Fig. 25: **Parental leave BC/PO in 2023** [1) 2)]

	Austria		Belgium		Finland		Sweden		Other Europe		Non-Europe	
F ... female // M ... male	F	M	F	M	F	M	F	M	F	M	F	M
Employees that were entitled to parental leave in %	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Number of employees that took parental leave	39	11	12	58	11	34	55	95	0	3	1	4
Number of employees that returned to work after parental leave ended	22	10	7	26	9	33	53	92	0	1	1	4
Number of employees that returned to work after parental leave ended that were still employed 12 months after their return to work	21	13	11	44	15	54	34	79	0	7	1	4

1) Countries sorted according to our definition of significant locations, Other Europe and Non-Europe to be consistent within the report. Employees per region can be found in tables 26 and 27. // 2) DYM SOLUTION CO., LTD, Ecoplast Kunststoffrecycling GmbH, mtm compact GmbH, mtm plastics GmbH, Rialti S.p.A. and Renasci N.V. are excluded from this figure.

Fig. 26: **Parental leave Fertilizers, Melamine and TEN in 2023** [1)]

	NITRO Austria		NITRO France		NITRO Other Europe	
F ... female // M ... male	F	M	F	M	F	M
Employees that were entitled to parental leave in %	100%	100%	100%	100%	100%	100%
Number of employees that took parental leave	24	39	5	0	8	3
Number of employees that returned to work after parental leave ended	6	9	3	0	1	1
Number of employees that returned to work after parental leave ended that were still employed 12 months after their return to work	4	14	2	0	0	2

1) Due to the divestment, only the first half of the year to June 30, 2023 is reported. The figures are, therefore, not fully comparable.

Fig. 27: **Total number of employees by employment contract (permanent or temporary) by gender & by region/ and total number of employees by employment type (full-time or part-time) by gender & by region in 2023** [1) 2) 3) 4) 5) 6)]

M ... male // F ... female	Gender	Permanent	Temporary	Total	Full-time	Part-time	Total
Total	M	4,525	74	4,599	4,281	318	4,599
	F	1,362	51	1,413	1,177	236	1,413
	Total	**5,887**	**125**	**6,012**	**5,458**	**554**	**6,012**
Borealis AG	M	218	4	222	220	2	222
	F	222	9	231	210	21	231
	Total	**440**	**13**	**453**	**430**	**23**	**453**
BC/PO							
Austria	M	991	15	1,006	975	31	1,006
	F	448	16	464	349	115	464
	Total	**1,439**	**31**	**1,470**	**1,324**	**146**	**1,470**
Belgium [7)]	M	1,055	12	1,067	920	147	1,067
	F	258	6	264	190	74	264
	Total	**1,313**	**18**	**1,331**	**1,110**	**221**	**1,331**
Finland	M	727	12	739	728	11	739
	F	201	13	214	200	14	214
	Total	**928**	**25**	**953**	**928**	**25**	**953**
Sweden	M	734	19	753	713	40	753
	F	240	9	249	245	4	249
	Total	**974**	**28**	**1,002**	**958**	**44**	**1,002**
Other Europe [8)]	M	636	13	649	561	88	649
	F	99	3	102	75	27	102
	Total	**735**	**16**	**751**	**636**	**115**	**751**
Non-Europe	M	382	3	385	384	1	385
	F	116	4	120	118	2	120
	Total	**498**	**7**	**505**	**502**	**3**	**505**

1) Total number: headcount (employees hired for more than three months, excluded: externals, trainees, apprentices, summer workers, long-term absences, temporary employees hired for less than three months). Permanent: employee contract without end date. Temporary: employee contract with an end date. Full-time: working 100% or work in a shift model (even if that does not add up on average to the weekly working hours). Part-time: working only a certain percentage as agreed in an individual contract. // 2) Austria, Belgium, Finland and Sweden are Borealis' significant locations of operation with more than 500 employees. All other European production or sales locations are summarized under Other Europe. Non-Europe covers all production or sales locations outside Europe. // 3) All numbers as of December 31, 2023. // 4) Borealis AG is included in the Austrian figures and displayed separately. // 5) Figures also include the headcount of non-consolidated entities. // 6) Due to the divestment in the first half of 2023, Fertilizer, Melamine and TEN is excluded from this figure. // 7) Including Renasci N.V. (HC = 60) // 8) Including Rialti S.p.A. (HC = 87)

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Fig. 28: **Percentage of employees by employee category & by gender & by age in 2023** [1) 2) 3) 4)]

% M ... male // F ... female	Gender	<30	30–50	>50	% per gender per employee category
BC/PO					
Senior leaders	M	0.00	0.38	0.70	1.08
	F	0.00	0.13	0.13	0.27
Managers	M	0.05	5.17	3.74	8.97
	F	0.08	2.26	0.67	3.01
Team leaders	M	0.25	3.93	3.04	7.22
	F	0.08	0.55	0.22	0.85
Experts	M	0.23	7.93	4.32	12.49
	F	0.17	4.29	1.61	6.07
Administration	M	2.11	6.80	3.89	12.81
	F	1.56	5.99	2.79	10.35
Blue-collar	M	6.19	15.85	11.89	33.93
	F	0.58	1.70	0.68	2.96

1) Employee category grade refers to the internal role classification system (grade 1 to 21): Senior leaders: all line managers grade 16 and above. Managers: all line managers grade 12 to grade 15. Team leaders: all line managers grade 11 and below. Experts: all non-line managers grade 10 and above; Administration (white-collar employees): non-line managers grade 1 to grade 9. Blue-collar employees: non-line managers grade 1 to grade 9 // 2) All numbers as of December 31, 2023. // 3) Numbers are correct to two decimal places in order to maintain granularity. // 4) Due to the divestment in the first half of 2023, Fertilizer, Melamine and TEN is excluded from this figure.

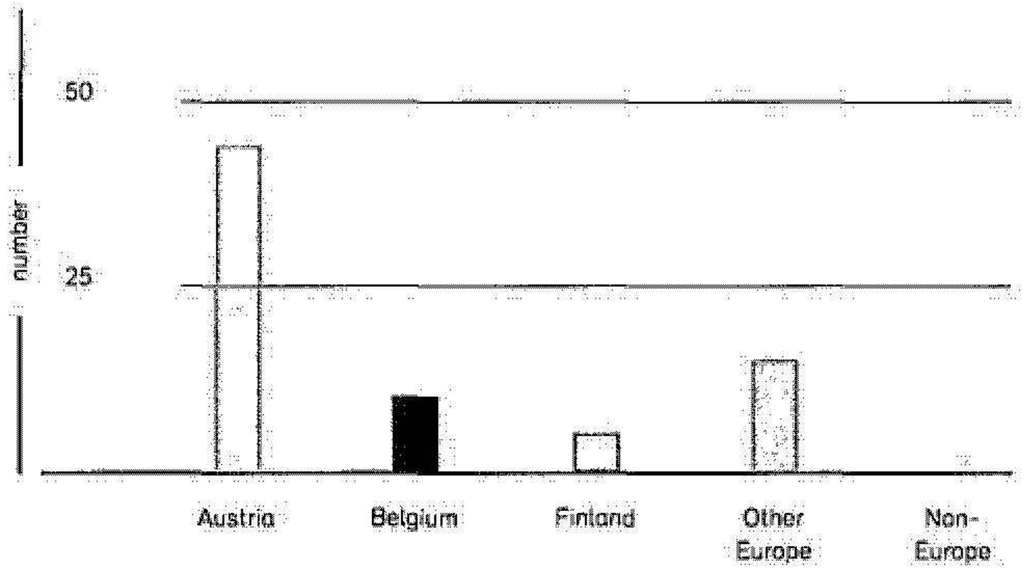
Fig. 29: **Percentage of new hires/turnover by gender & by region & by age in 2023** [1) 2) 3) 4) 5)]

%	% of new hires per total gender/per total region/per total age cluster	% of turnover per total gender/per total region/per total age cluster
BC/PO		
Gender		
Male	72.88	76.89
Female	27.12	23.11
Region		
Austria	22.46	26.54
Belgium	21.19	19.45
Finland	7.63	13.04
Sweden	10.17	11.67
Other Europe	21.19	13.73
Non-Europe	17.37	15.56
Age		
<30	28.11	14.42
30–50	57.34	42.56
>50	14.55	43.02
Fertilizers, Melamine & TEN [6)]		
Gender		
Male	69.30	80.52
Female	30.70	19.48
Region		
Austria	42.98	44.16
Belgium	0.88	0.00
France	37.72	42.86
Other Europe	18.42	12.99
Age		
<30	32.46	18.18
30–50	59.65	36.36
>50	7.89	45.45

1) The percentage of new hires is based on employee changes during the year in the respective category. The percentages refer to the split in employee changes with total new hires and turnover resulting in 100% in each respective category. // 2) Austria, Belgium, Finland and Sweden are Borealis' significant locations of operation with more than 500 employees. All other European production or sales locations are summarized under Other Europe. Non-Europe covers all production or sales locations outside Europe. // 3) Numbers are correct to two decimal places in order to maintain granularity // 4) Definition of new hires: employees hired for more than three months, excluding: externals, long-term absences, trainees, apprentices, summer workers, temporary employees (less than three months). Employee turnover: employees who left the company. // 5) Rosier S.A. Moustier and Rosier NL BV Sas Van Gent excluded from Turnover. // 6) Due to the divestment, only the first half of the year to June 30, 2023 is reported. The figures are, therefore, not fully comparable.

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Fig. 30: **Total number of non-employees per region in 2023** [1) 2) 3)]



BC/PO	number
Austria	44
Belgium	10
Finland	3
Other Europe	15
Non-Europe	1
Total	**73**

1) Non-employees: The most common type of worker and their contractual relationship with the organisation are leasing employees. The type of work they perform is blue collar work. // 2) Definition of significant fluctuations is a deviation in the number of employees during two consecutive reporting periods of more than 50 employees within a single organizational unit (equals 10% of Borealis' definition of significant location of operation) // 3) Due to the divestment in the first half of 2023, Fertilizer, Melamine and TEN is excluded from this figure.

Fig. 31: **Proportion of senior management hired from the local community in 2023** [1) 2) 3)]

%	
Austria	42.86
Belgium	92.31
Finland	100.00
Sweden	75.00

1) Employee category grade refers to the internal role classification system (grade 1 to 21): Senior leaders: all line managers grade 16 and above. Managers: all line managers grade 12 to grade 15. Team leaders: all line managers grade 11 and below. Experts: all non-line managers grade 10 and above; Administration (white-collar employees): non-line managers grade 1 to grade 9. Blue-collar employees: non-line managers grade 1 to grade 9. // 2) Definition of local: Senior Manager has the nationality of that country. Data refers to all Borealis entities in one country. // 3) Definition for significant locations of operation: Austria, Belgium, Finland and Sweden are Borealis' significant locations of operation with more than 500 employees. All other European production or sales locations are summarized under Other Europe. Non-Europe covers all production or sales locations outside Europe.

Outlook

Employee Experience
- Further in-depth implementation of the employer value proposition and employer branding in various P&C processes and communication, including identifying touchpoints for brand integration into the employee experience journey and building an Employer Brand Ambassadors network
- Continue to deploy the wellbeing platform and calendar activities, to offer activities throughout the year
- Implement the DE&I Roadmap

New Ways of Working
- Evaluate possibilities to create a flexible working environment enabling employees to work from a location abroad that is different to their employment contract location
- Further activate the Values, supported by feedback from the 2023 Pulse Check
- Support fair remuneration, by implementing OMV Group-wide job families and title structures, and a harmonized OMV Group grading framework

Organizational Evolution
- Continue the P&C digitalization journey, for example by implementing more self-service workflows for employees, to improve the employee experience and speed up and automate processes
- Selectively roll-out strategic workforce planning
- Roll out of Change Management Tool

Growing Talent
- Investigate the implementation of an internal marketplace concept and tool, to stimulate internal mobility by matching people to opportunities and potential roles based on their skills, interests, and preferences, and to connect employees with experiential, on-the-job learning
- Support and promote low-cost learning and improve the quantity and quality of Individual Development Plans

Transformational Leadership
- Embed and strengthen transformational leadership, through the roll out of the new leadership profile

Outlook Beyond 2024

Employee Experience

- Develop and deploy a listening strategy, to constantly receive qualified feedback from employees and improve as an employer
- Make progress towards the 2030 DE&I Goals:
  - Increase the share of women at management level to 30%
  - Increase the share of international management to 65%
  - Maintain the share of executives with international experience at 75%
  - Increase support for parents, different generations and employees with disabilities

New Ways of Working

- Continue to introduce more flexibility in the workplace and the rewards offered, such as a minimum standard of care leave globally
- Define where equal pay and pay transparency fit into the Group's broader Rewards and DE&I agendas and ensure that pay structures and policies follow good practices

Organizational Evolution

- Complete the full roll-out of strategic workforce planning, as part of annual strategy review process and as input to workforce planning for Borealis as whole

Growing talent

- Implement and further optimize the internal marketplace initiative, depending on the scope and timeline defined as part of the project in 2024
- Explore the possibilities of using AI-tools in Talent Acquisition, to improve the quality and speed of the process and support a positive candidate experience
- Optimize the onboarding experience, with an enhanced focus on preboarding and onboarding for internal moves
- Explore options to introduce modern and more standardized testing tools in the recruitment process, to make better-informed hiring decisions
- Increase learning hours to 30 per person by 2030

Transformational Leadership

- Embed and strengthen transformational leadership through training and experience sharing

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Health & Safety

Occupational Health & Safety

Goals and Planned Key Actions in 2023	Key Achievements in 2023
Roll out a safety focus program, to respond to unfavorable results in 2022	Rolled out the "B-Safe" program across Borealis
Harmonize Borealis' Life Saving Rules with OMV Group and the International Association of Oil & Gas Producers (IOGP) standard and roll out across Borealis	Rolled out the updated Life Saving Rules, which are harmonized with OMV Group and in line with the IOGP standard
Audit contractors to improve their health, safety, security and environment performance, focusing on subcontracting and on smaller high-risk contractors, such as roof repairs	Audited contractors, including extensive auditing of their health, safety and environment (HSE) management systems against the ISO 45001 requirements
	Rolled out a procedure across Borealis, covering working safely on roofs

Goals and Planned Key Actions for 2024	Goals and Planned Key Actions Beyond 2024
Update the content of the safety centers with the new Life Saving Rules	Develop a company culture where HSE shapes decision-making, at all times and every level
Streamline and simplify safety procedures and processes (including safe systems of work), with clear and compulsory minimum requirements	Develop supplier and contractor management capabilities on all levels, internally and externally
Develop a company culture where HSE shapes decision-making, at all times and every level	Define and implement leading key performance indicators to steer HSE performance

Chemical operations involve highly flammable, toxic and hazardous substances that could pose a significant risk to Borealis' employees and neighbors, if not handled correctly. Health and safety is therefore one of the key focus areas in the Borealis Sustainability Strategy. In addition, process and occupational health and safety incidents have a direct link to lost working time and damage to valuable assets, both of which could affect the Group's ability to supply its customers, and its profitability and performance.

Governance

Borealis lives by the slogan "If we can't do it safely, we don't do it at all!" Everyone at Borealis is expected to stop working, or not start working in the first place, if the situation is unsafe. This rule is embedded in Borealis' Group HSE management system and the consequences for infringement by line management can include a written warning, an improvement plan or a ban from the site. The Group's former goal zero journey roadmap has been replaced by the Borealis Group's HSE plan. This plan covers actions related to HSE culture, contractor HSE management, the HSE management system, and occupational safety and health.

At Executive Board level, HSE is part of the Sustainability & Responsible Care® Committee (→ see p. 74) remit. The Committee reviews performance, receives regular status updates, conducts twice-yearly deep dives into HSE trend focus areas and defines additional actions.

At Borealis Group level, the HSE managers' network defines the HSE strategy, establishes improvement actions and shares lessons learned. The network includes local HSE managers and Group HSE.

At location level, the leadership and Health & Safety team meet each month to discuss health and safety performance. Every location also has an HSE Forum, which consults and informs employee representatives about the HSE management system and promotes worker participation in occupational health and safety. Several informal platforms and meetings ensure that all employees of operational sites are represented. These forums are organized at a location level and their frequency is decided by each location. The Group assesses the implementation of these forums during the Group HSE

Blue Audit, which takes place every four years and includes an assessment of how HSE information is cascaded in the organization.

Every Borealis employee can report work-related hazards and has access to the Group's incident management software, Synergi, where they can report near misses. These are reviewed by the local incident investigators and the number of near misses followed up is a performance indicator. Employees are also kept informed on HSE matters through the European Works council for OMV, OMV Petrom and Borealis. This is an important platform for dialogue between management and employee representatives.

Health & Safety network meetings are scheduled regularly to share lessons learned, report potential hazards and hazardous situations, and discuss improvement areas and best practices. Attendees include all health and safety specialists at the locations and Group health and safety experts.

The new 2030 HSSE (Health, Safety, Security and Environment) strategy has been developed and rolled out to make Borealis an industry leader in HSSE by 2030. The strategy focuses on key elements of HSSE and also considers new risks and opportunities in the industry including mental health and wellbeing, biodiversity and digitalization, among others.

In addition, using lessons learned from previous acquisitions, the approach to integrate newly acquired facilities has been reviewed, by establishing a strong HSE foundation from the start, combined with a 2-year integration plan.

Preventing Occupational Health & Safety Incidents
Borealis aims to develop its health and safety culture from a calculative level (where safety is based on having systems in place to manage hazards) via a more proactive level (where safety leadership and values drive continuous improvement), towards a generative level, where health and safety becomes "how we do business".

The Group is therefore committed to eliminating hazards and reducing occupational health and safety risks, and to continuously improving through systematic learning. Borealis proactively prevents accidents by developing risk management tools, implementing controls, undertaking awareness campaigns and health and safety training, and conducting regular audits for both employees and contractors. Group HSE defines the key intervention areas and developments over the next five years, related to occupational health and safety, process safety, environment and energy.

The Group has an HSE management system, which is designed to reduce the possibility of incidents in the workplace by ensuring that hazards are systematically eliminated or controlled. The system covers occupational health and safety, process safety, environment and energy, as well as some aspects of security to fulfill legal requirements. It applies to all businesses where Borealis owns more than 50% or where the Group has operating responsibility with the exception of Ecoplast Kunststoffrecycling GmbH, mtm plastics GmbH and mtm compact GmbH. For Polyolefins (PO) and Base Chemicals (BC), the Group has an ISO 45001 matrix certification.

Fig. 32: **Workers covered by an occupational health and safety management system**

BC/PO	Fertilizers, Melamine & TEN
All listed sites below are ISO 45001 certified	All listed sites below are covered by the integrated management system, which includes health and safety aspects
Vienna (Borealis Group and Vienna Location)	Vienna (office location)
Mechelen	Grandpuits
Linz PO	Grand Quevilly
Schwechat	Linz
Porvoo	Ottmarsheim
Beringen	Piesteritz
Burghausen	Paris
Kallo	Lummen
Antwerp	Budapest
Monza	all warehouse locations
DYM	

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64.6% of employees (3,617 FTEs) and 40.4% of non-employees (1,607 FTEs) whose work and/or workplace is controlled by the organization are covered by an ISO 45001 certification. 94.0% of employees (5,265 FTEs) and 99.6% of non-employees (3,961 FTEs) whose work and/or workplace is controlled by the organization are covered by the Borealis HSE management system, which is audited internally. Only the employees and non-employees of the recycling companies Ecoplast Kunststoffrecycling GmbH, mtm plastics GmbH and mtm compact GmbH are not covered by an occupational health and safety management system. There are also the following exclusions because of recent acquisitions: Rialti S.p.A. and Renasci N.V. Fertilizer, Melamine and TEN is also excluded from the data due to the divestment.

Borealis uses risk assessments to identify hazards, determine the risk and take necessary measures to reduce it. These assessments are done before any work is carried out on a project or changes are made to an installation.

Major meetings and conferences in Borealis commonly start with awareness raising and sharing lessons learned on health and safety, which is a mandatory topic at many meetings. All levels of management, from front-line leaders to Executive Board members, carry out regular engagement walks. These are designed to spot safety risks, encourage positive changes in daily work routines and ensure dialogue occurs between management, employees and contractors. Everyone in Borealis must report hazards and hazardous situations and can do this via Synergi.

In addition to safety training for all employees and contractors, all visitors to Borealis' locations must pass safety training before they can access the site. Some Borealis sites also organize an annual meeting with their neighbors, where they discuss safety performance and initiatives. Borealis also coordinates emergency planning with the emergency services.

Promoting Employees' Health and Wellbeing

Borealis promotes and protects its employees' health and wellbeing in several ways. In addition to detailed chemical exposure monitoring, which is carried out in accordance with national laws, the Group offers physical examinations and subsequent check-ups, periodic screenings and evaluations. Employee health initiatives vary depending on local needs, but they typically include addressing issues such as back pain, blood pressure and weight management, as well as providing on-site flu vaccinations. Employees learn about stress prevention, find help to quit smoking and can consult a psychologist. They can also take part in voluntary health counseling programs, to identify and monitor health problems.

Basic medical services are provided to all employees, contractors and visitors, with employees also having access to advanced wellbeing services through local medical service centers. All information shared between patient and doctor is kept confidential, in compliance with national legal requirements.

In addition, Borealis has developed a wellbeing concept that sets common standards across all locations, enables sharing of best practices and builds on existing activities. It takes a holistic view of wellbeing and identifies four key areas for ensuring motivated and healthy employees. These are health, job engagement, competence and work-life balance (→ chapter People & Culture, p. 106).

Borealis conducts regular workplace health surveys, which cover every location in the Group every five years. These surveys identify, evaluate and document the working environment in both operations and offices, to establish a base for further improvement and prioritize actions. Their primary focus is to prevent occupational health risks, occupational illnesses and accidents. The health surveys also put a considerable focus on the psychosocial aspects of work and work-life balance.

Activities 2023

B-Safe Program

In line with the "Committed to Zero Harm" principle, Borealis has implemented strong measures to improve Borealis safety performance. In 2023 the B-Safe program was rolled out across Borealis. It covers five topics:

- reinforcing leaders' ability to influence their teams' safe behaviors;
- increasing the effectiveness of existing safety systems, processes and routines;
- enhancing risk recognition and decision-making at all levels;
- cross-learning from incidents, to reduce repeat incidents; and
- enabling Borealis to develop and retain a generative safety culture.

Leaders were trained during a three-day session and the other Borealis employees went through a one-day session, with the goal of refreshing the Group's basic health and safety focus areas and enhancing their effectiveness in the field. Thereby, more than 4,000 employees have already been trained. B-Safe coaches from each location were also extensively trained, to support their location with keeping the program alive once the training sessions are concluded.

Updated Life Saving Rules
During 2023, Borealis harmonized its Life Saving Rules and Process Safety Rules with the OMV Group Safety Rules, creating a common set of nine Life Saving Rules that are in line with the IOGP standard. This means that all employees and contractors follow the same rules in OMV, OMV Petrom and Borealis, and enables the entire OMV Group to share campaign and training material. The updated Life Saving Rules were rolled out top down, with each leader having to train their team. The roll-out was supported by posters and videos. Year to date, 95% of Borealis employees have gone through the leader-led training.

Improving Contractor HSE performance
In 2023, a major contractor at each location was comprehensively audited on its HSE management system, based on the requirements of ISO 45001.

In addition, Borealis established a new procedure covering working safely on roofs, which was rolled out across the organization. This procedure reflected learning from two fatal incidents in the recent past, including one in 2022 during repair works on a roof.

Group-wide Safety Days
In 2023, Borealis held its sixth Group-wide Safety Day in all locations, with the theme of "Safe and healthy working environment". For the second time, this Safety Day was held jointly with OMV. In addition to a webinar, the Group held safety workshops in some locations.

Campaign "Be Aware, walk with care"
In the first half of the year, 20 people have been hurt by slips trips and falls. Therefor a campaign was launched to increase situational awareness during walking.

Campaign "Stop the drop"
After several incidents with a potential severe consequence involving dropped objects, the Group launched an awareness campaign "Stop the drop". Objects falling from height (e.g. accidental fall of an unsecured tool) can lead to a fatality if it hits a person. The campaign was supported via workshops, posters and a video.

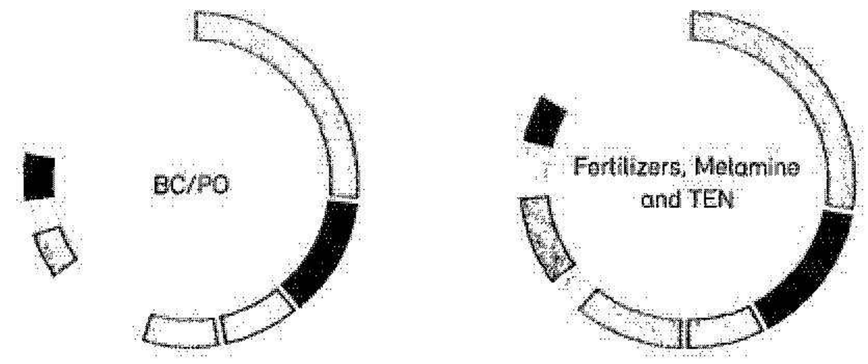
Performance 2023
Total recorded injuries (TRI) per million working hours has been a Borealis Group Scorecard KPI for many years. TRI are those that require medical treatment, restrict the work an employee can do or result in lost working days. All Borealis employees, contractors and subcontractors are covered by the indicators. Suppliers of raw materials, chemicals, additives and other commodities and haulers are excluded, unless Borealis caused the accident. The TRI criteria were changed in 2021 to bring them into line with OMV's HSE incident classification and reporting, based on the IOGP standards.

- *Borealis has an ambitious rate of a TRI of 2.5 or less and continuously works towards zero TRI.*
- *The overall TRI rate was 4.0 in 2023 compared with 2.9 in 2022, with 4.0 in BC and PO and 4.3 in Fertilizers, Melamine and TEN.*
- *The TRI rate for Borealis' employees was 2.8 (BC and PO) and 3.7 (Fertilizers, Melamine and TEN) against 2.7 (BC and PO) and 3.5 (Fertilizers, Melamine and TEN) in 2022.*
- *The TRI rate for contractors was 5.4 (BC and PO) and 5.2 (Fertilizers, Melamine and TEN) compared to 2.4 (BC and PO) and 3.7 (Fertilizers, Melamine and TEN) in 2022.*

In 2023, despite the intensive efforts, we have experienced a large number of low-impact (actual and potential) total recordable injuries (TRIs). One third of these TRIs (27 out of 83 TRIs in total) were experienced in the PDH2 project, where Borealis faces the challenge of managing a high number of low-tier suppliers. A strengthened safety training program has been launched to improve the project performance.

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Fig. 33: **Part of the body harmed between 2021 and 2023** [1]



%		BC/PO	Fertilizers, Melamine & TEN [2]
▭	Hand, finger, wrist	27	28
▬	Leg, knee	12	14
▭	Arm, elbow	8	8
▭	Foot, ankle, toe	8	11
	Neck, shoulder	10	3
▭	Eye	5	9
	Face, mouth	3	5
▬	Back	5	5
	Others	22	16

1) Analysis of 1,344 (314 for Fertilizer, Melamine and TEN) injuries between 2021 and 2023 // 2) Due to the divestment, only the first half of the year to June 30, 2023 is reported. The figures are, therefore, not fully comparable.

Locations identified with lower safety performance based on trending have also established a specific "get well" plan on top of their B-Safe improvement plan addressing specific local challenges, led and sponsored by Borealis' top leaders.

2023 was an excellent year in process safety with only 4 Leak of primary containments (LOPC), without consequence to people and assets. Every LOPC is one too many so to continue to build on the PS journey focusing on leading indicators, TIER 3 and TIER 4 events and special attention to corrosion under insulation, a major challenge in aging facilities.

Data analysis showed that hands and fingers remain the main body parts harmed in accidents and that the most frequent incidents (BC and PO: 25 out of 72; Fertilizers, Melamine and TEN: 5 out of 11) are slips, trips and falls as they account for 36% of the incidents. In 59% of the incidents a contractor got hurt.

Analyzing the incidents based on severity and reoccurrence led to the following actions in 2023:

- To respond to the high number of slips, trips and falls, the Group launched the awareness campaign "Walk with care"
- To respond to several high potential incidents with dropped objects, the Group launched the awareness campaign "Stop the drop"
- To improve the safety performance the B-Safe program was rolled out across all locations
- The updated Life Saving Rules were rolled out top down, with each leader having to train their team.

The sick leave rate is another important occupational health indicator. In 2023, the sick leave rate was 3.8% for BC and PO and 4.9% for Fertilizers, Melamine and TEN, compared to 4.1% and 5.5% respectively in 2022.

Outlook

Occupational health and safety remains the number one priority for Borealis. For 2024, the Group has identified the following primary focus areas:

- Updating the content of the Group's safety centers with the new Life Saving Rules and developing a tailored, practical and hazard-based training for the centers
- Updating the methodology for safety culture assessments and piloting the new methodology in two locations
- Designing and setting up an HSE academy, to foster training and competence development
- Implementing motivational management, based on a harmonized Group process
- Streamlining and simplifying safety procedures and processes (including safe systems of work), with clear and compulsory minimum requirements
- Ensuring that line managers are aware of the safety situation in their departments and the contribution of their team
- Verifying the effectiveness of actions following incident investigation
- Embed and sustain the B-Safe program, including B-Safe participants' feedback in order to improve safety culture
- Every location developing a plan for focus areas that were identified in the B-Safe program

Fig. 34: **Health & Safety performance indicators 2020–2023** [1) 2) 3) 4) 5) 6)]
See detailed background explanation of the performance in the respective section of this chapter

Issue	Definition	2023 BC/PO	2023 Fertilizers, Melamine and TEN [7)]	2022 BC/PO	2022 Fertilizers, Melamine and TEN	2021	2020
TRI Rate Total (Borealis and contractors)	Per 1 mn hours worked	4.0	4.3	2.6	3.6	2.3	3.9
TRI Total	Number	72	11	41	18	–	–
TRI Rate Borealis	Per 1 mn hours worked	2.8	3.7	2.7	3.5	2.3	3.8
TRI Borealis	Number	28	6	26	11	–	–
TRI Rate contractors	Per 1 mn hours worked	5.4	5.2	2.4	3.7	2.2	4.2
TRI contractors	Number	44	5	15	7	–	–
Fatalities	Number	0	0	0	1	0	0
Fatalities Borealis	Number	0	0	0	0	0	0
Fatalities Contractors	Number	0	0	0	1	0	0
Fatality rate Total (Borealis and contractors)	Per 100 mn hours worked	0	0	0	20.0	0	0
Fatality rate Borealis	Per 100 mn hours worked	0	0	0	0	0	0
Fatality rate contractors	Per 100 mn hours worked	0	0	0	53.5	0	0

1) The increase of the TRI rate compared to last year was mainly due to several TRIs that happened in the PDH project in Kallo (27 out of 83 TRIs in total). // 2) Suppliers of raw materials, chemicals, additives and other commodities and hauliers are excluded from the TRI statistics. // 3) 2022 and 2023 shows BC/PO and Fertilizers, Melamine and TEN separately, whereas the date for prior years has been reported consolidated. // 4) Definitions were adjusted in 2021 to align with OMV definitions. A comparison to previous years is therefore not possible. // 5) All three high-consequence injuries were caused by unusual accidents and therefor no meaningful actions could be derived. However Borealis will continue to focus on high potential incidents in the future. // 6) DYM SOLUTION CO., LTD is excluded from the sick leave rate. // 7) Due to the divestment, only the first half of the year to June 30, 2023 is reported. The figures are, therefore, not fully comparable.

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Issue	Definition	2023 BC/PO	2023 Fertilizers, Melamine and TEN[1]	2022 BC/PO	2022 Fertilizers, Melamine and TEN	2021	2020
High-consequence work-related injuries Total (Borealis and contractors)	Number	3	0	2	1	3	6
High-consequence work-related injuries Borealis	Number	1	0	1	1	2	5
High-consequence work-related injuries Contractors	Number	2	0	1	0	1	1
High-consequence work-related injury rate Total (Borealis and contractors)	Per 1 mn hours worked	0.16	0	0.13	0.20	0.15	0.31
High-consequence work-related injury rate Borealis	Per 1 mn hours worked	0.10	0	0.11	0.32	0.16	0.40
High-consequence work-related injury rate Contractors	Per 1 mn hours worked	0.24	0	0.16	0	0.13	0.15
Hours worked Total (Borealis and contractors)	Hours (thousand)	18,206	2,570	15,647	4,997	20,466	19,260
Hours worked Borealis	Hours (thousand)	10,011	1,601	9,484	3,129	12,548	12,532
Hours worked Contractors	Hours (thousand)	8,195	968	6,162	1,868	7,918	6,728
Sick leave rate	% of total hours worked	3.8	4.9	4.1	5.5	3.7	3.6

1) The increase of the TRI rate compared to last year was mainly due to several TRIs that happened in the PDH project in Kallo (27 out of 83 TRIs in total). // 2) Suppliers of raw materials, chemicals, additives and other commodities and hauliers are excluded from the TRI statistics. // 3) 2022 and 2023 shows BC/PO and Fertilizers, Melamine and TEN separately, whereas the data for prior years has been reported consolidated. // 4) Definitions were adjusted in 2021 to align with OMV definitions. A comparison to previous years is therefore not possible. // 5) All three high-consequence injuries were caused by unusual accidents and therefor no meaningful actions could be derived. However Borealis will continue to focus on high potential incidents in the future. // 6) DYM SOLUTION CO., LTD is excluded from the sick leave rate. // 7) Due to the divestment, only the first half of the year to June 30, 2023 is reported. The figures are, therefore, not fully comparable.

Definitions

Total Recordable Injuries (TRI): Accidents resulting in absence from work, the need to do a different type of work or any other case in which medical treatment is required. The TRI criteria have been aligned with OMV Group and have therefore become stricter from this year: this now also includes, for example, an accident which resulted in a single lost day of work without any medical treatment, or an incident which resulted in an employee requiring a single stitch. The rate is calculated as the number of accidents per million working hours. Borealis' employees and contractors working on the Group's premises are included in this calculation.

High-consequence work-related injuries: High-consequence work-related injuries are split between:
- Fatalities
- Other injuries from which the worker cannot recover (e.g. amputation of a limb), or does not or is not expected to recover fully to pre-injury health status within six months (e.g. fracture with complications).

The definition of high-consequence work-related injury uses recovery time instead of lost time as the criterion for determining the severity of an injury. Lost time is an indicator of the loss of productivity for an organisation as a result of a work-related injury; it does not necessarily indicate the extent of harm suffered by a worker. Recovery time, in contrast, refers to the time needed for a worker to recover fully to pre-injury health status.

Sick leave rate: The sick leave rate indicates the amount of time employees were absent from work due to sickness or injury. The overall sick leave rate is calculated as a percentage of the total number of planned working days in the current year.

Process Safety

Goals and Planned Key Actions in 2023	Key Achievements in 2023
Undertake a process safety event (PSE) Tier 1 and Tier 2 analysis, including an impact assessment, to assess the greatest opportunities for risk reduction and work out an action plan	Performed Tier 1 and 2 analyses, presented the results to the Process Safety Committee and identified key focus areas based on the analyses
Revise the risk register, based on the aligned Borealis and OMV risk matrix for health, safety, security and environment (HSSE)	Revised the risk register and checked the revision status at sites during Blue Audits (see below), as well as at Beringen and Kallo (Belgium) and Stenungsund (Sweden)
Conduct a quantitative risk analysis (QRA) in Beringen, Belgium, to assess the probability and consequence of all chemical release scenarios and identify risk profiles at various locations inside and outside the site, to reduce the overall exposure of employees and contractors	Carried out QRA in Beringen and communicated the results to the local management team, with an action plan now being developed
Continue the process safety management assessments by DNV at a Group level and in one location	DNV process safety management assessments were postponed and will now take place in 2024
Conduct internal health checks on process safety-related elements and a process safety review in the Borealis Blue Audits	Conducted Blue Audits at Burghausen (Germany), Antwerp (Belgium), Stenungsund (Sweden) and Itatiba (Brazil), with the results to be presented to the local management teams and the Operation Assurance Committee

Goals and Planned Key Actions for 2024	Goals and Planned Key Actions Beyond 2024
Continue PSE Tier 1 and Tier 2 analyses and expand to Tier 3 events, including an impact assessment to identify the greatest opportunities for risk reduction and develop an action plan	Continually improve training provision and emphasize process safety content, to build process safety competence and culture in the workforce and increase risk awareness
	Enhance the Group's tools to identify and assess hazards more effectively and address these risks systematically
	Continue to develop and follow process safety roadmaps at the facility level
Conduct a QRA in Stenungsund	Reduce the number of process safety events at all sites, by focusing on process hazard analyses (PHAs) and implementing technical risk reduction measures identified in those PHAs, audits and other process safety assessments, while maintaining and monitoring the performance of existing safeguards
Continue to perform internal health checks on process safety-related elements and a process safety review as part of the Borealis Blue Audits	

Borealis processes large quantities of flammable and/or toxic materials under high pressure and temperatures, which, if not handled properly, could lead to process safety incidents. In a worst-case scenario, leaks, fires or explosions could severely harm people's health or cause fatalities, both inside and outside Borealis, as well as causing environmental pollution. This could also disrupt supply to customers, with a consequent impact on Borealis' financial performance. It is therefore of the utmost importance for Borealis to invest in process safety and to professionally design, maintain and operate its plants.

The Seveso Directive is the main EU regulation dealing with the control of onshore major accident hazards involving dangerous substances. In line with this directive, Borealis works closely with national authorities and emergency organizations to ensure the safe operation of its plants and maintain a high level of preparedness in case of incidents. The Group also actively supports industry-wide efforts to enhance process safety, as a member of the European Process Safety Centre.

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To reach Borealis' objective of achieving zero accidents, the Group has put an HSSE plan in place, replacing its former Goal Zero Journey. This covers both occupational health and safety and process safety and is a key deliverable of the Group's Sustainability Strategy. As Borealis employees are encouraged to see the HSSE plan as a journey to be taken together, it helps establish a collective health and safety mindset.

Governance

The Executive Vice President Base Chemicals and Operations chairs the Group-level Process Safety Committee. The Committee's members are directors and departmental leaders from all the relevant operational streams: Group Health, Safety, Environment & Quality; Manufacturing Excellence; Operations Polyolefins and Operations Hydrocarbons; and Project & Expert Support.

The Group Process Safety department has developed a process safety management system that enhances risk identification and mitigation. The Group policies that are relevant to process safety are the Risk Management Policy and the Responsible Care® Policy. The Risk Management Policy defines Borealis' risk management framework by providing principles, roles, responsibilities and guidelines for risk assessment, mitigation and reporting. The policy aims to ensure the implementation of sound risk management practices at all levels across the Group. The Responsible Care Policy statement sets out the guiding principles for the Group-wide implementation of Responsible Care at Borealis (→ chapter Sustainability Governance, p. 68).

Each production location also has its own health, safety and environment (HSE) Assurance Team, chaired by a nominee appointed by local management. Its members come from different areas within the location, to ensure cross-learning and a link to Group developments. Assurance Teams meet regularly to oversee Borealis' process safety performance and program, steer the Group's HSSE plan for process safety, review progress and provide guidance on priorities, key activities and performance measures. Priorities are identified based on reoccurring or severe incidents, leading to a program being launched by multi-functional teams to improve performance. These teams determine best practice and roll it out in the locations, with support and supervision from Group Process Safety.

Group Process Safety also takes an active role in resolving challenges for Borealis' growth projects, by providing its expertise in an early-stage study.

Borealis is an active member of the European Process Safety Centre, sharing lessons from incidents and supporting process safety developments. The Group also takes part in several forums related to process safety, including the European Ethylene Producers Conference and the European Chemical Industry Council (CEFIC) Plant & Process Safety Network. Borealis also exchanges information with other companies to assess the best technical solutions for preventing and mitigating the escalation of major process safety incidents and scenarios.

Activities 2023

In 2023, Borealis undertook a wide range of activities to further improve its process safety performance. These included:

- revising the risk register and checking the status of those revisions at the sites undergoing Borealis Blue Audits (see below), as well as at Beringen, Kallo and Stenungsund;
- continuing to develop the Group's process safety competency, by conducting Process Safety in Design and Hazard Study Leader training, and following up Process Safety Basics e-learning, which OMV Group shared with Borealis; and
- finalizing a quantitative risk analysis in Beringen, to assess the probability and potential consequences of all possible chemical release scenarios, identify risk profiles in different areas inside and outside the location, and reduce the overall exposure risk of Borealis' employees and contractors.

Process Safety Audits

Borealis Blue Audits are an internal audit of a location's HSE systems and requirements. In 2023, these audits took place at Burghausen (Germany), Antwerp (Belgium), Stenungsund and Itatiba (Brazil).

The Group also completed seven internal health checks on Layer of Protection Analysis and Retrospective Hazard Reviews in Antwerp, Kallo, Porvoo (Finland), Stenungsund, Burghausen and Beringen.

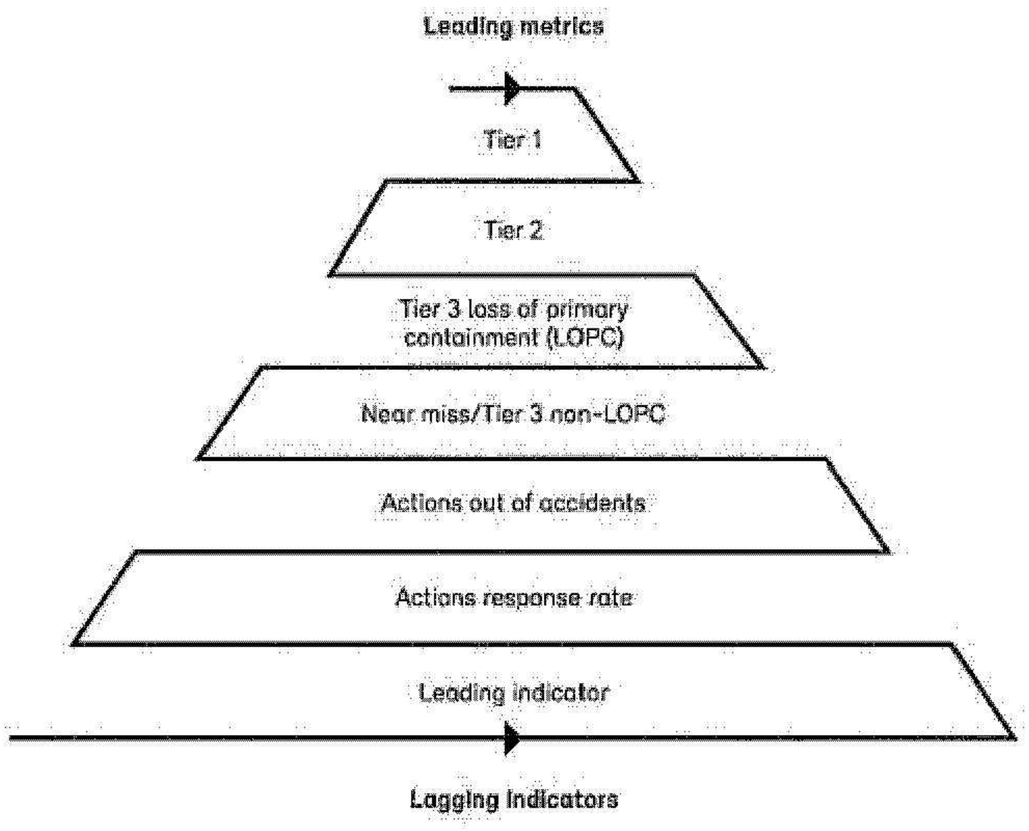
Furthermore, Borealis' insurance brokers conducted two major surveys and five follow-up surveys. All these audits reassured the Group's insurance brokers that the Group has a well-managed process to prevent and limit the impact of incidents.

Performance 2023

Borealis uses a Loss of Primary Containment (LOPC) Pyramid tool to support its monitoring of incidents, ensure they are investigated and that actions are completed in time to prevent reoccurrence.

The pyramid includes the performance of the safety-critical processes designed to prevent accidents. This performance is measured using indicators such as the status of safety-critical inspections, the testing of critical interlocks and the closure of actions. The leading indicators are followed up annually through a deep dive into overall performance and review by the Process Safety Committee. As well as using its own process safety incident rating tool, Borealis tracks process safety incidents according to CEFIC standards.

Fig. 35: **Borealis' Loss of Primary Containment Pyramid**



High-severity (Tier 1) accidents would include, for example, a large fire or explosion resulting in injuries or fatalities, and significant business loss and impact on the environment.

Medium-severity (Tier 2) accidents are those resulting in a loss of containment, with medium consequences for people, planet, and profit. A medium-severity accident would normally result in limited injuries, easy-to-repair damage and a controllable environmental impact.

Low-severity (Tier 3) accidents are those where substances are released but which result in a very low to zero impact.

In 2023, the Group's target was to have a maximum of 16 Tier 1 and Tier 2 accidents.

In 2023, for BC/PO: 1 Tier 1 accident was reported, along with 4 Tier 2 accidents and 461 Tier 3 accidents. In addition, there were 293 Tier 3 non-LOPC incidents, of which 1 was process safety-related with high potential.

In 2023, for Fertilizer Melamine and TEN: 2 Tier 1 accidents were reported, along with 3 Tier 2 accidents and 151 Tier 3 accidents. And no process safety-related high potential incidents.

As general process safety awareness increases due to Borealis' educational initiatives and campaigns, more low-severity accidents are being reported (→ chapter Occupational Health & Safety, p. 123).

The process safety response rate measures the number of actions closed against the number due to be closed on a 12-month rolling basis. Including all actions for 2023, the response rate (BC/PO) for December was 91% (2022: 91%; 2021: 92%). A total of 1,297 actions were implemented in response to Tier 1, 2 and 3 accidents.

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Fig. 36: **Process Safety performance indicators 2019–2023** [1]

Issue	Definition	2023 BC/PO	2023 Fertilizers, Melamine and TEN[2]	2022 BC/PO	2022 Fertilizers, Melamine and TEN	2021	2020	2019
Response rate on process safety incidents	% actions completed on time	91	87	91	92	92	93	93
High-severity accidents (Tier 1)	Number	1	2	3	1	9	1	0
Medium-severity accidents (Tier 2)	Number	4	3	8	4	7	11	11

1) Definitions were adjusted in 2021 to align with OMV definitions. A comparison to previous years is therefore not possible. // 2) Due to the divestment, only the first half of the year to June 30, 2023 is reported. The figures are, therefore, not fully comparable.

Definitions

Response rate of process safety incidents: Process safety incidents of a certain severity or risk potential are recorded and investigated through root cause analysis. Corrective actions are defined to prevent reoccurrence. The response rate of process safety incidents is measured as the proportion (%) of corrective actions completed within a defined period. High-severity accidents are Tier 1 accidents according to API (American Petroleum Institute) RP754 and medium-severity accidents are Tier 2 accidents according to API RP754.

Outlook

During 2024, Group Process Safety will focus on the following areas:

- continuing process safety event Tier 1 and Tier 2 analyses and expanding this to Tier 3 events, including an impact assessment to identify the greatest opportunities for risk reduction and develop an action plan; and
- conducting a Quantitative Risk Analysis in Stenungsund.

The HSSE group will also perform internal health checks on process safety-related elements and a process safety review, as part of the Borealis Blue Audits.

Product Safety

Goals and Planned Key Actions in 2023	Key Achievements in 2023
Support Borealis in maintaining its position as a leader in regulatory compliance, with a special focus in 2023 on implementing the long-awaited amendments to the food contact regulation for plastics	Assessed and implemented requirements of revised legislation relating to several national or regional approval schemes for plastics in food contact Assessed and commented on draft positive list for starting materials, additives and process chemicals for drinking water contact materials in the EU Notified all hazardous mixtures placed on the EU market to the EU Poison Centres
Be active in shaping regulatory changes that implement the EU's Chemical Strategy for Sustainability (CSS)	Contributed to two studies carried out by CEFIC on per- and polyfluoroalkyl substances (PFAS)
Continue to execute the EU REACH dossier improvement plan by 2026	Updated one lead registration dossier and 24 member dossiers in 2023, with 43 dossiers now updated since the start of the initiative in 2020
Increase product sustainability, by minimizing potential hazards and risks associated with Borealis' portfolio	Analyzed the use of PFAS in products, processes, maintenance and equipment, and defined a phase-out plan for the products that include these substances
Continue to implement emerging legislation globally, with a special focus in 2023 on submitting registrations in Türkiye	Prepared registration dossiers for about 50% of the substances imported to Türkiye, enabling continued market access for Borealis' product portfolio after postponed registration deadlines
Provide regulatory support for the implementation of the circular economy in the fields of mechanical and chemical recycling, and for the use of renewable feedstock	Supported a business project looking into closed loop recycling opportunities for automotive applications Supported the decision in the Lower Olefins and Aromatics (LOA) REACH consortium that alternative feedstock can be covered by the existing standard (fossil) REACH registrations of LOA substances if they meet the defined sameness criteria
Extend regulatory service to Borealis' growth projects	Implemented Borealis' procedures and training of colleagues at DYM SOLUTION CO., LTD regarding raw materials, product specifications and compliance checks, to enable continued sales growth in Europe and Türkiye Implemented a more streamlined approval process for novel recycle feedstock sources to accelerate product development in the key growth area of mechanical recycling.

Goals and Planned Key Actions for 2024	Goals and Planned Key Actions Beyond 2024
Generate and provide data to enable the EU authorities to make informed decisions on legislation under review	Prepare to implement new hazard classes, microplastic labeling and reporting, and new requirements from the REACH review in the period to 2030
Continue to implement emerging legislation globally, including Türkiye registration aftercare, registration of 100-1,000 metric tons substances in South Korea, and support for customers in Taiwan with registration of PEC 1 substances	Improve and implement IT tools to better control compliance of global purchases and sales of raw materials and products Improve efficiency and raw material/product data quality and reduce risk of human error by automizing data transfer and using a centralized data storage place.
Allow the percentage of alternative feedstock to increase under existing REACH registration	

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Borealis is committed to the principles of Responsible Care® (→ Responsible Care p. 80), which includes ensuring its products are safe. The Product Stewardship department is responsible for product safety throughout a product's life cycle and gives clear instructions to the organization, to ensure that all products comply with chemical- and application-related laws, in all the countries in which the Group operates and sells. The Group also publishes Safety Data Sheets (SDSs) and Product Safety Information Sheets (PSISs), to provide guidance on the safe use and disposal of its products, with regard to human health and the environment.

The Group strives to anticipate and understand consumer and market needs and concerns about chemical safety. It also closely follows developing legislation concerning chemicals, their applications and the environment, so it can take necessary measures to ensure safe use and continued compliance. Borealis also sees an opportunity to gain market share by proactively substituting chemicals of concern, thereby adding value for customers and ensuring their products' continued compliance and sustainability.

Governance

The Product Stewardship Council proactively addresses chemicals of concern. It is chaired by the Vice President Health, Safety, Environment and Quality (HSEQ) and brings together experts from across the Group, including Product Stewardship, Sustainability, Ethics and Innovation & Technology, as well as all of Borealis' business sectors and operations. This range of competencies ensures Borealis conducts holistic risk assessments that consider market needs, legal and technological requirements and stakeholder views.

Group Product Stewardship reports to the Vice President HSEQ. The team assesses and approves incoming chemicals at Group level and ensures that products comply with general chemical legislation, such as REACH and the Classification, Labelling and Packaging (CLP) regulation, as well as application-related legislation, such as food contact or healthcare applications.

At national or location level, experts from the locations' HSEQ organizations handle Product Stewardship activities, such as managing compliance with national chemical laws or plant-level approvals of raw materials.

Assessing Chemical Risks

The Group's hazardous chemicals strategy follows the precautionary principle of continuously assessing the risk potential of all substances used in Borealis' products, to identify critical chemicals that need to be replaced by safer alternatives. The Group has a list of substances under scrutiny that is influenced by regulations such as REACH and customer and public perception.

The Product Stewardship Council assesses substances with the highest identified risk, selecting the substances to be evaluated using a proprietary ranking tool. This enables Borealis to identify, mitigate and manage the risks posed by hazardous chemicals. In 2023, the Group analyzed the use of PFAS in its products, processes, maintenance and equipment. Only a very small number of Borealis' products contain PFAS, namely fluoropolymeric processing aids. For those products, a phase-out plan was defined and followed up.

The Product Stewardship Council also updates the Borealis Banned Substances List of more than 250 substances and substance groups that the Group will not use. In 2023, 10 substances were added to the list, which is published on the Borealis website.

Borealis uses its Portfolio Sustainability Compass to assess the sustainability of its Polyolefin product portfolio. Product Stewardship assesses the Group's polyolefin products and innovation projects in two categories of the Compass: "Chemical hazard and exposure across the life cycle" and "Global regulatory trends", and follows up any finding, opportunity or threat. (→ chapter Sustainability Management, p. 38).

Product Compliance

Borealis' product safety procedures cover the health, safety and environmental (HSE) aspects of a product throughout its life cycle, from raw material sourcing to its eventual recycling, recovery or disposal. All the Group's products are assessed for their HSE impacts and undergo mandatory compliance assessments against chemical and product regulations, including hazard communication via SDSs and hazard labels. Guidance for correct disposal of Borealis' products is given on the SDSs or PSISs. For Polyolefin products, those documents also include instructions on how to avoid accidental release of plastic pellets to the

environment. The Group reviews the product compliance assessments whenever there is a change in the product or legislation, to ensure products remain suitable for use in the countries where they are sold and continue to comply with all applicable legislation. However, in some cases these compliance assessments were performed too late in the change process for the products, when the material was already being produced in the Group's plants. This learning triggered the integration of the compliance assessment into the product approval workflow. This ensures that from 2024 onwards, when the change is fully implemented, no unassessed product recipe can end up in the production lines.

Borealis' products comply fully with REACH. This regulation requires participants in the chemicals value chain to prove the safe use of chemicals and to submit the required evidence to the European Chemicals Agency, in a registration dossier. In recent years, non-governmental organizations and some EU Member States have challenged the quality of these registration dossiers. CEFIC has therefore established a REACH dossier improvement program, which Borealis has signed up to and fully supports. The aim of the program is to update all existing dossiers by 2026. In addition to updating 25 existing registrations, in 2023 Borealis filed five additional registrations, to allow the import of new raw materials to its EU production plants.

Other relevant legislation and regulations include the Toxic Substances Control Act in the United States, the Globally Harmonized System (GHS) for the classification and labelling of hazardous chemicals, CLP, and, depending on use, any application-related legislation, such as the EU framework regulation on food contact materials.

In the EU, Switzerland, China, Japan and the Mercosur region, new legislation has revised the approval schemes for plastics that come into contact with food. During 2023, Borealis assessed and implemented the new requirements across its food contact product portfolio, by providing updated "Declaration of Compliance with Food Contact Regulations" documents to customers.

Borealis' other activities in 2023 included:

- using a newly implemented IT tool to notify all relevant products to the EU Poison Centres, prior the deadline for industrial use mixtures with certain human health hazards;
- working towards the ambitious original substance registration deadline in Türkiye of December 31, 2023 that was officially postponed on December 23, 2023 for 3, 5 and 7 years depending on hazard and volumes imported. Preparations have been finalized for 29 out of 60 substances during 2023, putting Borealis in an excellent position to meet the newly announced deadlines; and
- confirming that all substances in Borealis' drinking water contact products are listed in the draft positive list for starting materials, additives and process chemicals for drinking water contact materials in the EU. This assessment was also provided both directly and as part of the CEFIC drinking water group input to an ECHA survey carried out by consultant WSP, which has the task of checking if all substances in the inventory are really in use.
- Group Product Stewardship also intensified its support for the new DYM site in South Korea, to bring its regulatory data up to Borealis' standards. This included:

- *contacting 27 raw materials suppliers to request up-to-date SDSs and completed raw material questionnaires including full composition information;*
- *assessing 10 DYM product formulations and issuing SDSs for them; and*
- *submitting two EU REACH registrations.*
- *support for DYM and other growth projects will increase and continue throughout 2024 and beyond.*

In 2023, Borealis identified no incidents of non-compliance with regulations and/or voluntary codes concerning the health and safety impacts of products and services, or product and service information and labeling.

Controlling and Approving Raw Materials

All incoming chemicals used in Borealis' products are assessed using a thorough incoming material process, before they are approved for use. Group Product Stewardship performs an initial assessment to ensure legal compliance. Product Safety teams in the countries where Borealis operates then perform additional assessments at each plant,

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to ensure the chemical meets plant-specific requirements and complies with national or community-related legislation. The raw material approval package must contain a signed specification, up-to-date SDSs and all the information in the Borealis Raw Material Questionnaire. The approval package is reviewed at least every three years. Following an internal audit finding that the review date of several raw materials was overdue and supplier documents had not been updated, corrective actions were implemented in 2023. As well as better allocation of resources in Product Stewardship, special focus has been given to educate the raw material business responsible and to develop a report dashboard to help prioritization of the raw materials that are actively sourced. Once materials are approved for purchase, they are subject to Borealis' quality control to ensure they continue to comply with the agreed material properties.

All materials are documented based on Borealis' knowledge of the exact composition of the raw material and on detailed information about the material's hazardous constituents. Proper documentation of the raw materials used is a key element of high-quality Borealis product compliance statements, such as SDSs, application-related statements (such as medical use, food contact and drinking water) and other statements, such as on raw materials' origin.

Borealis also regularly audits its raw material suppliers for compliance with, for example, their legal and hygiene requirements. The Group requires its suppliers to provide documentation for each raw material and to keep it up to date, including the information required by national chemical inventory control laws, the CLP and REACH. This enables Borealis to issue the respective SDSs for its customers. In addition, Borealis' production sites are subject to frequent external second-party audits (e.g. customer audits) and third-party audits (e.g. ISO certification audits).

Supporting the Group's Polyolefin Sustainability Journey

Making plastics circular is one of Borealis' main goals. The Product Stewardship department plays a key role by supporting the Group's work to maintain product safety when using mechanically recycled post-consumer waste, which by its nature does not have a defined and homogenous chemical composition.

Both existing and planned legal frameworks, for example, following the EU Commission's Green Deal, ask industry and brand owners to use post-consumer recycled (PCR) materials for their products. The Product Stewardship team is generating an overview of legislation and industry standards, to produce a risk assessment and analytical testing strategy that can confirm compliance and the suitability of Borealis' Circular Economy Solutions portfolio.

During 2023, new ways of working regarding approval of novel recyclate feedstock sources were implemented to support key growth areas including the acquisitions of Rialti S.p.A. and Integra. A categorization system for different types of feedstock was developed that defines the required safety documentation and analytical test results for each EU feedstock, thereby streamlining the procurement process. In 2023, Borealis focused on strategies to enable the use of PCR material for more sensitive applications. For example, Product Stewardship supported a business project looking into closed loop recycling opportunities for automotive applications. The current draft of the EU's revised End of Life Vehicles Directive requires a step-change increase in PCR plastic content in cars. Borealis' project assessed the risk of potential waste streams being contaminated with substances of concern, with a special focus on the Global Automotive Declarable Substance List. A set of analytical tests were proposed to mitigate those risks. The Group is also taking part in an industry consortium to look at cosmetic packaging applications (see Sharing Product Safety Knowledge Across the Value Chain below).

The Lower Olefins and Aromatics (LOA) REACH consortium brings together companies who manufacture or import these products, to support them with their REACH registrations. To assist Borealis' chemical recycling ambitions, Product Stewardship pushed for the consortium's decision that alternative feedstocks can be covered by the existing standard (fossil) REACH registrations of LOA substances, if they meet the defined sameness criteria.

Microplastics

Microplastics are found in the environment, our nutrition and the human body. Once in the environment, microplastics do not biodegrade and tend to accumulate, unless they are specifically designed to biodegrade in the open environment or salt water. They are often mistaken for food by birds and turtles, and swallowed particles can lead to injuries or starvation.

In its 2019 report on microplastics in drinking water, the WHO concluded that "no reliable scientific information available today suggests a potential human health risk associated with exposure to microplastics".

However, research on microplastics is complex and in its infancy and much remains uncertain. Scientists agree that today's evidence provides sufficient grounds for genuine concern. Science Advice for Policy by European Academies concludes that, if microplastic pollution is left unchecked, business-as-usual would lead to concentration thresholds being exceeded in the near future and that widespread risks would occur within a century.

As it is not possible to completely remove microplastics once they are in the environment, the priority is to prevent plastics leaking into the environment in the first place. To develop effective and efficient solutions, more sound scientific knowledge is needed about the source, fate, persistence and effect of microplastics.

Borealis has therefore set up a cross-functional Microplastics Issue Team, which closely follows scientific knowledge generation, evaluates emerging studies and collaborates with value chain partners and industry associations in developing new studies (→ chapter Innovation, p. 187).

Borealis also proactively engages in working groups, along with Plastics Europe and CEFIC. The Group's experts contribute to CEFIC's Microplastics Issue Team, as well as to Plastics Europe's Microplastics Strategic Group, Operation Clean Sweep Taskforce and Microplastics Science Group (→ chapter Public Affairs, p. 48).

Furthermore, Product Stewardship has added instructions on how to avoid accidental release to the environment to all product safety documentation, such as SDSs and PSISs, issued from October 2020 onwards.

EU Chemicals Strategy for Sustainability (CSS)

In October 2020, the European Commission published its "Chemicals Strategy for Sustainability Towards a Toxic-Free Environment". This is part of the EU's zero pollution ambition, which is a key commitment of the European Green Deal. Together with the EU Circular Economy Action Plan and the linked EU Sustainable Products Initiative, this aims to bring about a step change in product safety and sustainability in the EU. Preparations for turning the strategy's ideas into proportionate and enforceable legislation have been ongoing since 2021 and will continue for several years.

CEFIC has organized an economic analysis of the CSS's impact on the European chemical industry. During 2023, Borealis has continued to take part in this work, particularly in two studies on PFAS. The first study assessed the economic impact of a proposed restriction on PFAS and the second study considered the use of PFAS materials in industrial equipment. CEFIC submitted both studies to the public consultation on the restriction. In addition, Borealis is represented in many CEFIC and Plastics Europe working groups dealing with different aspects of these initiatives, including the ongoing revisions of REACH and the CLP regulation. An internal impact assessment highlighted the importance of the Product Stewardship Council and the need for extra resources to handle the substitution of an increasing number of substances of concern.

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Sharing Product Safety Knowledge Across the Value Chain

Borealis communicates with its stakeholders on product safety through a wide range of channels and thereby manages its positive impacts. The Borealis website allows anyone to find information about the Borealis Banned Substances List. The website also includes examples of successful substitutions of hazardous chemicals and some position statements regarding "hot topics". Borealis' Polyolefin customers can download SDSs, PSISs and other general or application-related compliance statements from the Borealis website or the MyBorealis customer portal.

When product modifications may influence customers' safety or require additional testing of finished articles, Borealis informs customers or authorities in due time before it makes the modifications. Borealis also informs customers in advance when legislative changes have consequences for them.

In addition, Borealis offers training and education to customers. Sharing Borealis' expert product safety knowledge with value chain partners makes an important contribution to helping customers continuously meet the highest product safety and quality standards.

Collaboration with the value chain is also instrumental to mechanical recycling. Together with customers, Borealis is defining the boundaries to guarantee the safety of PCR plastics in different applications, as no established standards are available yet. For example, Borealis is an active member of the Cosmetics, Packaging and Toxicology (CosPaTox) consortium and project, which is looking into the development of safety guidelines for using PCR materials in cosmetic packaging.

Borealis actively participates in industry associations and standardization groups to stay at the forefront of regulatory and public requirements (→ chapter Public Affairs, p. 48). The Group is also an active member of the Product Stewardship teams at CEFIC, Plastics Europe and related national organizations. The Group works closely with its own experts, customers and suppliers, and engages in experience exchange at REACH conferences and other activities.

Outlook

The Group's product stewardship objectives are to:

- generate and provide data to enable the EU authorities to make informed decisions on legislation that is under review, such as the REACH Regulation, the Food Contact Regulation and the Drinking Water Directive and its national implementations;
- continue to implement the requirements of new legislation globally, including Türkiye registration aftercare, registration of 100-1,000 metric tons substances in South Korea, and support for customers in Taiwan with the registration of PEC 1 substances;
- ensure that Borealis' REACH registrations for cracker feedstock also cover higher percentages of alternative non-fossil feedstock than currently described by the Concawe consortium; and
- fulfill reporting requirements in North America including data calls for individual substances and the CDR (chemical data reporting) in the US.

Beyond 2024, Borealis will prepare to implement elements of the EU's CSS, such as the new hazard classes, microplastic labeling and reporting that will be required by 2026, as well as new requirements from the revised REACH regulation. Furthermore, Borealis will improve existing and implement new IT tools, to improve efficiency and data quality and reduce the risk of human error by centralizing data storage, thereby lowering the risk of product safety incidents and non-compliance.

Borealis Social Fund

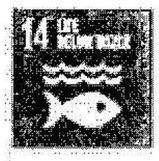
Goals and Planned Key Actions in 2023	Key Achievements in 2023
Project STOP: Hand over waste management systems in the cities of Pasuran, East Java, and Jembrana, Bali, to the local municipalities	Held Pasuran handover ceremony in February 2023, followed by Jembrana in August 2023
Project STOP: Begin to expand the program across the wider Banyuwangi region	Celebrated opening of the material recovery facility in Songgon, Banyuwangi, East Java, in September 2023
Prepare for the 15 Years of Water for the World and Borealis Social Fund Campaigns	Started Water for the World concept refresh. 15th anniversary activities canceled due to challenging market environment
Continue to manage and enhance the project portfolio	Established the Borealis Immediate Aid Fund in partnership with the Austrian Red Cross Supported the new "WELCOME TO THE FUTURE" exhibition at ZOOM Children's Museum in Vienna, Austria Provided emergency relief support after the earthquake disaster in Türkiye Began new partnership with Ecopost to drive circular economy in Kenya

Goals and Planned Key Actions for 2024
Continue implementation and fundraising activities for Project STOP in the Banyuwangi region, East Java

Businesses can only grow sustainably in a healthy environment and stable society. To foster its role as a socially responsible company, Borealis established the Borealis Social Fund in 2008.

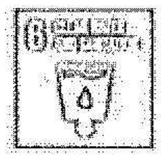
Each year, the Group dedicates a portion of its net profit to the Fund, based on clearly defined allocation rules. Any external or internal stakeholder can propose a project to the Sustainability Team, which validates the proposal and makes recommendations to the CEO, who is responsible for the Fund and selects and approves all projects. The Chairperson or Deputy Chairperson of the Supervisory Board must also approve sponsorships above EUR 0.5 million per project per year.

Borealis has defined three areas of social engagement that directly contribute to the UN Sustainable Development Goals (UN SDGs). Focusing on these areas helps to maximize Borealis' impact and aligns its activities with its Purpose and Group Strategy.

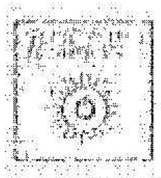


Waste and Resource Efficiency
SDG 14: Life Below Water

- enable the establishment of efficient and low-cost circular waste management systems in emerging and developing countries, to drive the circular economy;
- support research and innovation; and
- raise awareness and encourage behavior change.



Water
SDG 6: Clean Water and Sanitation



Energy
SDG 7: Affordable and clean energy

- provide access to safe drinking water and reliable, affordable renewable energy;
- support the preservation of water resources; and
- raise awareness and promote best practices.

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Education and Social Integration
SDG 4: Quality Education

- nurture interest in chemistry and science;
- support education on sustainability to meet future challenges; and
- integrate marginalized and underprivileged people into society.

Waste and Resource Efficiency: Project STOP and Ecopost

Environmental pollution due to littering is a global challenge, with millions of metric tons of plastic waste leaking into the environment and oceans every year. The problem arises because globally only around 9% of plastic is recycled, with about 50% landfilled, 19% incinerated and 22% dumped or burned in the open environment. While all regions will see plastic waste increase in the future, the OECD Global Plastics Outlook expects it to more than quadruple in Asia and Africa by 2060, as the population grows and living standards rise. Mismanaged waste is a major problem in the region, as it harms ocean ecosystems, human health and livelihoods, and sustainable development more broadly.

An important part of the solution is to accelerate the transformation towards a circular economy, by establishing low-cost, efficient and circular waste management systems to stop waste leakage at source. Borealis and Systemiq co-founded Project STOP in 2017 to help municipalities create these waste management systems, with broad support from national and regional governments, international institutions, academia and the private sector. Since it began in Indonesia, Project STOP has steadily expanded from the city of Muncar to two more cities, Pasuruan and Jembrana. In addition, in 2023 Borealis entered a partnership with Ecopost to drive circular economy in Kenya.

Project Highlight 2023: Project STOP

Project STOP focuses on delivering measurable impact on the ground. Its concept is that sustainable transformation can only be achieved through a holistic approach that addresses all system failures at once. The project's systemic approach therefore works on all levels, including setting up a waste collection and sorting system across the entire city, building the necessary infrastructure, establishing a sustainable financing model, strengthening institutional capacity and the regulatory environment, rolling out behavior-change campaigns and beach clean-ups, providing technical expertise and support in project management, and recycling valorization.

To ensure that valuable material does not end up in the environment, Project STOP collects all organic and inorganic waste fractions, including plastics. Moreover, it benefits the community by creating new full-time jobs in waste management and reducing the harm to public health, tourism and fisheries.

Once established, the system is formally handed over to the municipality. To ensure the system remains effective after handover, Project STOP has developed a comprehensive program to train municipal employees in the three cities. The Project STOP team also remains available for support and advice.

While the costs of collecting and sorting waste are currently covered by selling materials and waste collection service fees, it is crucial that the system is sustainably financed in the long term. This means continuing to increase the value of waste, creating a market for recycled materials and fostering a circular economy. To reinforce the financing model, Project STOP has started work on novel financing instruments.

Project STOP's ambition is to enable as many stakeholders as possible to replicate its approach in other regions, by developing a blueprint and sharing its know-how. The knowledge gained from the three city partnerships is now allowing the project to scale up across Banyuwangi, a Regency in Indonesia with around 1.7 million inhabitants, while being faster, lower cost and using fewer resources to implement.

The expansion program began in early 2023 and has three phases, which are planned to complete by the end of 2026. By that time, Project STOP aims to positively impact the lives of up to 2 million residents, create 1,000 full-time jobs and collect 230,000 metric tons of waste annually, including 25,000 metric tons of plastic.

A key highlight in 2023 was the inauguration of a newly constructed material recovery facility (MRF) in Songgon Municipality, Banyuwangi, East Java. The MRF is one of the largest of its kind in Indonesia and an important milestone towards building the country's first Regency-led circular waste management system. The new MRF will collect and sort all waste from households in the region, including materials to be recycled, and can process up to 84 metric tons a day. At full scale, the MRF will process around 3,300 metric tons of plastic waste per year by 2025.

Achievements since start of Project STOP [1]
by the end of 2023:

- *391 new full-time jobs created in waste collection, sorting, organic processing and management and administration;*
- *393,280 people provided with waste collection services for the first time in their lives; and.*
- *61,770 metric tons of waste (including 8,755 metric tons of plastic) collected, sorted and further processed*
- *Waste management systems in the cities of Pasuruan and Jembrana handed over to the local municipalities;*
- *Expansion project "Banyuwangi Hijau" started with the ambition to establish Indonesia's first regency-wide waste management system, bringing waste collection services to over 250,000 residents and creating around 200 new jobs in its first phase; Groundbreaking ceremony held in September 2023 for the first material recovery facility under the Banyuwangi Hijau expansion project with a capacity to manage 84 metric tons of waste per day in its initial phase*

1) numbers calculated until hand-over to the local city authorities

Project Highlight 2023: Ecopost

Ecopost is a Kenya-based social enterprise that addresses the challenges of urban waste management, plastic pollution and youth unemployment. Borealis and Ecopost share a vision of enhancing circularity, to stop waste leaking into the environment and create positive socioeconomic and environmental impact. The two companies are therefore collaborating, with Borealis funding Ecopost's activities to boost waste recycling in Kenya and promote a circular economy, in line with the UN SDGs.

Kenya faces significant economic and environmental challenges. These include more than one third of the population living below the poverty line, the need to address waste management, as well as the growing demand for building materials, which is leading to deforestation. Ecopost addresses all three challenges, through a scalable and replicable model. It collects plastic waste and recycles it into eco-friendly alternatives to fossil-based plastics, for applications such as fencing, signage and building materials. In doing so, it diverts waste from landfill, open burning or dumping in waterways and sewers, and provides an alternative material to timber.

Ecopost also helps to address poverty, by creating jobs for operators and distributors, and providing a fair and regular income for waste pickers, who are the most important people in the recycling value chain. In Kenya, waste picking is often an informal role performed by women. They are exposed to being underpaid for the waste they collect, as middlemen who sell the collected waste to recyclers typically capture the majority of the sales margin. Ecopost therefore formalizes the waste picking community by working with marginalized youth and women's groups, who collect, sort, shred and prepare waste material for producing pellets and plastic lumber.

To achieve impact at scale, Ecopost provides training and capacity building across the value chain. Borealis is supporting this capacity building by training and engaging more waste collectors, as well as formalizing their work by funding entrepreneurial start-up kits for the youth and women's groups.

Ecopost mainly produces posts for fencing, for customers such as ranches, government departments (such as Kenya Wildlife Services), and retailers for farmers. Another product segment is posts for signs, which are delivered to traffic sign producers (as suppliers to the government) and wholesalers (as suppliers to private companies).

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Since its inception, Ecopost has recycled 13,000 metric tons of plastic collected from urban dumpsites and industrial and household waste. This has saved 4,500 acres of trees, by providing an alternative raw material to wood for producing signposts and fencing. As a consequence, 160,000 metric tons of CO_2 equivalent could be saved in total. By providing work for the operators, plastic waste collectors, transporters, distributors and installation technicians, Ecopost has created 102 direct jobs and roughly 12,000 indirect jobs.

Ecopost also supports communities by sponsoring school visits to the factory, having hosted 120 sessions to date. As part of its Entrepreneurship & Women Empowerment initiative, Ecopost has enabled the procurement of shredders and balers for 31 groups across Kenya and Tanzania, with each group consisting of 15 to 25 members, who are mostly young people and women.

Water and Energy: Water for the World

The food supplies, health, livelihoods, and education of poor families all depend on having access to water and energy.

However, the United Nations estimates that worldwide, one in three people lack safe drinking water and two-fifths do not have basic handwashing facilities, especially in remote, rural areas. In addition, 789 million people – or 13% of the global population – do not have access to electricity and 3 billion people rely on wood, coal, charcoal or animal waste for cooking and heating. Drought is a particular problem, as it harms food supplies in some of the world's poorest countries and leaves people hungry and malnourished.

Energy services are also vital for good health, whether they are enabling clean water supplies or powering healthcare facilities. This makes energy key to preventing diseases and fighting pandemics.

Since 2008, Borealis and Borouge have provided solutions through Water for the World, a joint program to address the global water and energy challenge in rural and urban communities, with a focus on South-East Asia and Africa. The program cooperates with non-profit organizations and supports numerous projects, including in China, Ethiopia, India, Kenya, Nepal, Morocco, Myanmar and Pakistan, benefiting over one million people since its inception.

Project Highlight 2023: 15th Anniversary of Water for the World

Water for the World celebrated its 15th anniversary in 2023. While the program is based on a joint vision and global concept, Borealis and Borouge follow different but complementary approaches, tailored to the footprint of their organizations and local needs.

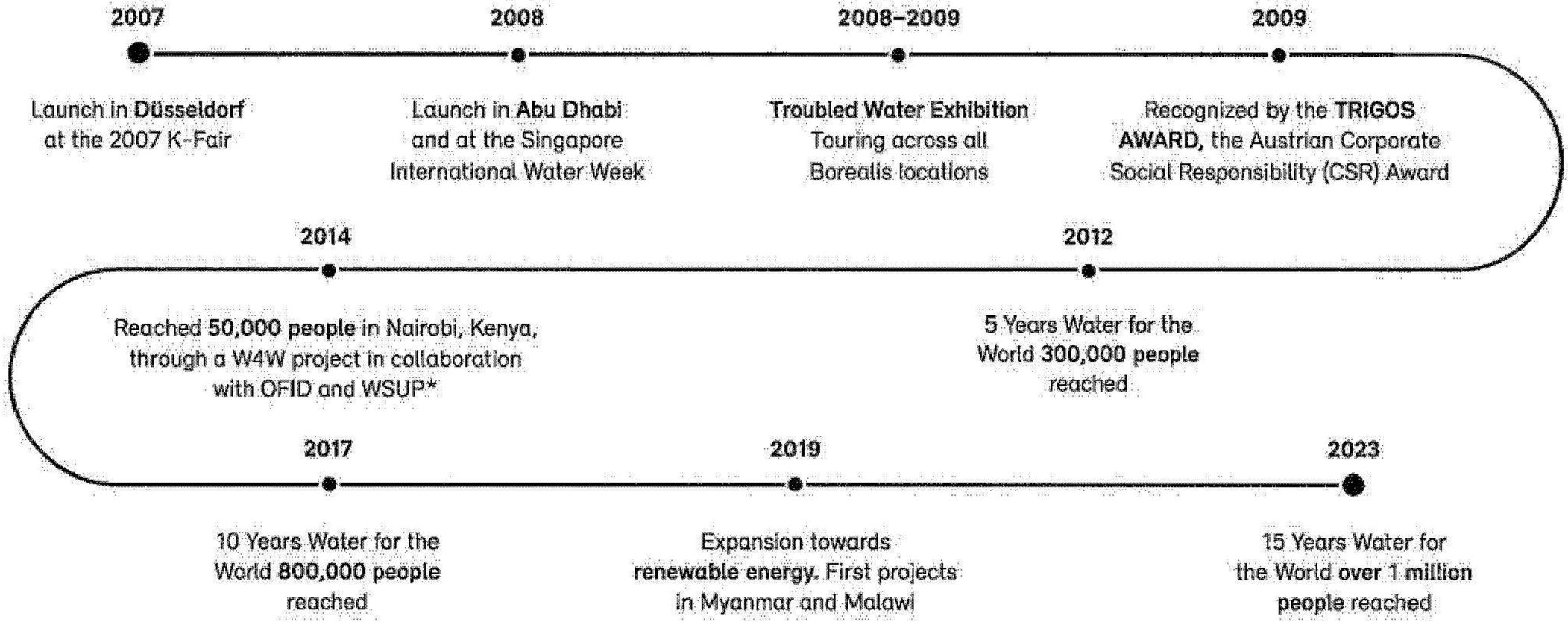
Borouge's footprint is in Asia and the Middle East, where the challenges include water scarcity and the need to extend water infrastructure to remote areas. Its projects therefore address these issues in the region, with Borouge employees working with local or national NGOs .

Borealis' main footprint is in Europe, where the primary challenge is water leaking from old infrastructure. The Group focuses on raising awareness, for example through water roadshows and exhibitions, and by supporting the Stockholm Water Prize. It also looks to increase knowledge in areas such as preventing water leaking from aging infrastructure, sustainable water practices in agriculture or calculating the world's first water footprint for plastics. In addition, since 2007 Borealis has partnered with Water and Sanitation for the Urban Poor (WSUP), providing funding and material to support its engagement in Africa.

In 2017, Water for the World extended its program to include renewable energy infrastructure, with a first project in Myanmar to install photovoltaic modules in a hospital in Kanni, followed by a project in Uganda.

In 15 years, the world has changed. Today's challenges include the consequences of climate change such as increased natural disasters, floods and droughts. Therefore, during 2024 the program will be reviewed, and the conceptual approach and project portfolio will be adapted, to meet current and future societal needs.

Fig. 37: **Water for the World highlights**



* WSUP: Water and Sanitation for the Urban Poor; OFID: OPEC Fund

Achievements by end of 2023
Since it began in 2007, Water for the World has:
– reached more than 1,000,000 people; and
– implemented over 20 projects in more than 20 countries.

Education and Social Integration: Growing Talent
Young people's education, innovation skills and critical minds will determine whether society finds solutions to complex global sustainability challenges, such as climate change, plastic waste and increasing migration.

Stimulating enthusiasm for science and chemistry at an early age means that today's young and inquisitive minds will become tomorrow's leading scientists and innovators. Education also enables migrants and underprivileged people to integrate into society, as well as supporting equality and inclusiveness and maintaining a stable democracy.

Educational systems therefore need to adopt a framework and practices that ensure young people develop the right skills, so they can put their ideas into practice, think independently and provide access to quality information for all. However, according to a UNESCO Institute of Statistics report in 2019, 258 million children and youth do not have access to education, 23% who are of primary school age, 24% of lower secondary school age and 53% of upper secondary school age. This is due to low public financing, poverty, war and other socioeconomic factors.

Borealis therefore created Growing Talent. Projects include Borealis' scholarships for migrants and underprivileged people, and providing better access to applied chemistry and science, for example via open chemistry labs, children's summer camps, and innovative education institutions such as the Austrian ZOOM Children's Museum, the Science Centre Network, the Finnish Company Park and the Emirates National School in the UAE.

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Project Highlight 2023: "WELCOME TO THE FUTURE!" Exhibition
Borealis has been one of the main sponsors of the ZOOM Children's Museum in Vienna, Austria, since 2013. The Museum and Borealis share a common goal of helping the young generation to make complex sustainability issues understandable, getting them excited about science and research, and sharpening their skills for future challenges.

Following the successful "PLASTICS" exhibition in 2015 and "EARTH & SOIL" in 2019, the Borealis Social Fund and ZOOM celebrated the opening of a new hands-on exhibition, "WELCOME TO THE FUTURE!", in 2023. The exhibition deals with the sustainability challenges of tomorrow's world and ZOOM has transformed the exhibition hall into a Future Lab, where artists, scientists and experts from many areas have contributed their ideas. ZOOM welcomes children to ask questions and to touch, feel, examine and play. In their own way, they zoom in on objects and situations and, by doing so, find out about themselves and discover their skills, abilities, and creativity.

Project Highlight 2023: Borealis Immediate Aid Fund
The economic crisis caused by the Ukraine war has driven up inflation and interest rates, with households facing higher bills for food, rent and other essentials, as well as spending more on servicing loans and other debts. As a result, an increasing number of people are at risk of eviction and homelessness, having their electricity and heating cut off, or being unable to pay for essential medication. In 2023, the Borealis Social Fund therefore partnered with the Austrian Red Cross to launch the Borealis Immediate Aid Fund (Borealis ISH Fonds), to provide fast and unbureaucratic financial aid to people in Austria facing financial emergencies. Based on a needs analysis, the fund focuses on helping young families and elderly people in situations where no other support is available. In addition to receiving financial aid, recipients benefit from a consultation with the Austrian Red Cross, to help them avoid similar situations in the future.

Achievement by end of 2023
Since Borealis established the Social Fund, Growing Talent has partnered with organizations in almost 10 countries, reaching out to more than 1,100,000 people

Emergency Crisis Relief
Borealis stands in solidarity with those affected by natural catastrophes, pandemics or war. In addition to its three focus areas, the Borealis Social Fund therefore provides support in crisis situations, in the form of money, materials, expertise or its people's time.

Continuing earlier donations for emergency situations in the past, in 2023 the Fund supported those affected by the Türkiye and Syria earthquake in February, by contributing to a container city in Adana, Türkiye, which was set up to house families temporarily while the area was being rebuilt. Borealis contributed to 34 of the 200 containers.

Environment

Environmental Management

Goals and Planned Key Actions in 2023	Key Achievements in 2023
Continue preparations to be compliant with the EU Best Available Techniques Reference on Common Waste Gas Treatment in the Chemical Sector (WGC BREF)	Concluded corporate-level gap assessment versus WGC BREF and handed it over to the locations for detailed measurements and studies to close the gaps
Continue to roll-out water management plans in all locations	Established water management plans for all locations and summarized gaps versus the water management plan framework in an action plan
Finalize work on the Operation Clean Sweep (OCS) certification standard and achieve full certification of all Borealis sites	Launched OCS certification standard at the European level Closed all gaps found in the 2022 readiness audits on Borealis' production sites and started planning for certification of all sites

Goals and Planned Key Actions for 2024	Goals and Planned Key Actions Beyond 2024
Achieve full third-party OCS certification of all European sites by the end of 2024, with non-European sites and recycling sites required to fully comply with the Group's internal standard	Achieve zero non-emergency flaring by 2030
Implement the action plan to close gaps against the water management plans and fully implement water reporting, baseline and improvement roadmaps, for tracking key performance indicators	
With OMV Group, evaluate biodiversity impacts and dependencies and assess risks and opportunities, based on the Locate, Evaluate, Assess and Prepare approach developed by The Taskforce on Nature-related Financial Disclosures (TNFD)	
Define 2030 targets for water and biodiversity	

Borealis' environmental management encompasses managing its energy consumption and efficiency, emissions to the environment (air and soil), its use and discharge of water, operational waste, and its overall environmental performance, ensuring compliance with all applicable laws and regulations.

The main driver for improving the Group's environmental performance is reducing its CO_2 emissions and energy consumption, which are among the most material impacts arising from its production processes. Emissions towards air, water use, waste and effluents also play a significant role in high-quality health, safety and environmental (HSE) management. They are therefore included in the Group's HSE management processes and monitored as part of the environmental objectives of each location.

Governance

The Health, Safety, Environment and Quality (HSEQ) function is responsible for Group-level environmental management and reports to the Chief Executive Officer. HSEQ defines the Group's standards and processes for its environmental management system.

Borealis also has several networks that bring together environmental experts from across the Group. The Environmental network holds regular meetings with the location environmental experts, to discuss and agree activities to continuously improve the environmental management system and performance. This includes drafting and reviewing new instructions, resolving issues identified by internal and external audits, and reviewing environmental performance, risks and opportunities.

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The team also shares lessons learned and the improvement actions taken, as well as discussing authority permits for projects and legal compliance.

The HSE manager's network defines the HSE strategy and improvement actions, and shares information such as lessons learned from incidents, best practice, and gap closing or audit actions. The network includes the Head of HSSE, local HSE managers and Group HSE experts. Borealis' environmental experts also contribute to the Public Affairs team, to help formulate Borealis' position on environmental issues.

Location HSE teams include environmental experts and report to the location leader. The local leadership meets each month to discuss HSE performance, including environmental KPIs and other indicators, as well as the performance of key projects. Every location has an HSE Forum, which consults with and informs employee representatives about the HSE management system, and encourages employee participation.

In addition, the Group has an OCS network, with regular meetings with the OCS specialists to discuss lessons learned, share improvements and drive performance.

Managing Environmental Risks

The Group performs a detailed and systematic environmental risk and opportunity assessment for every plant, in all locations. These take place at least every three years or sooner if there have been major changes, near misses, incidents or accidents, or potential improvements have been identified. The risk assessments are based on an evaluation of the current legal framework and possible changes to it, any deviations from permit limits, and stakeholder input. Risks above a certain level are added to the Group risk management tool.

Based on these assessments, Borealis defines and documents HSE objectives and targets for each location. Clear responsibilities and timelines are agreed and reviewed at Group HSE level. The consolidated outcomes, including HSE performance, are reported to the Executive Board. Borealis also regularly engages with its stakeholders and assesses how significant environmental risks could affect its neighbors and other stakeholders in the community. The engagement approach for each aspect is then defined and can range from newsletters to roundtables, and one-on-one discussions with key stakeholders. Local senior managers deal with matters that can be managed locally and Borealis holds bi-monthly public affairs calls, to ensure they are well informed.

All Borealis production locations are part of an ISO 14001-compliant environmental management system. Borealis also uses an environmental data management system and reporting software. This ensures the Group has good control of this data, which flows from different sources, in multiple formats and at different times, and gives it the traceability and transparency required for reporting and auditing.

The Group is committed to complying with all relevant environmental laws, regulations, standards and other legal requirements, such as operational permits. This ensures it can continue to operate and protects it from fines, reputational damage and the costs of impact mitigation. The Group reviews all cases of non-compliance and takes action to prevent them from reoccurring.

Borealis is also committed to implementing the principles of Responsible Care®, the chemical industry's voluntary commitment to continuous improvements in HSE performance (→ chapter Sustainability Governance, p. 68), The Group uses the European Chemical Industry Council's self-assessment web tool annually, to help it continually improve its approach to Responsible Care. The tool has numerous features, including benchmarking performance against peers and cross-referencing performance against the United Nations Sustainable Development Goals and other standards.

Activities 2023

Preparing for the Publication of WGC BREF

The WGC BREF (EU Best Available Techniques Reference on Common Waste Gas Treatment in the Chemical Sector) sets binding minimum performance standards for chemical plants, to prevent or minimize their impact on the environment through emissions to air.

Borealis has continued its intensive preparations for the introduction of the WGC BREF, which began in 2021 by building a full inventory of all emission points to air for each polyolefin plant, in accordance with requirement no. 2 (BAT 2 – Best Available Technology). In 2022, following the publication of the final draft of the WGC BREF, the Group used the inventories to conduct a full gap assessment against the 26 applicable BAT requirements.

After the publication of the final WGC BREF in December 2022, Borealis reviewed the gap assessment again. The Group then handed the assessment to the locations' technical experts, to define the necessary work packages and projects to close the gaps.

Compliance with WBC BREF requires measurements of each identified emission point to air. These measurements are more complex than expected and finding companies able to perform them has also proved challenging.

Borealis' sites in Austria are also legally required to inform local authorities of all gaps against a new BREF, within one year of its publication, to help the local authorities forecast permitting needs. This makes it more challenging for these sites to comply with the BREF, particularly if the required external service providers are not equipped for the task.

Emissions to Air

Borealis' emissions to air result from its production processes and from combustion for energy generation. Such emissions can cause acidification, inhibit seed production, hinder fertilization or have an impact on human health. In addition to carbon dioxide (→ chapter Energy & Climate, p. 157), these emissions mainly comprise:

- nitrogen oxide (NO_x) emissions, created by the burners in steam boilers, thermal oxidizers, flares and furnaces; and
- volatile organic compounds (VOC), which are fugitive emissions of hydrocarbons, occurring due to high pressure and temperature.

Borealis' identifies its emissions to air using a mix of direct measurements (for example, in the stack) and calculations based on fuel consumption. The method depends on the complexity (for example, where several units use one stack) and the amount emitted. Emission factors provide a standardized method for calculating emissions, based on the type and amount of fuel used. For example, an emission factor may state that $1m^3$ of natural gas burned in a steam boiler produces x mg of NO_x. In most cases, local or national authorities provide the emission factors, as they form part of Borealis' permit or reporting requirements. In some cases, the factors are literature-based.

The Group follows all the legal requirements and stipulations in its permits, and also has its own standards for measuring and following up on key pollutants. The Group records any deviations from the norm in its incident management system, then investigates them and takes corrective actions. The approach taken depends on the emissions' impact and their criticality. The Group prioritizes actions using the principles in its Group's Risk Management Policy, in line with Borealis' sustainability management approach. The Executive Board regularly discusses and addresses high-risk issues and proposals with significant potential for improvement.

Volatile Organic Compound Emissions

Borealis' goal is to reduce its VOC emissions by quickly detecting and repairing leaks. In 2023, Borealis' VOC emissions were 2,445 metric tons for Base Chemicals (BC) and Polyolefins (PO), compared to 2,608 metric tons in 2022. The decrease was mainly due to several turnarounds in the locations, resulting in production stopping for nearly two months.

Flaring

Flaring is a necessary safety measure used in the Group's hydrocarbon and polyolefin plants, in which excess gases which cannot be recovered or recycled are safely burned. Flaring is responsible for a minor part of the Group's overall CO_2 emissions, as well as NO_x emissions. Flaring also results in inefficient use of the Group's resources, causes nuisance to Borealis' neighbors, and has legal implications, such as permit stipulations or restrictions to emergency flaring (→ chapter Energy & Climate, p. 157).

The Group has set a target for zero non-emergency flaring by 2030. Turnarounds, regular maintenance of the plant's assets and other internal and external factors influence the achievement of this target. In particular, flaring increases in years with more turnarounds, which are scheduled events during which a plant is temporarily taken out of operation to carry out important maintenance works and inspections. This inevitably leads to more flaring, as plants or lines must be safely shut down, emptied and ramped up again.

In 2022, the Group summarized best practices, refined definitions and uniform minimum requirements, for example for measurements, in a new document in the Borealis Management System (BMS). The Group also updated its project and risk database to track flaring projects and monitor progress towards the 2030 target. This has enabled the development of roadmaps for the individual locations and the Group in 2023. To further strengthen the approach, a new Energy and Flaring team led by a senior manager

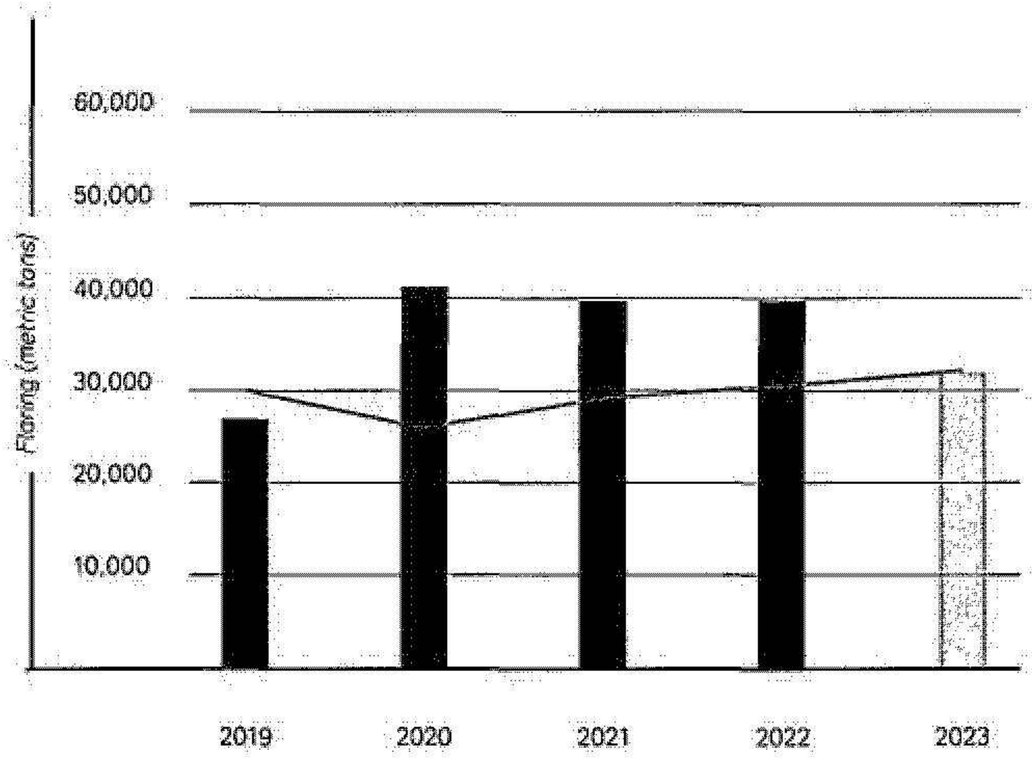
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has been established, to bring together the technical and financial expertise to deliver on these roadmaps.

Flaring losses in 2023 were 32,239 metric tons for Base Chemicals and Polyolefins, compared to 39,955 metric tons in 2022. The effort to reduce upsets and implement flaring improvements continued, but several turnarounds led to significant start-up and shut-down flaring during 2023.

At 12,883 metric tons, non-emergency flaring losses for Base Chemicals and Polyolefins in 2023 were lower than in 2022 (14,113 metric tons) and below the target of 15,329 metric tons.

Fig. 38: **Flaring performance 2019–2023**



metric tons	Actual	Target
2019	27,619	30,000
2020	42,543	27,500
2021	38,538	29,000
2022	39,955	30,479
2023	32,239	32,588

Key projects to reduce non-emergency flaring
In 2023, a turnaround in Schwechat, Austria, allowed the location to implement several projects that should reduce non-emergency flaring by 80%. The Group's location in Porvoo, Finland, also completed a major project, using gas that would previously have been flared to produce much-needed steam for the site. This should reduce non-emergency flaring at the site by more than 90%. The full impact of these projects, which also reduce CO_2 and NO_x emissions and energy consumption, will be apparent from 2024 onwards.

Dust Emissions
All Borealis locations focus on reducing and preventing dust. The Group's fertilizer locations, which were divested in 2023, were the main contributor. Borealis' polyolefin production plants monitor dust emissions using spot samples, so the total volume of dust they produce is not measured.

Key project to reduce dust emissions
During the year, the Group's Brazilian site replaced five dust collectors with state-of-the-art alternatives.

NO_x Emissions
Borealis measures most of its NO_x emissions and calculates the remainder using a standardized emission factor. Absolute NO_x emissions in 2023 were 1,154 metric tons for Base Chemicals and Polyolefins, compared to 1,102 metric tons in 2022.

Key project to reduce NO_x emissions
The Stenungsund (Sweden) location completed its steam boiler burner replacement program in 2023. The three steam boilers are now equipped with reliable and efficient low-NO_x burners, which reduce NO_x emissions by 20 metric tons a year, meet the site's legal emission standards and reduce its environmental impact.

Sulfur Oxide (SO_x) Emissions
Borealis does not produce SO_x emissions, as it only uses gaseous fuels (natural gas and hydrocarbons) where no sulfur is present.

Water Management
Borealis needs water to operate its plants and sites. Cooling is the largest use of water. Other uses include feeding boilers, cleaning, sanitation and firefighting.

The Group looks to minimize its water use, for example by recycling water in its production process. Environmental experts in each operation continuously monitor water use as part of the Group's environmental monitoring program and to comply with the permits set by local authorities

Borealis also carefully manages and treats the wastewater it discharges. Every location monitors its wastewater flows and contaminants to ensure that all parameters are within permitted levels and reports regularly to the relevant authorities.

In addition, Borealis uses tools such as the WWF (Worldwide Fund for Nature) water risk filter. This allows it to assess areas of concern, such as baseline water stress or interactions with neighbors and other stakeholders, so it can identify and prioritize improvement projects.

Water availability varies by location. A detailed water inventory was carried out in 2020 and 2021, which served as the basis for a risk assessment. This allowed the Group to understand its water usage, water emissions and water-related risks at each site and across the Group as a whole.

The results showed that four of the Group's sites have critical water availability and are therefore subject to stringent water permits. Borealis prioritized these locations, which were the first to implement the Group's new water management principles in 2022. The principles set minimum requirements for the locations to measure and report their water use, as well as how they are reducing their water withdrawal, for example by collecting and using rainwater, or through water saving, substitution, recycling and closed-loop systems.

In 2022, the Group also finalized water management plans for seven locations with baseline water stress. The plans cover all aspects of using water, from withdrawal to discharge, including the impact on the water bodies affected. The plans therefore lead to better data and follow-up of water flows, helping to identify projects to reuse water or use it more efficiently.

By the end of 2023, all of the Group's locations had finalized water management plans. Newly acquired locations will have three years to comply with this requirement. The locations have started to define the actions required to improve their water management, and their targets and goals.

During 2024, the goal is to:
- close the gaps against the water management plans, such as missing measurements to monitor water use or discharge;
- fully implement water reporting, including setting a baseline; and
- develop improvement roadmaps for tracking water performance indicators, such as water efficiency indicators or freshwater intensity.

Finalized studies and projects will be presented and reviewed in the Group's Water Team as well as the network of environmental experts, to ensure cross learning, application of lessons learned and a review of their effectiveness.

Water Withdrawal

Borealis withdraws the majority of the water it uses from surface water bodies, such as rivers and oceans. The remainder comes from groundwater, from another organization, municipal water supplies or other water utilities. Some locations also collect and use rainwater. Borealis' water withdrawal in 2023 was 334 million m^3 for Base Chemicals and Polyolefins, compared with 407 million m^3 in 2022.

Fig. 39: **Borealis' water withdrawal by source in 2023** [1]

mn m^3	2023 BC/PO	2023 Fertilizers, Melamine and TE[2]
Water withdrawal	**334**	**115**
Freshwater		
Ground freshwater	0.07 (0.0%)	0.0%
Surface freshwater	4.4 (1.3%)	0.0%
Freshwater from public supply	1.8 (0.5%)	0.7%
Freshwater from other sources (rainwater, recycling, third party)	0.3 (0.1%)	0.0%
Non-freshwater		
Ground non-freshwater	7.7 (2.3%)	1.2%
Surface non-freshwater	0 (0.0%)	98.1%
Sea water	319.2 (95.5%)	0.0%
Non-freshwater from other sources (rainwater, recycling, third party public supply)	0.9 (0.3%)	0.0%

1) All water withdrawal is measured in accordance with local legal requirements. //
2) Due to the divestment, only the first half of the year to June 30, 2023 is reported. The figures are, therefore, not fully comparable.

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Fig. 40: **Borealis' water withdrawal from locations with water stress by source in 2023**

mn m³	2023 BO/PO	2023 Fertilizers, Melamine and TEN[1)]
Water withdrawal from locations with water stress	**1.1**	**0.25**
Freshwater		
Ground freshwater	0.7 (63.6%)	0.0%
Surface freshwater	0 (0.0%)	0.0%
Freshwater from public supply	0.05 (4.8%)	0.0%
Freshwater from other sources (rainwater, recycling, third party)	0 (0.0%)	0.0%
Non-freshwater		
Ground non-freshwater	0 (0.0%)	100%
Sea water	0 (0.0%)	0.0%
Non-freshwater from other sources (rainwater, recycling, third party public supply)	0.3 (31.6%)	0.0%

1) Due to the divestment, only the first half of the year to June 30, 2023 is reported. The figures are, therefore, not fully comparable.

Fig. 41: **Borealis' water discharge by water body in 2023** [1)]

mn m³	2023 BO/PO	2023 Fertilizers, Melamine and TEN[2)]
Water discharge	**334**	**111**
To freshwater environment		
Freshwater discharged/ returned to groundwater aquifer	0 (0.0%)	0.0%
Freshwater discharged/ returned to fresh surface water	0 (0.0%)	0.0%
To non-freshwater environment		
Water discharged/returned to groundwater aquifer (non-fresh)	0 (0.0%)	0.19%
Water discharged/returned to non-fresh surface water	6.6 (2.0%)	99.75%
Water discharged/returned to seawater	326 (97.5%)	0.0%
To others		
Water discharged/returned to offsite water treatment	1.7 (0.5%)	0.0%
Wastewater discharge to beneficial/other user (third party)	0 (0.0%)	0.06%
Water discharge/returned to evaporation pond	0 (0.0%)	0.0%

1) No water bodies are affected by water discharge and/or run off. // 2) Due to the divestment, only the first half of the year to June 30, 2023 is reported. The figures are, therefore, not fully comparable.

Wastewater Discharge

All Borealis plants are connected to wastewater treatment installations, consisting of internal treatment units, external plants or both. The volume and nature of the wastewater Borealis generates depend on the type of production at its locations. Borealis therefore installs water treatment techniques that are appropriate for each plant's production process, which can include filtration, neutralization, osmosis, gravimetric and biological water treatment.

Treated water is then discharged primarily into a surface water body, such as an ocean or river. This body is also likely to be the water's original source, which limits the environmental impact as much as possible.

Water consumption

Borealis does not consume water as such, since none of the withdrawn water is used in its products or converted in any other way. The withdrawn water is mostly discharged to the same water body it was taken from. While a small fraction of the water evaporates, the Group also discharges rainwater collected on site, resulting in very small or no net water consumption. In rare cases, Borealis may collect and discharge more rain than the water lost to evaporation, leading to a positive net consumption.

Emissions to water

Borealis' operations use sea water for cooling purposes only. The discharged water does not therefore carry any pollution, with the only difference from the withdrawn water being a small increase in temperature.

Fig. 42: **Borealis' water consumption in 2023** [1)]

mn m³	2023
Total Water	
Total Withdrawal	334
Total Discharge	334
Total Consumption	0.0
Water stress	
Sum of Withdrawal	1.1
Sum of Discharge	0.9
Total Water Stress Consumption	0.2

1) Fertilizers, Melamine and TEN is excluded from this data.

Around two-thirds of the freshwater Borealis uses are treated at site and directly discharged. The remainder is sent to off-site communal or industrial wastewater treatment plants. The emission loads to water shown below only apply to freshwater direct discharge:

In 2023, a new, modern and robust industrial wastewater treatment plant began operation at the Stenungsund cracker plant in Sweden. It includes buffer storage, oil removal and off-gas treatment, in line with Best Available Techniques (BREF). The new plant has improved the work environment, reduced the risk of odors and complaints from neighbors, and results in low emissions to water.

In the catalyst production plant in Linz, Austria, improvements to the drainage system were implemented during a turnaround, so that rainwater no longer needs to be sent to the wastewater treatment plant.

Recycling and Reusing Water

Whenever possible, Borealis seeks to increase water-use efficiency by recovering its process water or reusing wastewater. For example, in some operations cooling towers use recycled water or rainwater. This is not possible in all locations, as it depends on permit stipulations and on the water body.

Fig. 43: **Borealis' water emissions in 2023 for BC/PO**

metric tons	2023
Water Emission	
AOX	74.4
BOD5	15.8
COD	129.3
Nitrogen	59.0
TOC	56.3
TSS	78.4
Heavy metal	
Cd	0.001
Cr	0.015
Cu	0.060
Hg	0.0
Ni	0.040
Pb	0.015
Zn	0.796

Borealis prioritizes reductions in energy consumption and CO_2 emissions, as these are the most significant impacts of its production processes. As water consumption and energy use are closely linked, due to the energy recovery from cooling water, the Group may sometimes decide to increase its water withdrawal to recover more energy.

For many years, Borealis' operations in Brazil have recycled all used water and utilized rainwater as make-up water. Several improvement projects were carried out in 2023 to improve both recycling and rainwater collection. This has led to a significant reduction in water withdrawal from the communal water supply.

Waste

Borealis generates waste during production and during short regular shutdowns and plant turnarounds. The most common types of waste produced in Borealis' operations include non-recyclable polymers found in the polymer waste input to the Group's recycling plants, as well as

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excavated soil, wastewater treatment sludge, solvents, mixed industrial waste and inert construction material. Borealis aims to minimize the production of waste where possible, but its main objective is to treat waste as a resource and to better handle end-of-life products by making them circular.

Borealis monitors waste production and implements control measures in all its operations, based on the requirements of regulations and ISO 14001 standards. The Group has waste management plans for each location, which are coordinated by local environmental experts. All locations follow the "4R" rules: reduce, reuse, recycle and recover.

All waste that leaves Borealis' sites is collected by a certified third-party waste handling company, sorted and then brought to final treatment. Each Borealis site obtains treatment statements and bills, which include the collection and final treatment fees, and ensures the correct reporting of invoices and environmental data. The data in this report is accurate up to November 2023. Due to the early deadline for closing this Annual Report, December values have not been submitted fully by the waste handling companies. All locations have given the best possible estimate to allow a good representation of the Group's waste generation. Waste generated upstream or downstream of the Group's production is not included in its waste reporting.

In 2023, the Group changed its waste reporting to comply with the GRI 2021 requirements. Comparisons to previous years can therefore only be made on the total volume and at the hazardous/non-hazardous level.

The Group has implemented integrated manufacturing processes which recover as much coproduct as possible. If a coproduct cannot be reused and therefore becomes waste, the Group's preference is to recycle it, taking into account relevant regulations and environmental considerations.

The Group only employs accredited contractors for handling its waste streams. By-products of polymer production, such as non-prime material or material from cleaning activities, are used to the extent possible in the Group's recycling plants.

Non-recyclable waste has become one of the largest proportions of total waste for the Group and a main driver of the significant drop in the overall recycling percentage.

Fig. 44: **Waste composition in 2023** [1]

metric tons	2023 Bo/Po	2023 Fertilizer, Melamine and TEN [2]
Hazardous waste		
Waste generated	15,256	2,097
Waste diverted from disposal	4,220	–
Waste directed to disposal	10,449	–
Non-hazardous waste		
Waste generated	58,210	3,671
Waste diverted from disposal	39,400	–
Waste directed to disposal	18,610	–
Total waste		
Waste generated	73,467	5,768
Waste diverted from disposal	43,620	–
Waste directed to disposal	29,058	–

1) Environmental data might be subject to minor adjustments due to ongoing audits and missing third-party data at the time this report was finalized. // 2) Due to the divestment, Fertilizer, Melamine and TEN was no longer part of the change in waste reporting. Thus, figures are only available for total volume and at the hazardous/non-hazardous level. As only the first half of the year to June 30, 2023 is reported, the figures are also not fully comparable.

Currently, this stream is used as secondary fuel in steel or cement production, but considerable research effort is going into finding a recycling solution for this stream as well.

Most of the Group's locations are in Europe, where data collection and reporting are clearly defined by the Waste Framework Directive. Regular internal audits and external audits by local authorities validate these waste figures. In 2023, the Group's total waste volume was 73,467 metric tons for Base Chemicals and Polyolefins, compared to 82,425 metric tons in 2022.

Approximately 59.4% of Base Chemicals and Polyolefins' waste volume was diverted from disposal, 39.5% was directed to disposal, 0.5% was temporarily stored onsite and 0.6% was going outside the country.

Fig. 45: **Waste diverted from disposal in 2023** [1)]

metric tons	Total BC/PO	Onsite BC/PO	Offsite BC/PO
Hazardous waste diverted from disposal			
Prepared for reuse	322	0	322
Recycling	2,553	0	2,553
Other recovery operations	1,345	0	1,345
Total hazardous waste prevented	**4,220**		
Non-hazardous waste diverted from disposal			
Prepared for reuse	332	0	332
Recycling	14,756	0	14,756
Other recovery operations	24,313	0	24,313
Total non-hazardous waste prevented	**39,400**		
Total waste prevented (diverted from disposal)	**43,620**		

1) Environmental data might be subject to minor adjustments due to ongoing audits and missing third-party data at the time this report was finalized.

Fig. 46: **Waste directed to disposal in 2023** [1)]

metric tons	Total BC/PO	Onsite BC/PO	Offsite BC/PO
Hazardous waste directed to disposal			
Incineration (with energy recovery)	5,475	0	5,475
Incineration (without energy recovery)	2,834	0	2,834
Landfilling	86	0	86
Other disposal operations	2,054	0	2,054
Total hazardous waste prevented	**10,449**		
Non-hazardous waste directed to disposal			
Incineration (with energy recovery)	11,723	0	11,723
Incineration (without energy recovery)	1,771	0	1,771
Landfilling	4,013	0	4,013
Other disposal operations	1,103	0	1,103
Total hazardous waste prevented	**18,610**		
Total waste directed to disposal	**29,058**		

1) Environmental data might be subject to minor adjustments due to ongoing audits and missing third-party data at the time this report was finalized.

Spills

The majority of Borealis' hydrocarbons in use, such as ethane, naphtha, ethylene or propylene, are gaseous under ambient temperature and pressure. A leak in any equipment (for example a pipeline, flange or vessel) would therefore lead to an emission to air, rather than a spill.

Borealis uses some liquid hydrocarbon raw materials, such as peroxides or oils for lubrication. These chemicals are stored and handled in designated areas with sealed surfaces and run-off protection. A liquid hydrocarbon spill to the environment is therefore highly unlikely and almost only possible during transport on site.

Pellet Spills

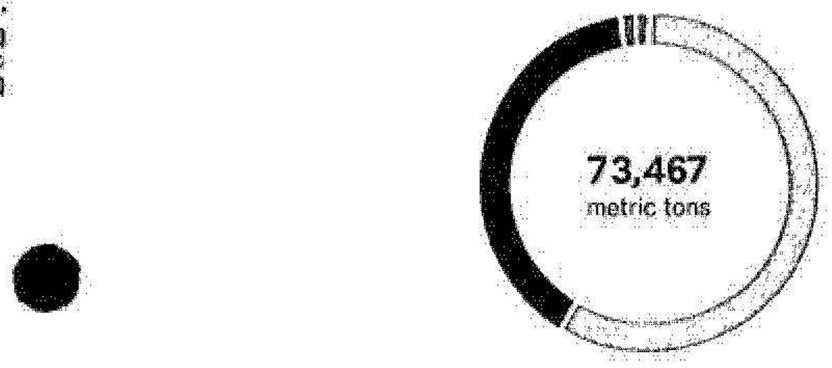
Plastic pellet loss is an important type of spill for a plastic raw material producer. Pellets released unintentionally during production, transportation, conversion and recycling can end up in nature, rivers and oceans. Preventing pellet spills is therefore a core responsibility for the industry.

Borealis is fully committed to zero pellet loss and has incorporated all elements of Operation Clean Sweep® (OCS), an international program to mitigate pellet loss, into its internal instructions, at both Group and local levels, as well as across its supply chain (→ chapter Logistics, p. 182).

The Group's target is to achieve full third-party OCS certification of all its sites in Europe by the end of 2024. Non-European sites and recycling sites are required to fully comply with the Group's internal standard.

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Fig. 47: **Waste treatment in 2023**



BC/PO	metric tons	%
Waste diverted from disposal	43,620	59.4
Waste directed to disposal	*29,058*	*39.5*
Temporarily stored onsite	360	0.5
Transboundary movement	428	0.6
Total	**73,467**	

In 2022, eight locations underwent an intensive two-day audit by Group experts in OCS, to thoroughly check compliance with the internal OCS requirements and the OCS standard. The audit covered all areas of the standard, from risk assessment and management, to work instructions, housekeeping and the training programs for all employees. The audits showed continued growth in Borealis' OCS maturity and progress towards compliance with the upcoming third-party certification standard. The main goal for 2023 was therefore to close all audit actions, to be fully compliant with Borealis' internal requirements and standards and be ready for an external certification audit.

In 2023, the Group's non-European and recycling sites also took major steps towards becoming compliant with the Group's internal standards. The sites in the US and Brazil and the Group's recycling sites are on track to be fully compliant by the end of 2024, which will be validated by an internal audit.

Lessons learned from audits, studies, improvement projects, housekeeping, inspections or incidents are shared and discussed in regular OCS network meetings that include all the OCS team leaders, as well as environmental experts from across the Group. The aim is to improve cross-learning, implement best practices and ensure consistent application of the Group's standards. Unfortunately, despite these efforts the annual internal inspections found some pellets on the shores near the Group's production facility in Porvoo, Finland. The authorities were informed, and cleaning was arranged immediately after the inspection. An internal task force has also been established to investigate the origin of the pellets. While the significant degradation of the pellets suggests they were released prior to the implementation of the OCS program, this is subject to confirmation by the final internal audit report. The European Commission is also addressing unintentional releases of microplastics. The current focus of the planned regulatory instruments is on tires, synthetic textiles and pellets. The primary impact of this regulatory measure on pellets is cost and administrative requirements for labeling, reporting and certification (→ chapter Public Affairs, p. 48, → chapter Product Safety, p. 134).

Borealis' commitment to Zero Pellet Loss encompasses

- *Leading by example: Borealis was among the first signatories of the Plastics Europe OCS pledge and the Group is also a signatory of the "Zero Pellet Loss" pact in Austria.*
- *Value chain: Borealis engages with the value chain, including customers, distributors, warehouses and logistic providers, and works with governmental bodies and universities to increase the Group's knowledge and further improve the best available technologies.*
- *Operational excellence: the Group's actions include ongoing analysis, awareness campaigns and training for employees and contractors, reinforcing work practices and behaviors, putting in place effective pellet retention measures, such as sieves and pellet separators, as well as effective skimmer ponds and filtration units based on the best available technology.*

Outlook

As in 2023, Borealis will continue its studies and projects to be compliant with the WGC BREF, as discussed under Activities 2023 above.

A major focus area will be to close gaps against the water management plans and achieve a high level of compliance in all locations, as well as to finalize the implementation of water performance indicators to help drive Borealis' water reduction ambition. The Group also aims to achieve full third-party OCS certification of all sites, to validate its work on reducing pellet loss.

Fig. 48: **Key environmental performance indicators 2019–2023** [1]

See detailed background explanation of the performance in the respective section of this chapter

Issue	Unit	2023 BC/PO	2023 Fertilizers, Melamine and TEN [2]	2022 BC/PO [3]	2022 Fertilizers, Melamine and TEN	2021 total	2020 total	2019 total
EU ETS CO_2 emissions	mn metric tons	1.325	0.925	1.355	2.022	3.878	4.050	4.625
N_2O emissions	metric tons	–	243	0	629	713	1,143	1,351
Flaring performance	metric tons	32,239	–	39,955	–	38,538	42,543 [4]	27,619
VOC emissions	metric tons	2,445	165	2,608	357	3,260	2,942	3,122
NO_x emissions	metric tons	1,154	586	1,102	943	2,589	2,842	3,000
Dust emissions	metric tons	–	133	10	492	511	342	455
NH_3 emissions	metric tons	–	229	8	550	435	686	881
Primary energy consumption	GWh	14,824	2,470	14,923	6,441	21,730	22,340	25,831
Water withdrawal	mn m^3	334	115	407	250	735	755	750
Waste generation	metric tons	73,467	5,768	82,425	9,958	102,023	97,905	86,109

1) Environmental data might be subject to minor adjustments due to ongoing audits and missing third-party data at the time this report was finalized. // 2) Due to the divestment, only the first half of the year to June 30, 2023 is reported. The figures are, therefore, not fully comparable. // 3) 2022 data of BC/PO included data for Rasier Group // 4) Severe upsets led to significant emergency flaring during shutdowns; in addition, there was a lack of recycling capacity.

Definitions

EU Emission Trading Scheme (ETS) CO_2 emissions: All greenhouse gas emissions (GHG) as per the European ETS expressed in CO_2 equivalents (since 2009 this indicator has replaced the reporting of direct carbon dioxide emissions).

Nitrous Oxide (N_2O) emissions: Emissions of N_2O (also known as laughing gas) are generated by the production of nitric acid in the fertilizer plants. N_2O is a GHG with a global warming potential (GWP) 310 times higher than CO_2.

Flaring losses: All streams sent to the flare, except streams that assure a constant flame (e.g. fuel gases to pilot burners, fuel gas purges to flare lines for safety reasons, steam, nitrogen).

Volatile Organic Compound (VOC) emissions: Emission of all organic compounds (from C1 to Cn) with a vapor pressure of 0.01 kilopascal (kPa) or more at either room temperature or at actual temperature when processed. The quantification is based on measurements and estimates. Total volatile organic carbon, expressed as C, includes methane.

Nitrogen Oxide (NO_x) emissions: Emissions of all nitrogen oxides from all relevant sources, including flares. The emissions are quantified as NO_x. When NO_x measurements are not carried out, emission factors correlated to the fuel type and heating value are used.

Dust: Emission of dust from the production of fertilizers.

NH_3 (Ammonia): Emissions of NH_3 from fertilizer plants, loading stations and water treatment of fertilizer locations.

Energy consumption: Consumption of all energy vectors (i.e. fuels, electricity and steam). Electricity and steam are converted into primary energy with standard conversion factors of 40% (electricity) and 90% (steam).

Water withdrawal: Total amount of fresh water withdrawn from surface or groundwater sources for any type of usage (e.g. cooling, steam generation, cleaning, sanitation).

Waste generation: Generation of all waste at company locations during normal operation as well as during special projects. Any substance or object that is to be discarded is included in the definition of waste. Exceptions are atmospheric emissions, liquid effluents and by-products with commercial value.

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Energy & Climate

Goals and Planned Key Actions in 2023	Key Achievements in 2023
Establish a data management process for climate-related data and develop an integrated tool for CO_2 management, to actively manage the Group's emission-reduction projects	Established a project to advance the digitalization of energy and climate data, encompassing data management, greenhouse gas (GHG) reporting and forecasting
Set up an accounting model based on a CO_2 budget for Scopes 1 and 2	Set up CO_2 budget models for Scopes 1, 2 and 3
Evaluate the feasibility of setting science-based targets	Participated in the Science Based Target initiative (SBTi) Expert Advisory Group which is developing the chemical sector methodology, as well as a related CEFIC working group to evaluate the methodology's fit to Borealis' target setting
Set up carbon management governance across the Group	Set up carbon management governance aligned with OMV Group
Limit European Union Emissions Trading System (EU-ETS) emissions to 1.436 million metric tons of CO_2e (BC and PO)	ETS emissions in 2023 were 1.325 million metric tons of CO_2e (BC and PO)
Achieve energy performance of 3.984 MWh primary energy/metric ton in Hydrocarbons	Energy performance of 4.165 MWh primary energy/metric ton in Hydrocarbons
Achieve energy performance of 1.289 MWh primary energy/metric ton in Polyolefins	Energy performance of 1.336 MWh primary energy/metric ton in Polyolefins
Investigate the Group's current energy reduction ambition, to ensure it is in line with the Group's renewable energy and climate ambitions	Established Borealis' new energy ambition as 10% energy savings of the consumption of 2015 implemented by 2030, which takes into account the divestment of the nitrogen-based business and energy efficiency's key role in achieving the Group's climate ambition

Goals and Planned Key Actions for 2024	Goals and Planned Key Actions Beyond 2024
Enhance digitalization of climate, energy and select environmental data	Stay below 2.6 million metric tons of CO_2e emissions by 2025
Develop and communicate the Group's CO_2 budget	Stay below 2.0 million metric tons of CO_2e emissions by 2030
Continue to evaluate feasibility of an SBTi-aligned target following publication of the chemical sector guidelines from SBTi	Source 40% renewable power by 2025
Roll out carbon management governance	Source 100% renewable power by 2030
Limit ETS emissions to 1.477 million metric tons of CO_2e (BC&E and PO);	Achieve climate neutrality for Scopes 1 and 2 by 2050
Achieve energy performance of 4.257 MWh primary energy/metric ton in Hydrocarbons	10% energy savings of the consumption of 2015 implemented by 2030
Achieve energy performance of 1.310 MWh primary energy/metric ton in Polyolefins	
Implement 70,000 MWh of energy savings	

The evolution of industry is having a major impact on the natural greenhouse effect. Over the last century, the burning of fossil fuels such as coal and oil has increased the concentration of atmospheric greenhouse gases (GHGs). Clearing land for agriculture, industry and other activities has also contributed to that increase. These changes to the atmosphere's GHG composition are having major effects on the environment and society. Most importantly, our planet will become warmer, extreme weather events such as storms and flooding will become more common, and the sea level will rise.

There have been significant efforts globally to address climate change, most notably the 21st session of the United Nations Climate Change Conference (COP 21). The resulting Paris Agreement calls on all countries to

keep the global temperature increase to well below 2°C and to pursue efforts to limit the increase to 1.5°C above pre-industrial levels.

Reducing the impact of climate change must go hand in hand with economic success, to ensure that industries and other organizations can afford to develop the innovations needed. As one of the largest and most diversified industries in Europe, and a significant emitter of GHGs, the chemical industry plays an important role in helping to achieve long-term GHG emission reductions in Europe and globally. Borealis is therefore committed to reducing emissions from its operations, as well as reducing and avoiding emissions in its value chain, during the life cycle of its products.

To understand its impact on climate change, a company can calculate its emissions inventory or carbon footprint using the Greenhouse Gas Protocol, which is a globally accepted methodology for these calculations. The protocol divides corporate emissions into three scopes:

- Scope 1: direct emissions that occur at the source and are controlled by the reporting company
- Scope 2: emissions stemming from the generation of energy purchased by the company
- Scope 3: all other indirect emissions occurring in a company's value chain

This framework guides Borealis and many other companies in pursuing climate targets in a meaningful way.

Governance

In 2022, Borealis established a Climate Strategy Coordination team to drive its transformation to a net-zero business. The team is led by the Director Sustainability and Public Affairs, with the CEO as sponsor and the Executive Board as its Steering Committee. As sustainability is a core part of the Group Strategy, the topic is integrated into almost all areas of the organization. The team therefore brings together expertise and initiatives from throughout the Group's businesses and functions, in a focused way. The team is structured according to Borealis' emissions inventory and hotspots identified in the Group's Scope 1, 2 and 3 emissions, ensuring that the people responsible for these areas can work together in a harmonized way, to maximize the impact for the Group. This approach fosters transparency and ownership, to enable Borealis to effectively execute its climate strategy.

To enhance the transparency and governance of sustainability, Borealis is evaluating a software tool to manage backward-looking key performance indicators and its roadmaps for further improvement.

The Climate Strategy Coordination team reports progress to the Responsible Care Committee and the Energy & CO_2 Committee (→ chapter Sustainability Governance, p. 68).

In 2023, Borealis appointed a Project Director Energy & CO_2, a newly created role to steer the Group's energy efficiency and CO_2 reduction efforts, as part of its growth and transformation ambitions.

Borealis' Climate Strategy

Borealis is fully committed to reducing the carbon footprint of its operations and to achieving net-zero operations by 2050 or sooner. In 2022, Borealis launched its Group Strategy 2030, which stated its ambition to:

- reduce total Scope 1 and 2 emissions to 2.6 million metric tons by 2025 and to less than 2 million metric tons by 2030; and
- source 40% of electricity from renewable sources by 2025 and 100% by 2030.

The Scope 1 and 2 emissions target corresponds to a reduction in emissions of 50% in 2025 and 60% in 2030, against Borealis' base year of 2019. The reduction targets include the impact of divesting the Fertilizers, Melamine and Technical Nitrogen business in 2023.

The Group has identified its preferred technologies for mitigating Scope 1 and 2 emissions in the period to 2030, based on the required product quality, the supply of feedstock, market demand, and economic and technological feasibility. Depending on the location, market, availability of end-of-life products and the legal framework, the options may include feedstock derived from biogenic materials, mechanically or chemically recycled plastics and capturing CO_2.

A real step change in Scope 3 emissions can only be achieved through cooperation across the whole value chain and Borealis is therefore working with its value-chain partners towards this goal.

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Increasing Renewable Electricity Sourcing
Borealis' 2030 renewable energy goal is an important part of the journey towards climate neutrality by 2050 or sooner. To achieve the goal, the Group will use on-site investments where possible, as well as long-term contracts known as power purchase agreements (PPAs), which source power from as close as possible to the Borealis locations where the power is used. Borealis believes that more renewable power as well as futureproof electrical grids will be needed if industries such as petrochemicals are to electrify further (→ chapter Procurement of Feedstock, Electricity and Utilities, p. 172).

Driving Energy Efficiency
Energy consumption accounts for a significant proportion of Borealis' total production costs. Borealis' current ambition is 10% energy savings of the consumption of 2015 implemented by 2030. The Group sees energy efficiency as a cornerstone of its climate ambition, in line with the energy efficiency first principle, which is a priority for the EU and is supported by EU Commission recommendation (EU) 2021/1749.

Continuous improvement is the baseline to implement energy efficiency improvement and comply with ISO 50001, combined with continuous leadership engagement from key teams. Borealis' initiatives include energy teams at each production location that drive the location's energy planning process, increase awareness, act as a forum for energy issues and ensure ISO 50001 compliance. To progress beyond this baseline, all Borealis locations run energy screening programs at least every four years, often with third-party support, to evaluate their performance and identify ways to improve. Actions are then prioritized based on their benefit to:
- the planet, by protecting the environment;
- people, for example through improved working conditions; and
- profit, such as the ability to generate cost savings.

Prioritization also takes account of a risk and opportunity assessment, including social, environmental and economic aspects, the total cost of ownership, the internal rate of return and organizational capacity.

Borealis has reassessed its energy ambition, to reflect the divestment of the Fertilizers, Melamine and Technical Nitrogen business and to ensure the Group leverages energy efficiency to achieve its climate ambition. Based on a thorough analysis across all locations, the Group aims to implement 10% energy savings of the consumption of 2015 by 2030.

Driving Transformation Towards a Circular Economy
To achieve its climate ambition, Borealis is also increasing its capacities for circular economy solutions and gradually introducing renewable and recycled feedstock into its own production (→ chapter Circular Economy, p. 166, → chapter Procurement of Feedstock, Electricity and Utilities, p. 172).

Providing Sustainable Polyolefin Products and Solutions
Borealis also plays a role in solving society's climate challenges, by providing sustainable polyolefin solutions.

For example:
- Society's conversion to renewable power needs a high level of interconnectivity in the electricity grid over longer distances. Borealis' Borlink™ technology ensures reliable power transportation from wind and other renewable energy sources.
- Borealis also enables the transportation of renewable energy by providing a high-voltage direct current (HVDC) cable compound based on its Borlink technology, which is being used in cross-linked polyethylene (XLPE) power cables that qualified for the tender for the "German Corridor projects".
- Borealis' advanced photovoltaic films (Quentys™) optimize the production of renewable solar energy.
- Plastics are raw materials for efficient electric vehicle system components and reduce emissions in transportation by enabling lightweight components for vehicles.

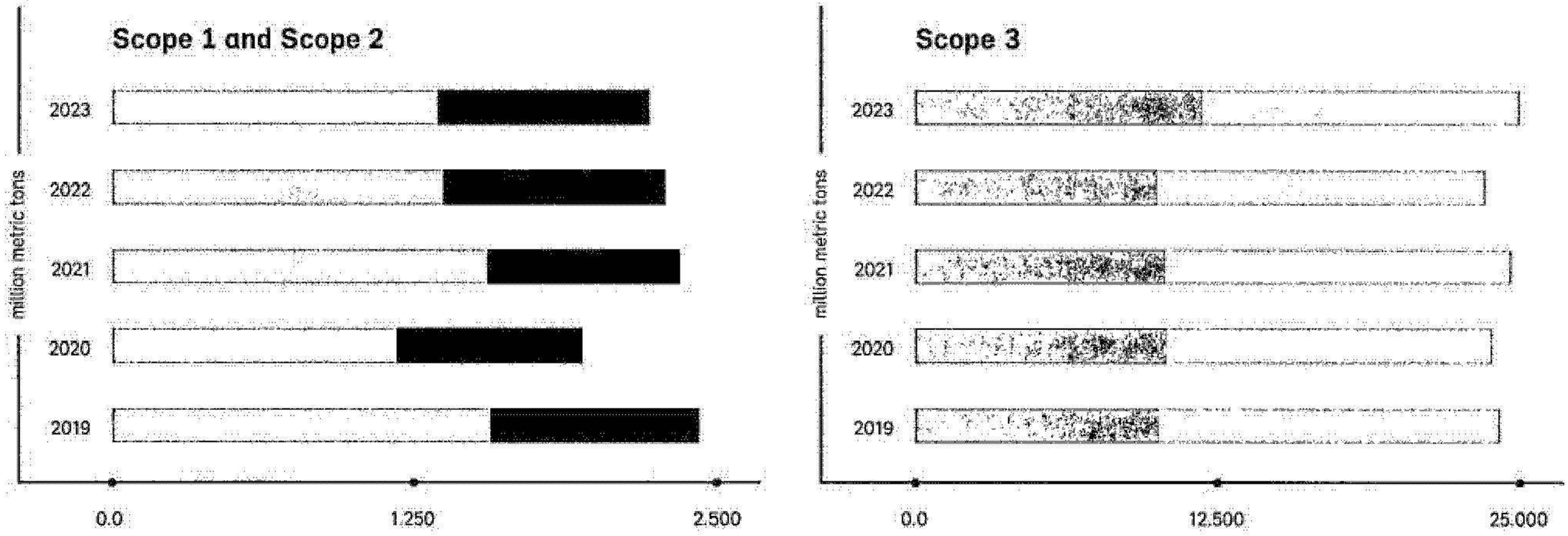
Measurement and Calculation of Borealis' Carbon Footprint
Borealis calculates its corporate carbon footprint following the GHG Protocol and includes EU ETS emissions. The Group uses a broad range of emission factors, which are a means to calculate the GHG emissions produced by a given source. Each EU member state has its own emission factors, so natural gas use in Austria, for example, would have the specific Austrian emission factor applied to it. Other emission factors are standard factors from scientific literature or inventories or are measured by a certified laboratory. All EU ETS emission factors are permitted and approved by the relevant authorities.

The Group reports:
- the previous year's Scope 1 and 2 location-based emissions, as well as Scope 3 emissions; and
- Scope 2 market-based emissions as estimated at the moment of publication.

Borealis uses 2019 as its base year for all emission scopes and its GHG targets, as 2019 was the last full year before the COVID-19 pandemic and the majority of the Group's assets were operating for the whole of 2019. It is also in line with the base year of OMV Group, which owns 75% of Borealis, resulting in OMV Group including Borealis' emissions in its emissions inventory and base year emissions.

Borealis will adapt its base year when needed, according to the GHG Protocol accounting rules, although any decision to shift the base year will be influenced by the materiality of the change versus OMV Group's emissions. Under the GHG Protocol accounting rules, the divestment of Fertilizers, Melamine and TEN should be seen as a base year adjustment, the operations and emissions will no longer be part of Borealis' inventory. Borealis' Scope 1 and 2 calculations include all companies where the Group owns more than 50% and has operational control. Emissions of companies not under operational control or with less than 50% ownership are included in Scope 3.15 (investments).

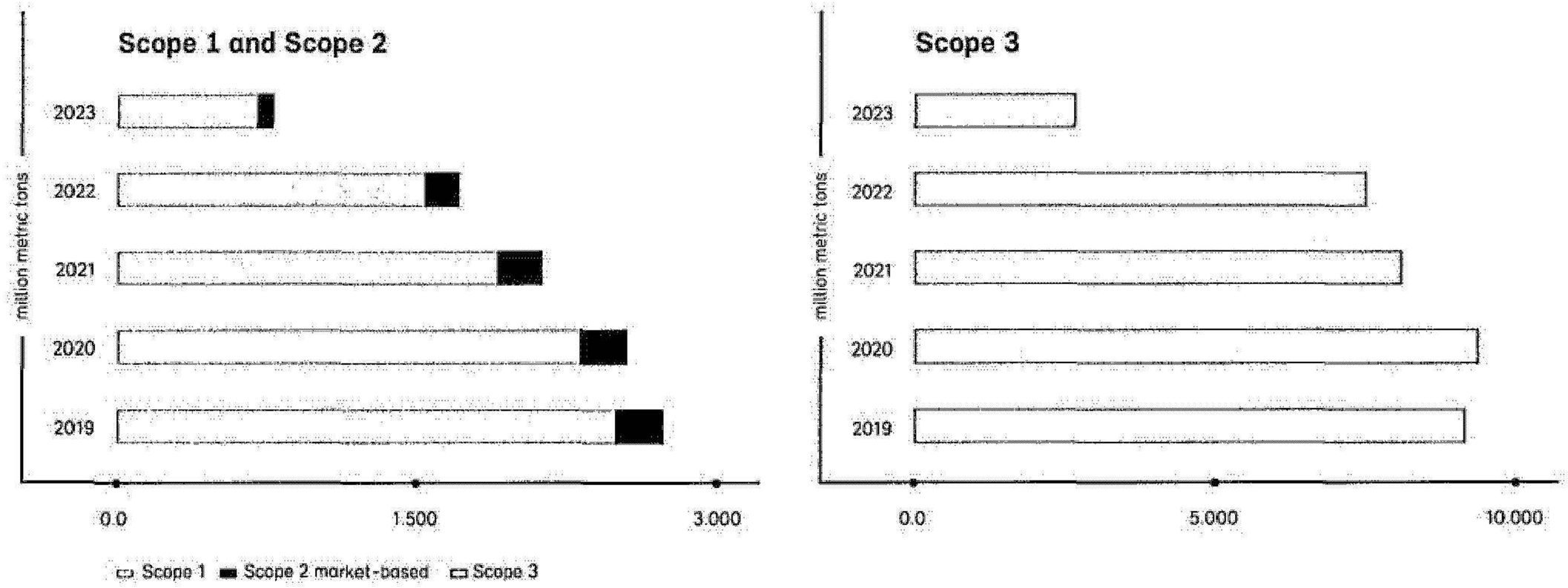
Fig. 49: **Borealis BC and PO GHG according to Greenhouse Gas Protocol for 2019–2023**



mn metric tons (mt) CO_2e [1]	2023	2022 [2]	2021	2020	2019
Scope 1	1.347	1.369	1.556	1.181	1.569
Scope 2 market-based	0.878 [3]	0.933	0.799	0.767	0.864
Scope 2 location-based	0.601	0.567	0.591	0.631	0.632
Scope 3 upstream	12.116	10.332	10.391	10.413	10.227
Scope 3 downstream excluding category 3.15	12.546	13.525	14.374	13.491	14.119
Scope 3 excluding category 3.15	24.662	23.857	24.765	23.904	24.346
Scope 3 including category 3.15	44.523	43.548	45.377	50.514	48.848
Scope 3.15	19.861	19.691	20.612	26.610	24.502

1) Emissions are calculated following greenhouse gas protocol. Minor emissions are estimated. // 2) Scope 1 and 2 includes Rosier Group. Data is subject to minor adjustments. // 3) Indication, market based emissions will only be finally calculated end of June 2024.

Fig. 50: **Borealis Fertilizers, Melamine and TEN greenhouse gas emissions according to Greenhouse Gas Protocol for 2019–2023** [1]



mn metric tons CO_2e	2023	2022 [2]	2021	2020	2019
Scope 1	0.704	1,540	1.903	2.319	2.500
Scope 2 market-based	0.084 [3]	0.166	0.225	0.237	0.237
Scope 2 location-based	0.054	0.133	0.166	0.188	0.192
Scope 3	2,681 [3]	7.520 [4]	8.103	9.399	9.183

1) Due to the divestment, only the first half of the year to June 30, 2023 is reported. The figures are, therefore, not fully comparable. // 2) Data is subject to minor adjustments. // 3) Estimated based on historical values. // 4) Including Rasier Group.

Performance 2023

Scope 1 and EU ETS

Scope 1 involves direct emissions from Borealis' sites and includes internally generated power and steam (before furnaces) and flaring, which make up a large part of Borealis' Scope 1 emissions. Borealis takes into account all greenhouse gases in the Scope 1 calculation, as defined in the GHG Protocol [1]. The Group does not report direct biogenic CO_2 emissions, as they were negligible in 2023. Biomass in the feedstock is mostly allocated to the product using ISCC mass balancing.

In 2023, Borealis produced 1.325 million metric tons of EU ETS CO_2 equivalent emissions. This is less than the 1.338 million metric tons in 2022. Borealis has set a target to emit no more than 1.477 million metric tons of EU ETS CO_2 equivalent emissions in 2024.

1) CO_2, N_2O, SF_6, HFC, PCF, CH_4

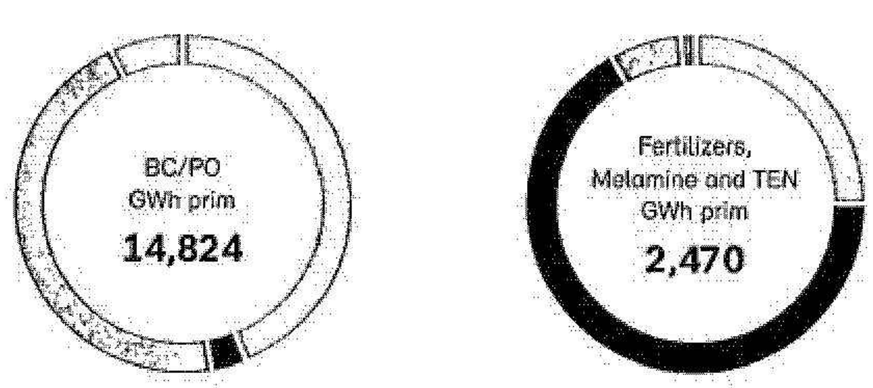
Scope 2

Scope 2 emissions involve indirect CO_2 equivalent emissions caused by Borealis' consumption of externally generated electricity, external steam and energy that the Group purchases and brings into its facilities from other sources. It is expressed as market-based or location-based emissions, as defined in the GHG Protocol.

Borealis' main sources of energy are electricity, heat (primarily from steam), natural gas and fuel gas. The Group documents, tracks and follows up on all sources of energy each month, for every location. Data on all of Borealis' energy consumption is collected as it is metered, then converted to the equivalent in primary energy using the Group's environmental data management tool. This allows Borealis to summarize different energy sources using one consumption figure, enabling it to compare performance across its plants and production lines.

Borealis tracks energy consumption and the realized energy improvement projects using both primary and final energy, which is the actual energy consumed. This provides insights to identify and prioritize energy improvement opportunities and continuously reduce emissions. Some emissions from energy (Scope 2 – market-based) can only be estimated until data from suppliers are final, at the end of Q1 of the following year. Borealis therefore finalizes its corporate carbon footprint for the previous year by the end of June. ETS emissions are externally verified by EU member states. Scope 2 emissions (location-based) for BC and PO in 2023 were 0.601 million metric tons. Scope 2 (market-based) emissions in 2023 are estimated to be 0.878 million metric tons CO_2, which was less than the 0.933 million metric tons in 2022.

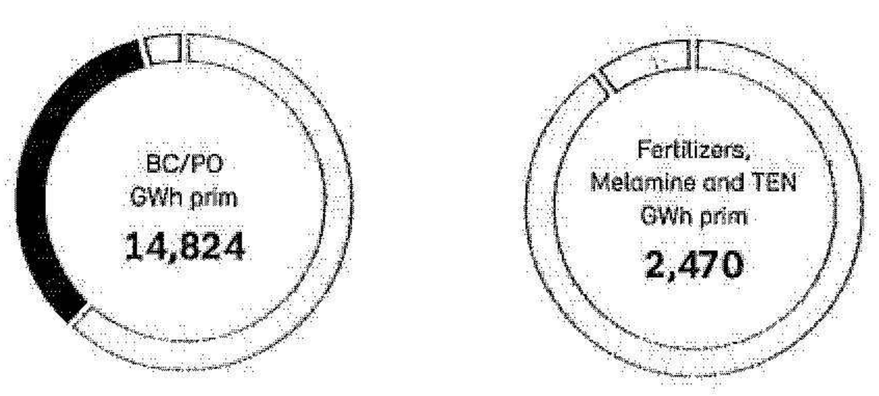
Fig. 51: **Total energy consumption per source in 2023**



%	BC/PO	Fertilizers, Melamine and TEN [1]
Electricity	44.0	24.9
Natural gas	3.4	66.8
Fuel gas	45.9	6.9
Steam	6.7	1.3

1) Due to the divestment, only the first half of the year to June 30, 2023 is reported. The figures are, therefore, not fully comparable.

Fig. 52: **Total energy consumption per product group in 2023**



%	BC/PO	%	Fertilizers, Melamine and TEN [1]
Hydrocarbons	62	Fertilizers, Melamine and TEN	92
Polyolefins	34	Infrastructure, offices, warehouses and research facilities	8
Infrastructure, offices, warehouses and research facilities	4		

1) Due to the divestment, only the first half of the year to June 30, 2023 is reported. The figures are, therefore, not fully comparable.

There is a decrease of 99 GWh primary energy in yearly energy consumption for BC and PO, due to reduced operations because of lower market demand and implemented energy efficiency measures. In 2023 BC and PO sold 64 GWh in the form of steam or heat, 13 GWh of electricity and 44 GWh of cooling capacity. The energy efficiency improvement is calculated by summing individual project's energy savings compared to business as usual and dividing the total by the Group's absolute energy consumption in 2015, the baseline year. In 2023, Borealis implemented projects that will generate 153,348 MWh of yearly final energy savings. This brings the total energy saving to 5.3%, against the objective of 10% by 2030.

Fig. 53: **Total fuel consumption per source in 2023**

GWh primary energy	BC/PO	Fertilizers, Melamine and TEN [1]
Total fuel consumption from non-renewable sources	7,319	1,821
Total fuel consumption from renewable sources	0	0

1) Due to the divestment, only the first half of the year to June 30, 2023 is reported. The figures are, therefore, not fully comparable.

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Non-renewable resources: The amount of commercial liquid fuels used is insignificant. Fuels and steam consumed are mainly used for processes. Data for cooling consumption is currently not available.

Renewable power sourcing ambition is expressed as a percentage of the power used in the BC and PO businesses that is from renewable sources such as wind, solar, biomass or hydro and connected directly to Borealis' internal grids or sourced on the European markets through power purchase agreements (PPAs) covered by guarantees of origin. Borealis intends to reach 100% by 2030 and is exploring co-ownership of renewable power assets.

Final energy consumption of BC and PO: 2,606 GWh electricity, 892 GWh steam, 6,805 GWh fuel gas and 514 GWh natural gas. Energy consumption is converted into primary energy as follows: fuels (including natural gas): 100% conversion to energy, factor 1; steam 90% boiler efficiency, factor 1.11; electricity: 40% efficiency, factor 2.5.

Final energy consumption of Fertilizers, Melamine and TEN: 264 GWh electricity, 29.7 GWh steam, 171 GWh fuel gas and 1,651 GWh natural gas. Energy consumption is converted into primary energy as follows: fuels (including natural gas): 100% conversion to energy, factor 1; steam 90% boiler efficiency, factor 1.11; electricity: 40% efficiency, factor 2.5.

Figures 51 and 52 show the activities for which Borealis used energy. Figures 54, 55 and 56 show the Group's energy intensity since it established its Energy Roadmap for each business unit.

Scope 3

Scope 3 emissions include other indirect emissions in the value chain, both downstream and upstream. For Borealis, the following Scope 3 categories (out of 15 listed in the GHG Protocol) are material and therefore included in the calculation under the GHG Protocol:

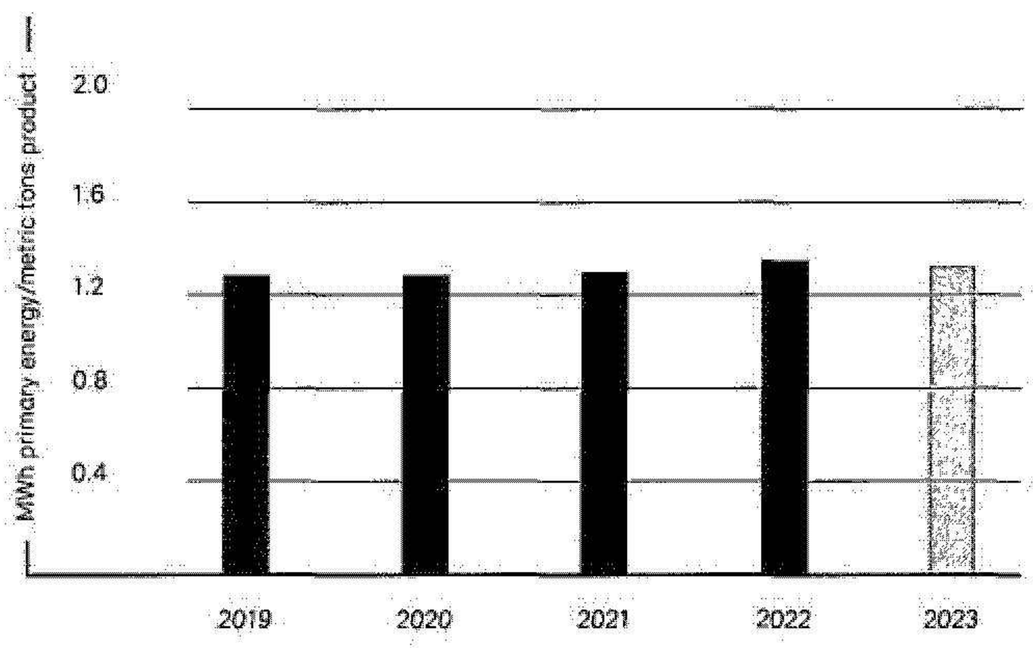
- 1 Purchased goods and services
- 2 Capital goods
- 3 Fuel and energy-related activities not included in Scope 1 or 2
- 4 Upstream transportation and distribution
- 5 Waste generated in operations
- 8 Upstream leased assets
- 10 Processing of sold products
- 11 Use of sold products
- 12 End-of-life treatment of sold products
- 15 Investments

Categories 6 ,7, 9, 13 and 14 are not included in the calculation, as they are not material for Borealis.

As Borealis transitions to being climate neutral by 2050, circular and bio-based materials will be key levers for reducing GHG emissions. The Group has therefore opted to calculate Scope 3 category 12 (end-of-life treatment of sold products) based on the recycled and biogenic content of its products. By taking this conservative and fully transparent approach, Borealis is assuming the burden of recycling and emissions in its own circular transition. This approach is also known as the circular product cut-off methodology.

Borealis uses general mass and spend-based emissions factors to calculate Scope 3 emissions. In future reporting, the Group will strive to include supplier and customer-

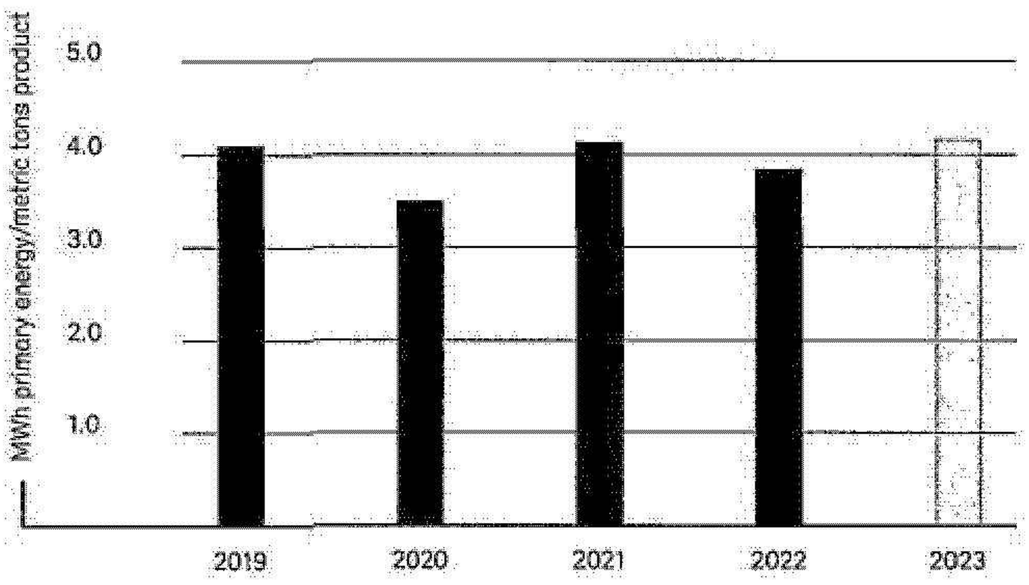
Fig. 54: **Polyolefins production energy intensity 2019–2023** [1]



metric tons	Polyolefins actual
2019	1.283
2020	1.286
2021	1.300
2022	1.362
2023	1.336

1) Polyolefin production intensity is referenced to sum of all assets producing plastics.

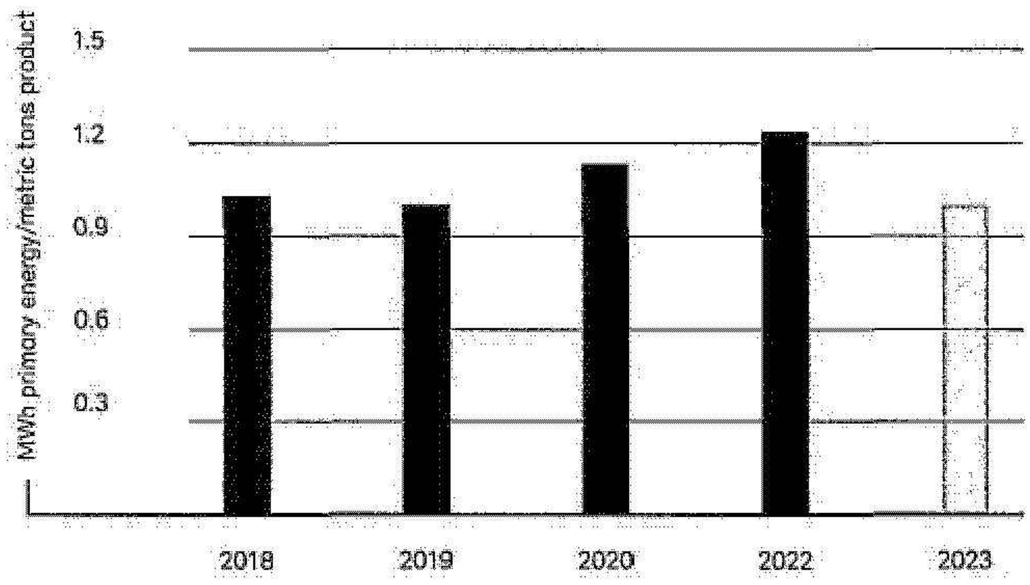
Fig. 55: **Hydrocarbons production energy intensity 2019–2023** [1)]



metric tons	Hydrocarbons actual
2019	4.088
2020	3.507
2021	4.121
2022	3.836
2023	4.165

1) Hydrocarbon production intensity is referenced to the sum of production of ethylene, propylene and aromatics from all assets.

Fig. 56: **Fertilizers, Melamine and TEN production energy intensity 2019–2023** [1)]



metric tons	Fertilizers, Melamine and TEN actual
2019	1.028
2020	0.999
2021	1.172
2022	1.240
2023	1.100

1) Due to the divestment, only the first half of the year to June 30, 2023 is reported. The figures are, therefore, not fully comparable.

based emission factors, when they become available. A major part of Borealis' Scope 3 emissions falls into category 15 (investments). This includes the Group's stake in Borouge, as a result of which 36% of Borouge's Scope 1, 2 and 3 emissions are taken into account. Borouge's Scope 3 emissions are extrapolated by using the same ratio of Scope 3 to the total of Scopes 1 and 2 as Borealis, while excluding category 15. A similar approach is taken for Borealis' financial stake in Baystar™ in Texas, US.

Activities 2023

In 2023, Borealis worked to reduce its energy consumption and greenhouse gas emissions through the following initiatives:

- increasing the share of renewable energy consumed from 28% in 2022 to approximately 38% in 2023, as well as signing PPAs to lock in renewable energy supply for future years (→ chapter Procurement of Feedstock, Electricity and Utilities, p. 172);
- completing the cracker furnace upgrade in Stenungsund, Sweden, with the final furnace upgraded in 2023, to generate total yearly CO_2 emission reductions of up to 6,479 metric tons;
- New APC (advanced process control) in Stenungsund reducing CO_2 by 700 metric tons
- installing a new regenerative thermal oxidizer in Porvoo, Finland, which will result in a significant reduction in flaring and Scope 2 CO_2 emissions, as well as realizing energy savings;
- signing an eight-year PPA with Axpo, for 100 GWh per year from a Finnish wind farm to power production operations in Porvoo;
- advancing a digitalization project to step up the Group's reporting on climate and energy, as well as selected environmental data. This includes data management, calculation, forecasting and reporting capabilities. The project is ongoing and will enable better tracking of strategic targets, as well as decision-making support; and
- establishing a budget model, to understand and project Borealis' carbon emissions and the effect of projects and strategic choices on the remaining budget to 2030, for Scopes 1, 2 and 3.
- A series of internal audits were undertaken on the locations, to prepare for recertification of the energy management system next year.

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Fig. 57: **Reduction of GHG emissions** [1]

Metric tons CO_2 equivalent	BC/PO [2]	Fertilizers, Melamine and TEN
GHG emissions reduced	8,800	–

1) Reductions occurred directly as a result of reduction initiatives (revamp of cracker furnace and improved control of fuel combustion) // 2) All Kyoto gases are included. Base year: 2019 (most representative year before COVID). Reductions took place in Scope 1 and 2.

Fig. 58: **GHG emission intensity**

GHG emissions per total production (metric ton CO_2/metric ton product)	BC/PO [1]	Fertilizers, Melamine and TEN [2] [3]
GHG emissions intensity ratio	0.319	0.340

1) Total production includes PO, BC, COM (compounding activities) and CES. Scope 1 and Scope 2 (location-based) are included in the intensity ratio. All Kyoto gases are included. // 2) Total production includes Fertilizers, Melamine and TEN. Scope 1 and Scope 2 (location-based) are included in the intensity ratio. All Kyoto gases are included. // 3) Due to the divestment, only the first half of the year to June 30, 2023 is reported. The figures are, therefore, not fully comparable.

Building Awareness and Partnering Across Industries to Foster Learning

Borealis participates in several initiatives to raise awareness and foster learning, both within the Group and externally. These include:

- Contributing to the development of science-based target methodologies for the chemicals sector, as part of the SBTi's Expert Advisory Group. The SBTi will select the final methodologies, which will be available at no cost to all stakeholders, to support alignment with the Paris Agreement. Furthermore, in order to better understand the implication of the different options for setting sector guidelines for the chemical industry, Borealis participated in a related CEFIC working group.

Taking part in "Sustainable Plastics Industry Transformation", or SPIRIT, a collaborative research and development program driving the transformation of the plastics industry in Finland through four main activities:

- replacing conventional fossil-based feedstocks with renewably sourced ones;
- developing technologies and processes for the mechanical and chemical recycling of plastics;
- decarbonizing production operations; and
- exploring enablers for the green transition, including design for recycling, standardization, improved traceability and recycling concepts.

The project has a funding commitment from Business Finland and aims to accelerate learning in the Finnish industry, in collaboration with other partners. More than ten partnership projects have already begun, involving tens of research organizations and value chain partners. Learning is also shared within the Group. (→ chapter Circular Economy p. 166, → chapter Innovation p. 187)

- Co-funding a research project, FUTNERC, with the Swedish Energy Agency and Preem, which aims to accelerate the transformation of the chemical industry and achieve net-zero greenhouse gas emissions from refineries and chemical plants by 2050.
- Launching a Sustainability Academy with OMV and OMV Petrom, with the first learning path focusing on climate change and ESG, in order to engage and train the entire organization on the journey towards climate neutrality.

Outlook

Borealis' energy and climate objectives for 2024 are to:

- further advance the digitalization project to step up the Group's reporting on climate and energy, as well as selected environmental data, including data management, calculation, forecasting and reporting capabilities;
- fine-tune the accounting model based on a CO_2 budget for Scopes 1, 2 and 3 and use the model to enhance understanding of Borealis' impact on climate change throughout the Company;
- continue to evaluate the feasibility of setting science-based targets, aligned with the further development of the SBTi Chemical industry sector guidelines, with the understanding of the possibility of a Scope 3 target for the medium term (2030) and long term (2050) being a key challenge of this process;
- roll out the new carbon management governance across the Group, including the integration of climate criteria in key decision processes;
- limit ETS emissions to 1.477 million metric tons of CO_2e (BC and PO);
- achieve energy performance of 4.257 MWh primary energy/metric ton Hydrocarbons;
- achieve energy performance of 1.310 MWh primary energy/metric ton in Polyolefins; and
- implement 70,000 MWh of energy savings.

Circular Economy

Goals and Planned Key Actions in 2023
Focus on the commercial ramping up of Borealis' circular portfolio and make further investments in mechanical and chemical production capacities, to move closer to the Group's targets for 2025 and 2030
Continue to support technology development for better sorting and recycling solutions and explore alternative business models, such as closed-loop systems

Key Achievements in 2023
Acquired majority shareholding in Renasci N.V , a Belgian provider of innovative recycling solutions
Acquired Rialti S.p.A. in Italy, a leading European producer of recycled polypropylene compounds

Goals and Planned Key Actions for 2024
Further expand circular portfolio capacities
Invest in new recycling technology developments
Conduct large-scale recycling testing of Holy Grail 2.0 sorted feedstock

Goals and Planned Key Actions Beyond 2024
Continue to move towards the Group's strategic goals for circular capacity in 2030

The incredible versatility of plastics has been a key ingredient in improving life and increasing living standards in today's world, by making our lives more efficient, convenient and safe. However, in our current linear economic model, plastic products are made, used and eventually disposed of. Continuing with this model will lead to more plastic waste and environmental pollution, while putting pressure on the planet's limited resources.

The solution is to transition to a circular economy, where plastics are reused or recycled and made from renewable feedstock, reducing our dependence on fossil feedstock. A circular economy therefore decouples economic growth and resource constraints, while reducing waste leakage into the environment. The circular economy will also help to limit climate change, as it will reduce greenhouse gas emissions by using mechanical and chemical recycling instead of incineration and renewable feedstock instead of virgin feedstock.

Borealis' ambition is to lead the transformation to a circular economy, and it is working intensively to be able to offer an alternative to the linear economy, across all its applications. To support this journey, Borealis created EverMinds™, a platform to accelerate action on circularity for plastic, to help inspire and create more impact for circular solutions.

Governance

To achieve its circular economy ambitions, Borealis has established two dedicated departments. These are:

- the Circular Economy Solutions (CES) business and New Business Development group, focused on executing tactical business projects and running the current CES business; and
- the Transformation group, which defines the circular economy strategy across specific focus areas, such as mechanical and chemical recycling or design for circularity, as well as supporting all other Borealis business areas in their industry-specific transformation.

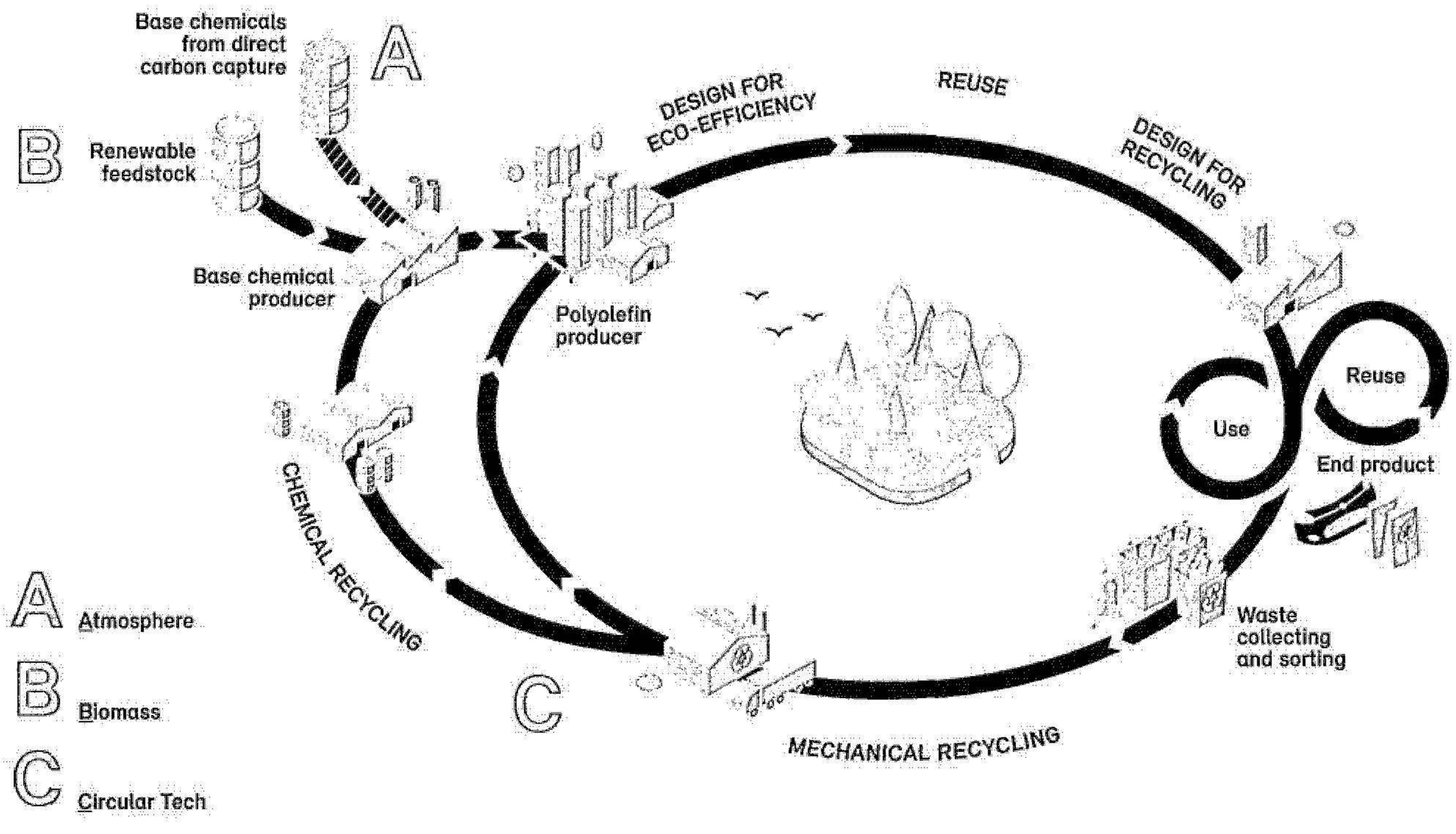
The Circular Economy Innovation Studio in Borealis' Innovation Headquarters in Linz, Austria, is the Group's spearhead for technology and innovation, while the Digital Solutions group in Brussels, Belgium, supports with the creation of digital solutions for circularity. Since OMV Group acquired a majority stake in Borealis, the companies have joined forces to develop several circular economy areas, such as chemical recycling and feedstock sourcing.

Borealis' Integrated Approach to the Circular Economy

To transition to a truly circular and carbon-neutral economy, a variety of solutions are required to keep products circulating at their highest value, quality and utility over many lifetimes. Borealis therefore believes in using a full suite of carefully chosen technologies, in a complementary and cascading way, through the following hierarchy:

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Fig. 59: **Borealis' integrated approach is embodied in the Circular Cascade Model**



- **Design for eco-efficiency:** adopting a design mindset from the start that sets the agenda for minimizing the use of resources and maximizing their lifetime value.
- **Reuse:** maximizing the lifetime of products by establishing systems and business models for reuse.
- **Design for recyclability:** designing products that can be reused as well as collected, sorted and recycled, by making appropriate material and design choices.
- **Closing the loop:** using mechanical recycling first, to make products with the highest-possible value and quality, and then using chemical recycling to valorize the residual waste streams from mechanical recycling and mixed-plastic waste streams, which currently cannot be mechanically recycled efficiently and would otherwise go to incineration or landfill.
- **Using non-fossil feedstock:** moving towards carbon neutrality, by using non-fossil feedstock such as renewables and developing carbon capture technologies for base chemicals production.

Targets and Performance

Borealis is targeting production capacity for circular solutions of 600,000 [1] metric tons by 2025 and 1.8 million metric tons by 2030. In 2023, the Group's total production capacity for circular solutions was 195,200 metric tons, up 32% on 2022. Borealis also processed 116,300 metric tons of circular feedstock, down 0.5% compared to the previous year.

metric tons	2023	2022
Total capacity for circular solutions established [1]	195,200	148,000
Processed circular feedstock [2]	116,300	117,000

1) Total capacity for circular solutions established means circular supply capability of polymers (e.g. polyolefins) and chemicals (e.g. olefins) based on recycled content and/or biobased/renewable feedstock. // 2) Total circular feedstock processed covers the actual input of feedstock for mechanical and chemical recycling, as well as renewable feedstock.

1) Global capacities including non-consolidated Joint Ventures (Borouge). This target is under review.

This year it became particularly clear that Borealis is dependent on external factors to achieve its production capacity targets, such as economic conditions, voluntary pledges by companies in the value chain and regulatory developments. Specifically on biobased products, the absence of supporting policies and the high cost of feedstock is making their volume targets very challenging. Even though the Group faces the above dependencies, it will endeavor to close the gap to its strategic targets.

Activities 2023

Design for Eco-Efficiency

Borealis' foam business is a prime example of eco-efficient polyolefin (PO) solutions. This business line is used in industries such as packaging, sports, transport and construction, and helps facilitate the transition to a circular economy as it is especially suited to ultra-lightweight foam applications while being fully recyclable.

Borealis has further increased its participation in the UK company Bockatech Limited from 7.35% to 12.25%. Bockatech Limited is commercializing Bockatech EcoCore, which is a patented manufacturing technology for foamed articles, using Borealis HMS (high melt strength) polypropylene.

Reuse

Reuse is a core part of Borealis' integrated approach. Partnerships are vital for scaling up reuse activities and ensuring sustainable growth, and the Group strengthened its commitment in 2023 by engaging in several collaborative projects with value-chain partners.

Borealis has joined the 4everPack consortium, a two-year research program run by the Finnish institute VTT and funded by Business Finland. The project aims to replace the linear economy with a fully circular model, focusing on the reusable packaging value chain. Borealis will provide its know-how and expertise in innovative material and packaging design for the selected reuse systems. Several articles and conference papers have been published showing the consortium's findings.

Borealis also launched an open innovation challenge on the topic of reusable e-commerce solutions.

Design for Recyclability

To promote Design for Recycling, Borealis actively promotes its ten Codes of Conduct for PO packaging designers. These are being incorporated into assessment methodologies for recyclability, for example in future modulated Extended Producer Responsibility (EPR) guidelines for packaging. Borealis also applies its innovation activities to develop alternatives to materials and material combinations that are not recyclable today and collaborates with strategic value-chain partners to expand its range of monomaterial solutions.

At the Plastic Recycling Show Europe 2023, Borealis launched a new monomaterial pouch containing over 95% polypropylene (PP), which is fully designed for mechanical recycling. This can help meet the ambitious recycling and waste reduction targets set out in the EU's Packaging and Packaging Waste Regulation, as well as eco-modulation criteria for EPR programs.

The digital watermarks initiative Holy Grail 2.0 is now entering the final phase of research and development trials, to validate the technology at the highest technical level and make it ready for market entry. Borealis will perform recycling tests on the PP film and polyethylene flexibles generated by the sorting trials at Hündgen Entsorgung, which are using the packaging volumes put on the market by participating companies of the Holy Grail 2.0 initiative in Germany and Denmark.

Closing the Loop with Recycled Materials

To support the transition to a circular economy, Borealis is building up its Borcycle™ portfolio to meet growing demand for high-quality recyclate that helps producers and brand owners to meet environmental and regulatory challenges. Borcycle transforms plastic-waste streams into value-adding, high-performance and versatile solutions for demanding applications. The portfolio includes Borcycle™ M, based on mechanical recycling processes, and Borcycle™ C, which uses chemical recycling technology and is suitable for very demanding applications, such as food contact materials. Borcycle C grades are ISCC PLUS (International Sustainability and Carbon Certification) certified using the mass balance methodology.

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A fully transparent chain of custody is important to the circular economy, as it provides essential information on the origin of circular feedstock, the yield from the operation and how much of the feedstock is allocated to the end-product. Borealis has chosen ISCC PLUS as its certification body. In July 2023, the Group's PO compounding site in Monza, Italy, received ISCC PLUS certification, with the mtm plastics mechanical recycling plant achieving the certification in November 2023. Earlier Borealis had achieved the milestone of having all its European PO operations and PO compounding sites certified (except for the newly acquired Rialti S.p.A. in Taino, Italy), in addition to the Renasci N.V. recycling sites in Ostend, Belgium, and Ecoplast in Wildon, Austria.

Borealis' cooperation with OMV and its proprietary chemical recycling technology, ReOil®, is key to the Group's circular economy strategy. After two years of continuous production in its ReOil100 pilot plant, OMV started construction of the ReOil2000 demonstration plant in 2022, with a target to start production in 2024.

Borealis began a partnership with Renasci N.V. in 2021, to work on the innovative Smart Chain Processing (SCP) concept, including a plastic to pyrolysis oils process. In 2022, Borealis took a minority share in Renasci N.V., which it increased to a majority shareholding of 50.01% in early 2023. On November 30, 2023, Borealis increased its shareholding in Renasci N.V. from 50.01% to 98.56%, enabling deeper synergies between the two companies.

The investment gives Borealis greater access to chemically recycled feedstock, strengthening the Borcycle C portfolio. Borcycle C chemical recycling provides circular solutions for difficult-to-recycle cross-linked polyethylene, such as XLPE and PE-X, for the wire and cable and infrastructure sectors. Borealis, Neste, Uponor and Wastewise Group have started the first production of PE-X pipes, based on feedstock from chemically recycled PE-X waste. The project shows that chemical recycling can process hard-to-recycle waste plastic into high-quality polymer products.

In June 2023, Borealis signed an agreement to acquire Italian company Rialti S.p.A, one of Europe's leading producers of mechanically recycled PP compounds for injection molding and extrusion. The transaction was closed in October 2023. The investment strengthens Borealis' circular portfolio, by adding 50,000 metric tons of recycled compounding capacity and meeting growing customer demand for sustainable solutions.

In November 2023, Borealis announced the signing of an agreement to acquire Integra Plastics AD, an advanced mechanical recycling player based in Bulgaria. The investment will further strengthen Borealis' advanced mechanical recycling portfolio, adding more than 20,000 metric tons of recycling capacity, and support growing customer demand for sustainable solutions. The closing of this transaction is subject to inter alia customary regulatory approvals.

Non-fossil Feedstock

Bornewables™ Portfolio

The Bornewables™ polyolefins (PO) portfolio made with renewable feedstock is one of the Group's solutions for reducing the carbon footprint of plastic and its customers' plastics applications. The Bornewables portfolio uses ISCC PLUS mass balance certification, offers the same high performance as virgin PO and can be recycled in the same way.

In 2023, Borealis introduced the Bornewables line of Queo™ plastomers and elastomers. This followed the ISCC PLUS certification of Borealis' production site for the Queo portfolio in Geleen, the Netherlands.

Borealis' customer PFNonwovens Group is a leading global producer of customized nonwoven fabrics, used in baby care, medical, adult incontinence and feminine hygiene applications. In 2023, it announced that it is reducing the carbon footprint of nonwovens and accelerating its journey towards climate neutrality by using Bornewables polypropylene (PP) for absorbent hygiene products. Bornewables PP is second-generation renewable feedstock, derived entirely from waste and residue vegetable oil streams.

Carbon Emissions as an Alternative Feedstock
Borealis is exploring carbon capture technologies and the use of carbon emissions as a primary raw material, to accelerate the move away from fossil-based resources. Following the first proofs of concepts, the target is to scale up these initiatives in 2024.

Collaboration with the Value Chain: EverMinds™
All Borealis initiatives which demonstrate the Group's progress in the circular economy are positioned under the EverMinds™ platform. The platform stands for accelerating and celebrating action in the circular economy, based on partnerships and cooperation across the value chain. This recognizes that the PO industry can only achieve circularity if all members of the value chain work together. All products will need to be designed for recyclability, and converters and brand owners will have to value high percentages of recycled content in their products. At the same time, quality waste streams will be needed for recycling, which requires higher waste collection rates and more efficient waste sorting.

To support this cooperation, Borealis hosted seven live webinars on sustainability and circular economy topics in 2023. The webinars were tailored for all industry clusters and targeted customers and value-chain partners. Most sessions were either hosted with Borouge or with guest speakers, including Ansmann AG, denkstatt GmbH, Essity, Merck KGaA and Reclay Group. On average, each webinar had more than 400 registrations and an attendance rate of 50%. Recordings are offered to the target groups on-demand.

Borealis is a member of "Sustainable Plastics Industry Transformation", or SPIRIT, a collaborative research and development program driving the transformation of the plastics industry in Finland. More than ten partnerships have been established with research organizations and value-chain partners (→ chapter Sustainability Governance, p. 68).

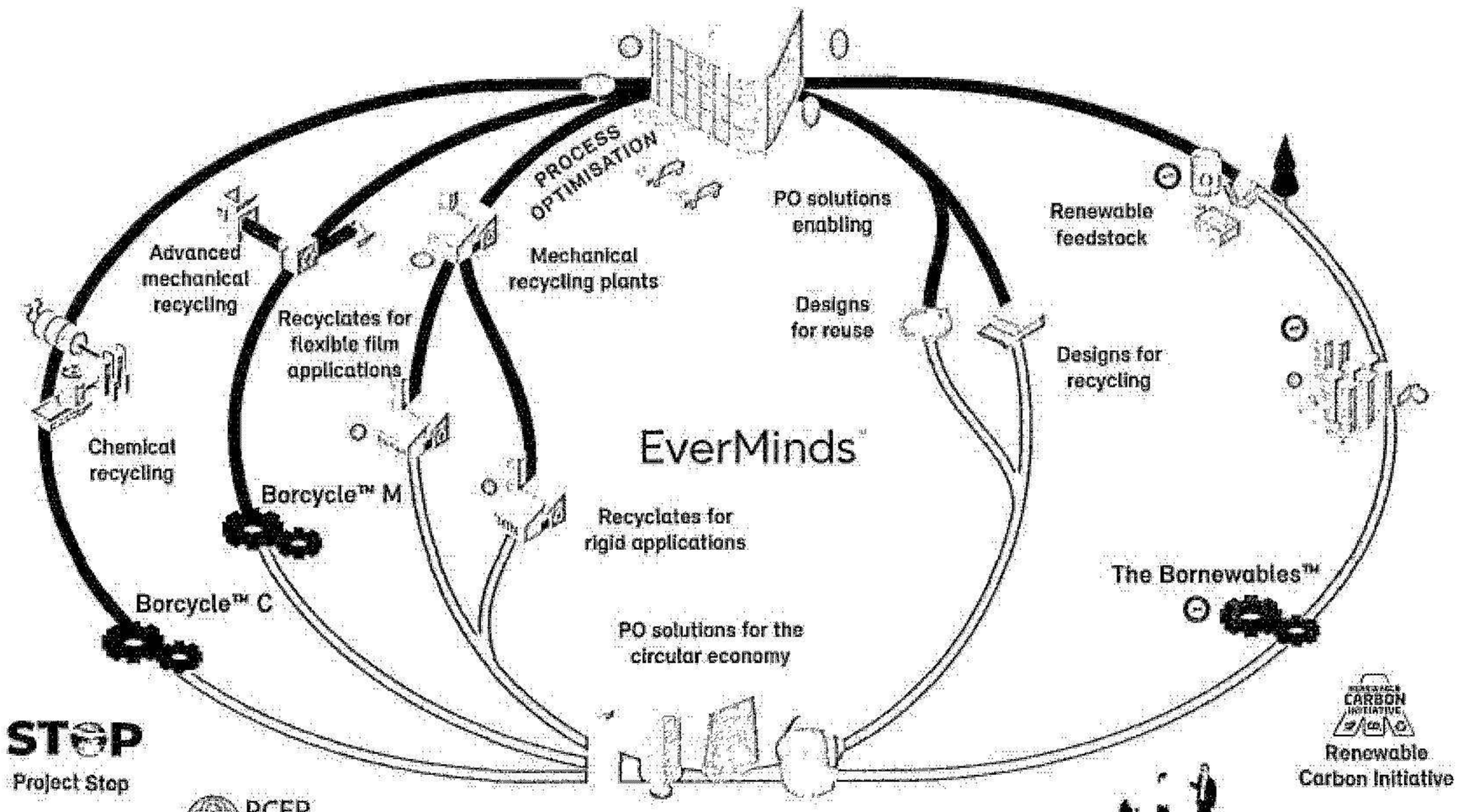
The Group is also a member of the Renewable Carbon Initiative, which aims to support and accelerate the transition from fossil carbon to renewable carbon for all organic chemicals and materials. The initiative looks to bring stakeholders together, provide information and shape policy, to strive for a climate-neutral circular economy.

As a member of the Business Coalition for a Global Plastics Treaty, Borealis supports the development of the UN Instrument to End Plastic Pollution, which is a once-in-a-generation opportunity to tackle the plastic pollution crisis in a globally coordinated way. The resolution adopted at the UN Environmental Assembly in March 2022 marked the start of negotiations and was a clear call for system change towards a circular economy for plastics.

Over 170 leading businesses support the Coalition alongside Borealis, providing recommendations for negotiators on elements of the future agreement that will support an ambitious and effective global regulatory framework.

Outlook
For 2024, Borealis' focus will be to further expand its mechanical and chemical recycling production capacities, while enlarging the circular product portfolio. The Group will continue to support technology development for better sorting and recycling solutions and explore alternative business models around closed-loop systems. Borealis specifically envisages decisions in terms of investments in new polymer recycling technologies.

Fig. 60: **Overview of Borealis' Circular Economy landscape**



Procurement

Feedstock, Electricity and Utilities

Goals and Planned Key Actions in 2023	Key Achievements in 2023
Further increase global sourcing of feedstock at competitive prices, for the crackers and propane dehydrogenation (PDH) units	Closed new five-year ethane procurement and logistics contract, to secure a light feedstock advantage for the Group's cracker in Stenungsund (Sweden)
Further increase renewable feedstock sourcing through increased volumes from existing renewable feedstock contracts and exploring alternative sources, including taking an investment decision on the Group's own chemical recycling plant	Bought first renewable cargo for the Porvoo (Finland) location at a competitive premium. This was also Borealis' first Crude Tall Oil (CTO)-based feedstock Amended Borealis' bio-propane contract with Neste, to increase feedstock flexibility Investigated viability of constructing the Group's own chemical recycling plant and delayed decision to 2024, to further study technology, plant size and location Completed supply agreement for e-Naptha, the Group's first feedstock based on carbon capture and utilization (CCU), which will be processed in Porvoo for a key customer
Continue to progress towards the target of sourcing 100% renewable electricity by 2030 through additional power purchase agreements (PPAs) and solar power investments, with a need to source an additional 400–600 GWh per annum of electricity from renewable sources	Outperformed the annual target of 400 GWh/a, by signing five PPAs for approximately 558 GWh/a of electricity

Goals and Planned Key Actions for 2024	Goals and Planned Key Actions Beyond 2024
Further increase global sourcing of feedstock at competitive prices, for the crackers and PDH units	Further increase global sourcing of feedstock at competitive prices, for the crackers and PDH units
Continue to progress towards the target of sourcing 100% renewable electricity by 2030	Continue to progress towards the target of sourcing 100% renewable electricity by 2030
Begin tendering an additional propane contract for PDH2 in Kallo (Belgium), for approximately 300,000 metric tons per annum	Complete tender for an additional propane contract for PDH2 in Kallo, for approximately 300,000 metric tons per annum
Sign new supply agreements with renewable feedstock suppliers, to meet the Group's bio-circular targets for the coming years	Continue to grow the Group's renewable feedstock portfolio to meet its CES targets, comprising circular and bio-circular solutions

To manufacture and deliver its products, Borealis purchases and sources feedstock, electricity and utilities, such as steam, nitrogen and boiler feedwater. The products and services the Group procures have an important influence on its financial results and business performance, including critical areas such as safety, environmental impact, quality and customer service. The Group therefore carefully manages its sourcing activities to optimize performance in these areas, by developing specific sourcing strategies for individual product and service categories. Borealis also looks to further improve the reliability of its feedstock supply by approving alternative sources.

Governance

The Base Chemicals (BC) organization manages the sourcing of feedstock, electricity and utilities. Dedicated teams source feedstock and cracker products for the BC business and assets, as well as electricity and utilities

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for both the Polyolefins (PO) and BC assets. The Senior Vice President BC is accountable for the BC business and organization.

In the PO organization, the Circular Economy Solutions and New Business Development group coordinates the sourcing of plastic waste feedstock for the mechanical recycling assets. The mtm plastics, Ecoplast and Renasci N.V. businesses carry out day-to-day procurement of plastic waste at site level.

Feedstock Sourcing

Olefins and Polyolefins

Borealis sources hydrocarbon feedstocks, such as naphtha, butane, propane and ethane, and converts them into ethylene, propylene and a range of coproducts through its olefin units. The Group's main focus is on the quality, availability, logistics and cost of feedstock. Global sourcing is crucial, as it gives the Group a more diversified supplier base, so it can obtain the right quality, remain competitive and avoid supply disruptions, especially since the Russian embargo on several oil products.

A dedicated team of feedstock traders and product managers sources the whole Borealis feedstock range. Feedstock and olefins required for Borealis' olefins and polyolefin production plants are either sourced on an arm's-length basis from OMV Group or purchased globally via strategic long-term supply agreements, short-term contracts and spot trading, covering deliveries from the US and Europe.

Since March 2022, Borealis has phased out all products with Russian origin from its portfolio. This was unchanged during 2023 and Borealis is designing its future feedstock sourcing to remain independent from Russian-originated products. The Group's production site in Porvoo (Finland) was previously closely linked to Russian supplies and is in a so-called 'ice class' restricted area, which makes seaborne deliveries difficult in wintertime. Borealis has therefore contracted ice-class-sized vessels, to guarantee security of feedstock supply during winter. In summer, the vessels are used for other purposes.

The cost of feedstock is closely linked to swings in the crude oil price. Borealis therefore implements hedging strategies and ensures that it develops and maintains a high-performing commercial sourcing team. The Group actively screens new markets, maintains its market knowledge by subscribing for reports and attending industry and market conferences, and engages with industry partners to share best practices. Borealis is a member of several industry groups, such as the European Chemical Industry Council (CEFIC), and takes part in industry gatherings such as the European Petrochemical Association and the European Petrochemical Luncheon.

As part of its journey towards increased sustainability, Borealis has maintained International Sustainability & Carbon Certification PLUS (ISCC PLUS) accreditation in its plants in Kallo (Belgium), Beringen (Belgium), Schwechat (Austria), Burghausen (Germany), Porvoo (Finland) and Stenungsund (Sweden), and secured renewable feedstock deliveries in all European locations.

Fig. 61: **Feedstock sourced for production of olefins and polyolefins 2019–2023**

mn metric tons	2023	2022	2021	2020	2019
BC/PO					
Feedstock for olefins	2.6	2.7	3.0	2.0	2.9
Olefins for polyolefin production	1.2	1.2	1.5	1.9	1.5

Fig. 62: **Feedstock sourced for production of fertilizers, melamine and TEN 2019–2023** [1)]

GWh	2023	2022	2021	2020	2019
Fertilizers, Melamine and TEN					
Feedstock for fertilizer production	2,217	10,594	12,268	14,034	14,777

1) Due to the divestment, only the first half of the year to June 30, 2023 is reported. The figures are, therefore, not fully comparable.

Performance 2023

Non-renewable Feedstock Sourcing

Using ethane as primary feedstock contributes to the competitiveness of Borealis' European cracker assets. It was not possible to source ethane on the European market in 2023, as practically all ethane originating from the North Sea shelf is being rejected in natural gas. Consequently, Borealis imported all its ethane requirements from the US, under its long-term supply agreement for US-sourced ethane. Despite high shipping rates and soaring prices, ethane remained competitive in 2023. Both propane and butane were advantageously priced compared to naphtha and the Group therefore maximized their use. The Very Large Gas Carrier "Oceanus Aurora", which the Group ordered to supply the new PDH plant in Kallo, was delivered in Spring 2023. The Group is currently using the carrier to supply its other locations, until the new PDH plant starts operation in the first half of 2025.

Renewable Feedstock Sourcing

Borealis' suppliers produce ISCC PLUS-certified hydrocarbons entirely from renewable raw materials, such as waste and residual oils and fats. Borealis then converts the hydrocarbons into ISCC PLUS-certified cracker products, phenol and acetone, which are finally used to produce high-performance plastics and chemical intermediates.

During 2023, Borealis further increased the volume of renewable feedstock sourcing by signing new supply agreements, including one for e-Naptha, the world's first CCU-based steam cracker feedstock volume. Borealis also sourced its first CTO feedstock at a competitive premium. In total, Borealis contracted for around 36,000 metric tons of renewable feedstock during the year, primarily for feedstocks derived from used cooking oil.

Chemical Recycling

Borealis' portfolio of Borcycle™ C products is based on chemically recycled plastic waste, enabling the transformation of this waste stream into circular high-performance products and applications.

Chemical recycling of plastic waste complements mechanical recycling and is an essential part of Circular Economy Solutions. By converting plastic waste into liquid hydrocarbons known as pyrolysis oil, it allows material circularity for sensitive applications, such as food contact packaging and medical products.

Chemical recycling technology is still developing towards reaching industrial scale and the desired operational performance. The regulatory framework for the chemical recycling industry is also yet to be fully established in the EU and other regions, resulting in some uncertainty and increased risk for investments.

In 2023, Borealis took full control in Renasci N.V. and continued to develop Renasci's high-tech recycling center in Ostend, Belgium. This secures greater access to chemically recycled feedstock, according to the ISCC PLUS mass balance methodology.

In addition, Borealis expanded its circular feedstock network with suppliers such as OMV, Neste and Shell, as well as independent chemical recycling companies. This further supports Borealis' aim to become one of the leading global suppliers of chemically recycled base chemicals and polyolefins.

As most of the pyrolysis oil currently produced requires additional purification before it can be used in cracker furnaces, Borealis is working with partners to develop a reliable and effective processing route for chemically recycled materials. Borealis is also investigating the viability of constructing its own chemical recycling plant at its locations (→ chapter Circular Economy, p. 166).

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Sourcing of Plastic Waste Feedstock for Mechanical Recycling Operations

Borealis sources plastic waste feedstock for its mechanical recycling operations, mtm plastics in Germany and Ecoplast in Austria. These sourcing activities focus on post-consumer plastic packaging waste, from multiple suppliers.

One key activity is Recelerate, a joint entity Borealis established with Reclay Group (Germany) in 2022. Recelerate aims to close the loop on plastics circularity by rethinking the way that plastics are collected, sorted and processed, in order to significantly increase the amount of light packaging waste that is actually recycled.

The Group is also looking into new plastic waste feedstock sources, including closing the loop with customers and other value chain partners, to efficiently source this feedstock and further increase mechanical and chemical production capacities.

Sourcing of Electricity and Utilities

Borealis sources electricity and utilities needed for its production processes. The Group's electricity contracts are generally spot-indexed and contracted on a one to three-year basis. Commodity pricing risk is managed using financial risk instruments.

The Group is actively scouting for industry alliances to prepare for a carbon-neutral future and aims to obtain 100% of its electricity from renewable sources by 2030, as part of the Group Strategy 2030. (→ chapter Energy & Climate, p. 157).

During 2023, Borealis continued to develop PPAs to source renewable electricity on a longer-term basis. In Sweden, Borealis signed a new onshore wind PPA with Axpo, a Swiss energy supplier and a new hydro PPA with Vattenfall. In Finland, Borealis signed two new PPAs with Axpo and Alpiq. And in Belgium, Borealis signed a new onshore wind PPA with Wind Aan de Stroom.

Outlook

During 2024, Borealis intends to:

- further increase the global sourcing of competitively priced feedstock for the crackers and PDH units;
- continue to progress towards the target of sourcing 100% renewable electricity by 2030, through additional PPAs and solar power investments, with the aim of sourcing an additional 400–600 GWh per annum of renewable electricity;
- begin a tender for an additional propane contract for PDH2 unit in Kallo, for approximately 300,000 metric tons per annum; and
- sign new supply agreements with renewable feedstock suppliers, to meet the Group's bio-circular targets for the coming years.

Raw Materials, Packaging, Technical Supplies and Services

Goals and Planned Key Actions in 2023	Key Achievements in 2023
Health, Safety, Security and Environment (HSSE) – Strengthen the prequalification process for new suppliers, with a focus on HSSE and sustainability, in order to implement and fully comply with OMV Group's new contract management procedure; and – Continue the high focus on security of supply, due to continuing global logistical challenges	– 297 new suppliers screened through the prequalification process – 224 suppliers in the EcoVadis pool – 8 suppliers have participated in a TfS audit – Engaged with 188 suppliers via CDP – 56 suppliers completed at least one E-learning training on sustainability on the EcoVadis platform.
Circular Economy – Support Borealis' projects for chemical and mechanical recycling, by awarding and managing contracts for equipment and services; – Improve sustainability in packaging usage, for example by reusing more pallets, using recycled material for packaging and prompting suppliers to reuse packaging; and – Continue to support Borealis' growth projects and further develop technology projects, such as bio-based feedstock and energy efficiency initiatives	– Supported Borealis' circularity strategy by securing contracts with service suppliers for studies, technology assessments and engineering services related to a project which will contribute to reducing waste, conserving resources and decreasing the Group's ecological footprint
Cost efficiency – Continue to increase cost efficiency and synergies through integrated management of procurement within the OMV Group; and – Ensure price transparency of raw materials and packaging (RMP) as part of the final product recipe cost, to help manage price volatility in the market	– Chem 2.0 project team established for Chemicals & Packaging, to create savings through renegotiations and increased price transparency
Human Rights – Further strengthen human rights compliance throughout the value chain (→ chapter Ethics & Compliance, p. 84).	– Further strengthen human rights compliance throughout the value chain, building on the improvements made in 2022 such as the Kallo social compliance management, improvement of processes and training for all stakeholders.

Goals and Planned Key Actions for 2024
In 2024, the focus will be on: – Sustainable suppliers, with only suppliers who meet the Group's sustainability requirements being eligible to participate in tenders; – Sustainable sourcing, with the aim to integrate sustainability criteria into award decisions, such as CO_2 emissions per kg of product, and the supplier's EcoVadis score; and – Low-carbon procurement, with the aim to continuously manage and decrease the carbon volume of purchased goods and services

Borealis aims to foster innovation, maximize value contribution and enable supply chain growth. It achieves this by applying its sourcing and logistics expertise, to ensure that the highest-quality materials and services are provided throughout the supply chain.

Sustainable procurement means caring about the environmental, social and economic impacts of the goods and services the Group intends to purchase. Borealis also aims to foster innovation, maximize value contribution, and enable supply chain growth by applying its sourcing and logistics expertise to ensure that the highest-quality materials and services are provided throughout our supply chain. It is of paramount importance that the organization is fully compliant with all applicable legal requirements, as well as with the Group's internal safety, environmental protection, and human rights standards, when managing its supply chain.

By integrating sustainability requirements throughout its supply chain (for example through audits, assessments and sustainability criteria in sourcing), Borealis aims to drive positive change in the sustainability performance of its suppliers and contractors, while mitigating potential negative impacts. The Group purchases goods and services for all business areas including, among others, those related to raw materials, IT, consultancy, engineering and logistics.

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Governance
To drive value creation and foster synergies, OMV and Borealis have set up an integrated procurement organization and adopted a One Procurement Directive, which applies across the OMV Group, including Borealis. The Directive sets out the framework, principles, and rules for managing procurement activities and establishes the minimum requirements within the procurement process. A Sustainable Procurement & Supplier Innovation department was also established in 2022, to help meet OMV Group's sustainable procurement ambitions and targets for 2025 and 2030.

Within Borealis, Polyolefins (PO) is responsible for procurement at Group and location level, with the exception of Base Chemicals (BC) trading activities, which the BC organization manages directly. Procurement's organizational structure includes separate areas for chemicals and packaging, business services and operations and materials, as well as engineering project services.

Borealis' Procurement Approach
Borealis follows a defined process when purchasing goods and services to ensure legal compliance, product quality, consistency, reliability of supply and sustainability. To get the best value, Borealis applies the Total Cost of Ownership philosophy. This requires the Group to consider the full costs it will incur during the lifetime of the product or service, rather than looking only at the upfront cost. When defining and adopting sourcing strategies, Borealis also considers market and technology intelligence and supplier innovation potential.

After defining Borealis' procurement needs (including scope and specifications), reviewing the supply market and defining the sourcing strategy, the suppliers are selected. This includes the use of questionnaires and on-site audits for supplier qualification.

Every year, Borealis defines a set of strategic suppliers based on criteria such as revenue, innovation, impact on operability and potential for growth. The Group uses a supplier relationship management process for strategic suppliers (see below), which combines KPI-based performance management with supplier segmentation and professional knowledge of business risks. Activities with strategic suppliers can include top management meetings and common innovation programs. On a monthly basis, Procurement monitors the performance of around 100 strategic suppliers, evaluating risks and taking mitigating actions where needed.

The procurement process takes account of sustainability aspects, and these are reflected in Borealis' Ethics Policy for Business Partners, which is published on the Group's website. It defines the Group's approach to key aspects of business ethics when sourcing, such as anti-corruption, anti-slavery, compliance and child labor, as well as health, safety and the environment. New major and strategic suppliers must agree to the policy by signing the contract.

Management and Due Diligence Processes
Policies and Commitments
To mitigate supply chain risks, including forced labor, slavery, human trafficking and corruption, Borealis requires suppliers to meet relevant legal requirements and the Group's rules and standards. Suppliers are obligated to fully comply with Borealis' Code of Conduct, with supply chain partners also being required to sign the Code of Conduct. Suppliers must accept the Group's General Conditions of Purchase, which further detail Borealis' business standards (for example on labor rights), as an integral part of its contractual agreements. Borealis reserves the right to terminate relationships with suppliers if it discovers non-compliance with its policies or if suppliers fail to address non-compliance in a timely manner.

Supplier Relationship Management (SRM)
The Group developed a new SRM framework in 2022 and rolled it out in 2023, including the contract management procedure. The framework supports Borealis in managing its strategic relationships with the pool of suppliers that show the most potential and bear the most risk within the supply chain. Within the framework, sustainability is part of the supplier segmentation and supplier portfolio management processes.

To become a leader in the circular economy, Borealis needs to help its suppliers unlock their potential for creating innovative solutions. The supplier innovation process is therefore a crucial component of the SRM, strengthening partnerships between the business, Procurement and suppliers. During the supplier segmentation process, the Group measures suppliers on their innovation potential. The Group also has a heavy focus on innovation in its

interactions with strategic clusters of suppliers, in order to leverage the most important suppliers for the organization.

Prequalification
As part of its supplier prequalification process, Borealis collects information directly from potential bidders in SAP Ariba and uses it to evaluate their compliance with the Group's HSSE and sustainability requirements. Only those that meet the standard are considered for future collaboration.

Prequalification is based on a standardized list of elements and objectives that align with:
- Borealis' HSSE Management System, which includes the HSSE Policy and international standards ISO 9001, ISO 14001 and ISO 45001; and
- the Group's Sustainability Framework, which includes its Sustainability Policy, Human Rights Policy and grievance mechanisms.

Suppliers located in a high-risk country are asked to submit a positive TfS Audit and Assessment report, which is particularly important for suppliers of chemicals and packaging. Borealis categorizes high-risk countries by considering human rights, environmental and ethical aspects.

Supplier Selection
Following prequalification, Procurement and business representatives select the best suppliers, based on a predefined set of commercial and technical criteria during a tender process. To support Borealis' Sustainability Targets 2030 and the Sustainable Procurement ambition to give sustainability a "value" in sourcing, Procurement has included two criteria in the commercial evaluation to assess bidders' sustainability performance. These criteria are the supplier's EcoVadis score or participation in a Together for Sustainability audit and participation in the climate change questionnaire either directly at our request or via CDP Supply Chain.

Audits
Borealis' Procurement organization conducts full-scope supplier audits either as part of the prequalification process or during contract execution. The aim is to measure suppliers' performance and define actions that will enable them to optimize their performance and meet Borealis' requirements. The audits pay special attention to the financial stability of suppliers, their strategy and organization, supply chain, sustainability (such as human rights, carbon footprint management, environmental management, certifications, and social responsibility), and their cybersecurity performance. All full-scope audits run by Deloitte are done remotely.

Each audit finding classified with a red flag will be followed up and analyzed by Procurement in collaboration with business representatives and any other relevant function, such as HSSE, Legal, Internal Audit, and Compliance. Information on the outcome of the audit is made available to the supplier, and the supplier is requested to submit a corrective plan with concrete measures and an implementation timeline. The full scope audits performed in 2023 resulted in no follow-up measures.

In 2023, based on the feedback received from suppliers and internal stakeholders, Borealis revised its audit approach. The scope of the audit is now defined based on a set of criteria, such as the type of goods and services purchased from the supplier, the supplier's size, and whether it is a single source supplier. This new approach has increased Borealis' flexibility to adjust the audit scope to reflect the risks related to the supplier and dramatically reduce the effort for low-risk suppliers.

In addition to the full scope audits, Borealis also performs Together for Sustainability (TfS) audits on selected raw materials suppliers. These audits are performed on site and in 2023 there were 8 audits. All of the audits resulted in corrective action plans and the suppliers have three years to implement them.

Risk Assessments
Understanding a supplier's risk is an important factor in deciding whether and how Borealis does business with it. Since 2019, the Group has received daily alerts about its registered suppliers through SAP Ariba. These alerts enable Borealis to monitor supplier risks in four categories: Environmental and Social, Finance, Regulatory and Legal, and Operations. The risk alerts help the Group to apply a preventive risk management process. Furthermore, OMV has a screening process to ensure that parties sanctioned by the EU or international organizations, such as the United Nations, are not accepted as procurement partners.

Together for Sustainability
TfS is a joint initiative and global network of 50 member companies (2023 status), which sets global standards for the environmental, social and governance performance of

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the chemical industry's supply chains. It enables its members to implement sustainable procurement by sharing the results of standardized supplier audits and assessments, performed by independent experts. TfS is based on the principles of the UN Global Compact and Responsible Care.

Since Borealis became a fully consolidated member of the OMV Group, its membership of TfS has been elevated to OMV Group level.

OMV Group Procurement has set the following TfS-related targets:

- *By 2025, run TfS audits [1] and assessments [2] for all suppliers covering more than 80% of Procurement spend*
- *By 2030, extend TfS audits and assessments to all suppliers covering 90% of Procurement spend*

1) TfS Audits are conducted by an approved external auditor and can be on-site, remote or a hybrid of the two. They cover a single or combined business location such as a production site or warehouse. Sustainability performance is verified against a defined set of audit criteria. // 2) TfS Assessments are conducted by TfS partner and service provider called EcoVadis, a global leader in CSR assessments, via a secure online platform. The assessment questionnaire is adapted to the size, country of origin, and business sector of the company being assessed and results in a score at the end (the EcoVadis score).

CDP Supply Chain

Borealis aims to continuously manage and decrease the carbon volume of its purchased goods and services. Working with its suppliers can enable the Group to define joint low-carbon initiatives, to continuously decrease carbon emissions in the supply chain and meet its Paris Agreement commitments.

As part of its CDP Supply Chain membership, in 2023 OMV Group invited 395 suppliers to respond to the CDP's climate change questionnaire. Of these, 188 were Borealis' suppliers. The suppliers were selected based on the spend, estimated carbon emissions and the carbon intensity of their goods and services. In addition to reporting their emissions, suppliers were asked whether they have carbon reduction targets and to share any initiatives or projects to reduce carbon emissions that they would like the Group to join.

Supplier Capacity Building

OMV Group works with its suppliers to improve their overall sustainability performance. For instance, in 2023, individual meetings and webinars were offered to suppliers to help them understand the requirements of the CDP climate change questionnaire or the TfS Assessment, and why this information is important to the Group. Additionally, sustainable and low-carbon procurement were included in the agenda of the annual strategic supplier meetings.

Local Procurement

Borealis aims to support the communities around its locations and to foster their economic development. The Group defines local procurement as when the supplier and the ordering entity are in the same country. Local procurement strengthens the local economy, meets community expectations and has helped to reduce business disruption for Borealis in recent years. It also has the potential to reduce the Group's carbon footprint, particularly due to shorter transportation distances. Borealis' spend with local suppliers in 2023 was 55.2%.

Fig. 63: **Proportion of spending on local suppliers in 2023** [1) 2)]

%	BC/PO (Technical supplies only)
Procurement budget spent on local suppliers	55.2

1) Definition of local: Supplier Country and Country of the Ordering Company are the same. // 2) Definition for significant locations of operation: Austria, Belgium, Sweden and Finland.

Activities 2023

Following the previously reported case of alleged human trafficking practices by a subcontractor at Borealis' propane dehydrogenation plant construction site in Kallo, Belgium, the Group implemented the following measures at the beginning of 2023 to prevent it from happening again:

- Speak-up campaign: Borealis strengthened its speak-up campaign, to encourage reporting of suspected or witnessed misconduct. The campaign is specifically addressed to workers of contractors, who are invited to directly contact Borealis in case of such misconduct.
- Improvement of processes: the Group has further improved processes for vetting, due diligence and monitoring of supply chain partners, including enhanced due diligence requirements for contractors who assign personnel to Borealis' sites.
- Training: additional training has been provided and created awareness for internal project teams and contractors, to address the detected issues.

In 2023, Borealis continued to actively engage with its suppliers and its own buyers on sustainable procurement and supplier innovation practices. Over 200 procurement colleagues from Borealis, OMV and OMV Petrom participated in several awareness sessions.

In October 2023, the Group organized its second Supplier Sustainability and Innovation Day, to interact and exchange experiences with suppliers and build a stronger and more sustainable supply chain. More than 350 suppliers and employees attended the event, which addressed topics such as climate change, the circular economy and innovation.

Fig. 64: **Negative environmental impacts in the supply chain**

	BC/PO
Number of suppliers assessed	297
Number of suppliers identified	2 [1]
Percentage of suppliers with which improvements were agreed upon	0%
Percentage of suppliers with which relationships were terminated	0%

1) The two new suppliers screened in 2023 did not meet the environmental requirements due to missing ISO Certificates and environmental/HSSE policies. Thus, they were rejected during the prequalification phase and were not invited for tenders.

Fig. 65: **Negative social impacts in the supply chain**

	BC/PO
Number of suppliers assessed	297
Number of suppliers identified	3 [1]
Percentage of suppliers with which improvements were agreed upon	0%
Percentage of suppliers with which relationships were terminated	0%

1) The three suppliers were assessed with less than 30 points in the EcoVadis rating. The negative social impacts identified relate to the dimensions Ethics and Labor.

Procurement of Chemicals & Packaging (C&P)

Chemicals play a vital role for Borealis, giving unique product properties which enable the Group to produce value-added specialty products. A reliable supply of these materials, on time and in accordance with the agreed quality and quantity, supports Borealis' operational excellence. Packaging materials are needed for all solid products that Borealis delivers to customers. They are essential for protecting Borealis' goods in transit and for preventing spills such as pellet loss into the environment. They also help customers to dose the goods accurately and are a vital means to support Borealis' ambition to continuously reduce transport energy consumption. The Group continuously looks to balance the cost of packaging with the volume of material used and its functionality, such as the packaging's ability to prevent damage, contamination or pellet spills. Packaging is an important part of the Group's approach to contributing to a circular economy, and where possible, Borealis uses reusable packaging, such as pallets, and its own recycled material to produce packaging material.

With a prolonged and deeper economic downturn and weak market demand, Borealis started a cost reduction program called Chem 2.0 in September 2023, with the aim of creating higher value from renegotiated chemicals contracts with reduced prices.

To achieve this, the Group set up a project team with chemicals category managers fully in charge, including peer coaching by OMV Procurement sparring partners and business involvement through Borealis' Product Asset Management team (PAM). The project has involved baseline setting and negotiation preparation training, including two external workshops. The project completed in mid-December 2023.

Borealis uses dedicated procurement teams to source its raw materials and packaging for polyolefins, primarily from suppliers in Europe, North America, Japan, China and South Korea. The Group maintains a list of prequalified suppliers. Safeguarding competitive pricing in a high-inflation environment for raw materials, goods and services was the major challenge throughout the year, both in C&P and other procurement activities.

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The European Council Directive 94/62 Consolidated reinforces the mandatory requirements for packaging allowed on the EU market. The Directive also considers other measures such as environmental taxation, which will increase taxes on waste packaging. Under the Directive, EU member states should take the necessary measures to attain the following targets:

- by 2025, 65% by weight of all packaging waste will be recycled, including 50% of plastic and 25% of wood; and
- by 2030, 70% by weight of all packaging waste will be recycled, including 55% of plastic and 30% of wood.

Borealis works with Pallet Return System (PRS), an initiative of the polymer industry, dedicated to providing full-service, sustainable pallet pooling solutions. PRS collects and repairs pallets and brings them back in a pool for all their customers. Approximately 50% of all Borealis' used pallets are returned and reused in the pool. In 2023, PRS collected 497,000 pallets from our European customers.

Fig. 66: **Packaging consumption of polyolefins sold 2021–2023**

metric tons	2023	2022	2021
PO			
Cardboard	1.80	1.80	1.63
Big bags	2.03	2.03	2.07
Film	0.42	0.45	0.45
Other materials	0.03	0.03	0.03
Total	**4.28**	**4.31**	**4.18**

Fig. 67: **Packaging consumption of fertilizers sold 2021–2023** [1)]

metric tons	2023	2022	2021
Fertilizers			
Big bags	0.39	0.72	0.74
Film	0.01	0.04	0.05
Total	**0.40**	**0.76**	**0.79**

1) Due to the divestment, only the first half of the year to June 30, 2023 is reported. The figures are, therefore, not fully comparable.

Procurement of Operations & Materials and Projects & Engineering

In 2023, as part of the new organizational set up, technical procurement in Borealis is covered by two procurement units: Operations & Materials and Engineering. Operations & Materials encompasses all procurement activities related to the maintenance and growth investments of Borealis' assets globally. This includes engineering, construction contracting and procurement of equipment, materials, industrial services and spare parts.

Major engineering services or engineering, procurement, construction and management contracts are sourced globally, while maintenance services are predominantly sourced within Europe.

Outlook

In 2024, the Integrated Procurement Organization will focus on:

- sustainable suppliers, with only suppliers who meet the Group's sustainability requirements during the prequalification process being eligible to participate in tenders;
- sustainable sourcing, with the aim to integrate sustainability criteria into award decisions, such as CO_2 emissions allocated to goods or services delivered to Borealis, and the supplier's EcoVadis score; and
- low-carbon procurement, with the aim to continuously manage and decrease the carbon volume of purchased goods and services.

Logistics

Goals and Planned Key Actions in 2023	Key Achievements in 2023
Polyolefins (PO) – improve logistics reliability for customers, especially those exceptionally far from Borealis' production plant; – continue the logistics safety boost plan; and – complete the Polyolefin PackCycle project, with the conversion to up to 80% post-consumer recyclates (PCR) for key packaging	Improved delivery reliability, with proportion arriving on time up to 4 percentage points higher, and both long-distance and short-distance deliveries improving Continued to improve logistics safety, with 30% reduction in medium and severe incidents, resulting in Borealis finishing runner up in a health, safety and environment (HSE) excellence award for 2023 PackCycle 1.0 project introduced the first wave of recycled material into secondary packaging materials for Borealis' commercial grades, achieving 46% PCR content by the end of 2023
Base Chemicals (BC) – maintain a high focus on transport safety, as a priority for suppliers and customers; – continue to reduce costs by optimizing transport routes and through contract negotiations with key service providers; and – continue to reduce the environmental footprint of transportation, to reduce GHG emissions	Reported one severe incident in 2023, against a target of a maximum of three Met 2023 target for performing transportation safety audits Improved optimization of transportation routes in 2023, by using time charter vessels for feedstock imports and logistics contracts for product flows Put into operation the Very Large Gas Carrier (VLGC) time charter vessel Oceanus Aurora for cross-Atlantic feedstock trade, with the vessel equipped with a dual-fuel engine, shaft generator and wind propulsion system

Goals and Planned Key Actions for 2024	Goals and Planned Key Actions Beyond 2024
Polyolefins (PO) – improve logistics costs without jeopardizing service levels for customers; and – further boost safety by including haulers and on-site logistics service contractors in the total recordable injury rate (TRI) definition	Polyolefins (PO) – continue to focus on HSE, specifically safety in logistics operations and further reductions in the CO_2 footprint; and – comply with the Packaging and Packaging Waste Regulation first wave by the end of 2025
Base Chemicals (BC) – maintain a high focus on transport safety, as a priority for suppliers and customers; – reduce costs by optimizing transport routes, minimizing demurrage costs and improving contract conditions with key service providers; and – focus on the environmental footprint of transportation to reduce GHG emissions, reflecting the introduction of the EU Emissions Trading System (ETS) for maritime operations in 2024	Base Chemicals (BC) – continue to reduce the environmental footprint of transportation, to reduce GHG emissions; and – maintain focus on transportation safety as a key area, including maritime, rail and road transport services

Borealis' Base Chemicals and Polyolefins businesses transport up to 8.1 million metric tons of finished products to the Group's sites or customers each year. This means that potential negative impacts on the environment and people can occur, due to CO_2 emissions and spills or losses during transportation.

Borealis outsources its logistics services to external suppliers. When awarding contracts, the Group takes costs, service, quality, safety and sustainability into account. The weighting applied to each factor depends on the business's needs, as well as customer requirements, the type of products transported (dangerous or non-dangerous) and the business environment. However, logistics services must always meet Borealis' safety, ethical and environmental standards.

The primary sustainability aspects of logistics that Borealis needs to address are:

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- safety, in particular potential accidents and spills, as well as smoking, speeding, alcohol use, and working at heights without safety protection; and
- the reduction of greenhouse gas emissions, primarily carbon dioxide (CO_2).

Governance

Each business area sources its own logistics requirements, with the respective Senior Vice President having overall responsibility for their organization.

In Base Chemicals, logistics contracts for all modes of transport (sea, pipelines, rail, trucks and storage facilities) are managed by the Supply Chain Manager, reporting to the Head of Optimization & Supply Chain, with logistics coordinators in Belgium, Sweden and Finland responsible for the day-to-day execution of the transport agreements. The Supply Chain team also includes a Transportation Safety Expert, responsible for vessel vetting, transportation safety audits and incident management.

In Polyolefins, global logistics sourcing is part of the Product Asset Management and Supply Chain (PAM/SC) organization, and there is also a strong link to the procurement organization. The sourcing function works with four category managers, who are responsible for bulk transport, palletized transport, maritime (container) transport and external warehouse management.

The PAM/SC organization also includes the site logistics organization, which is responsible for on-site activities such as loading, storage, dispatch, packaging and order execution. Each major site has a logistics manager reporting to a corporate site logistics manager, to align processes and procedures.

Stakeholders such as sales and planning are part of the sourcing team and take part in defining the strategy and goals. This structure means they are also informed on the actions taken.

Transport Modes

Polyolefins

Polyolefins has approximately 130 providers of road, container and maritime transport, warehousing and on-site logistics services. Approximately 40 partners are responsible for 80% of the business, with the largest accounting for 7%.

All of Polyolefins' partners are either Safety & Quality Assessment for Sustainability (SQAS) qualified, certified by maritime or other qualification bodies, or are qualified via EcoVadis, the world's largest provider of business sustainability ratings.

Base Chemicals

Base Chemicals has long-term strategic logistics partnerships for its sea transport, pipelines, rail and truck deliveries. These partners are encouraged to obtain sustainability ratings from EcoVadis, while road transport companies must have an SQAS assessment.

Borealis tracks the fleet's safety performance and energy efficiency, as well as promoting the use of environmentally friendly bunker solutions. The Group also uses its dedicated time charter vessels, Navigator Aurora and Oceanus Aurora, as well as shorter-term time charter options (lasting six to twelve months) to source US-based ethane or liquefied petroleum gas (LPG) for its flexible crackers in Stenungsund (Sweden) and Porvoo (Finland).

Fig. 68: **Total transported volumes per business segment in 2022–2023** [1]

mn metric tons	2023 Transported volume BC/PO	2023 Transported volume Fertilizers, Melamine and TEN [2]	2022 Transported volume BC/PO	2022 Transported volume Fertilizers, Melamine and TEN
Polyolefins	3.4	–	3.4	–
Base Chemicals	4.8	–	4.2	–
Fertilizers, Melamine and TEN	–	1.4	–	3.5

1) Total Base Chemicals volume transported (all INCOTERMS) is 7.6 mn metric tons, of which 4.8 mn metric tons were transported via own contracted transport. // 2) Due to the divestment, only the first half of the year to June 30, 2023 is reported. The figures are, therefore, not fully comparable.

Activities 2023

Improving Delivery Reliability

During 2023, the Polyolefins organization achieved improved reliability in its deliveries to customers, with the proportion arriving on time up to 4 percentage points higher than last year, and both long-distance and short-distance deliveries improving. This was primarily the result of reduced market demand resulting in more capacity, as well as Borealis' increased focus on intermodal routes.

Securing Charter Vessel Capacity for BC

As noted above, Borealis uses short- and long-term VLGC time charter agreements to transport LPG from the US to the crackers in Finland and Sweden. The volumes transported in this way increased from 2022, as the war in Ukraine led Base Chemicals to stop sourcing some feedstock for the Finnish cracker from Russia, with these volumes replaced by US sources. The total estimated volume shipped in 2023 was 1.6 million metric tons.

Since June 2023, Borealis has operated a newly built time charter vessel to support its LPG needs. The new vessel has a dual-fuel option, allowing the engine to run on LPG instead of conventional gas-oil-based bunkers, helping to reduce the Group's environmental footprint.

Projects to Reduce CO_2 Emissions in Polyolefin Logistics

During 2023, Borealis continued its strategy to increase its use of low-emission transport modes, such as electric trucks and the European waterway system. Polyolefins also increased its volumes with partners who are part of the European Responsible Care® program.

Logistics Set Up for Renewable and Chemically Recycled Feedstock Sourcing

During 2023, Base Chemicals further developed its supply chain solutions for transporting renewable feedstocks such as bio-diesel and bio-propane to its production locations in Porvoo (Finland), Stenungsund (Sweden) and Kallo (Belgium), as well as for customer deliveries. A dedicated supply chain solution has been set up for chemically recycled feedstock from Renasci N.V. to the Porvoo cracker, via a multimodal solution with iso-containers and vessels.

Operation Clean Sweep

Borealis is fully committed to zero pellet loss and therefore takes part in Operation Clean Sweep® (OCS), an international program to mitigate pellet loss. During 2023, based on a lesson learned, Borealis increased the number of spot checks at its locations on the quality of bulk truck cleaning, in relation to pellet spills during filling. All reported deviations are entered into Borealis' carrier performance rating system, which also includes hauler consequence management (→ chapter Environmental Management, p. 146).

Improving Polyolefin Circularity through the PackCycle Project

Borealis launched the PackCycle project in 2020, with the aim of improving the circularity of the flexible packaging used in transporting and distributing the Group's products to its customers, such as plastic sheets used in pallet packaging. As part of this, Borealis continues to support the adoption of post-consumer recycled (PCR)-based plastic sheets at sheet producers and users, in line with its EverMinds™ ambition to accelerate action on circularity of plastics across the value chain. During 2023, the Group successfully introduced PCR material content in the coverhoods and topsheets for its end products as well as for its form-fill-seal packaging for non-prime materials. For 2024, the focus will be on further introduction of stretch hood film for packaging.

Transportation Safety

Transportation safety is key for Borealis. The Group requires all logistics partners to report the following accidents and spills to the environment that occur during transportation:

- any injury or fatality to their own personnel, as well as contractors;
- any damage to property of any party involved in the accident;
- all material damage while transporting Borealis' goods to the final customer;
- any public disruption;
- pellet spills during bulk loading or transport to the final customer; and
- any intervention by the emergency services.

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Within 24 hours of an accident, the logistics partner must send a report to Borealis which includes information on the cause of the accident. The Group collaborates closely with its supply chain contractors and has a process to define improvement actions for every incident.

Borealis looks to continuously improve transport safety in different modes of transport, as a submitting member of the Oil Companies International Marine Forum, Chemical Distribution Institute and European Barge Inspection Scheme. As part of this, the Group follows an annual transport safety audit plan. In 2023, Borealis performed four transportation safety audits. Borealis also carries out regular vetting inspections on sea-going tankers and inland barges, with every vessel and barge requiring Borealis' approval. An online vetting system, called Mainstay, is used to vet the vessels and barges in BC's supply chain. Contracted shipping companies also regularly undergo a Tanker Management and Self-Assessment audit.

In Polyolefins, the logistics safety boost plan resulted in further improvements in logistics safety, with a 30% reduction in severe and medium incidents. This led to Borealis finishing runner up in an HSE excellence award for 2023. The improvement was mainly due to increased visibility on site and Borealis continues to work with its logistics partners to achieve further gains. During 2023, the Group also further strengthened its concept for on-site logistics safety audits, with respect to both safety processes and working practices.

Borealis tracks the transport safety performance of its logistic providers using a key performance indicator (KPI) based on definitions provided by CEFIC to classify incidents.

Spills or Losses During Transportation
Spills of hydrocarbons are potentially dangerous and may create significant exposure for people and the environment, given the nature and volumes of the products being moved. Borealis therefore has extra-high precautionary safety measures, which it follows up with supply chain contractors to mitigate the risks of spills, including pellet spills (→ chapter Environmental Management, p. 146).

Fig. 69: **Logistics Incidents**

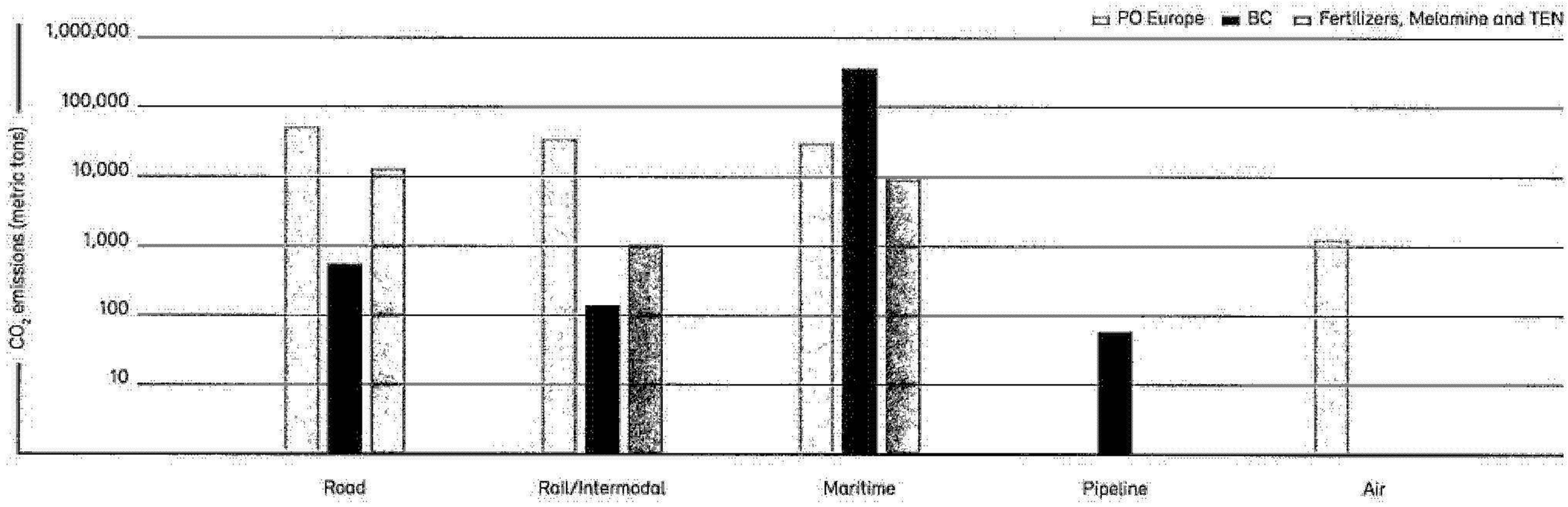
Actual	2023	2022
PO [1]		
Severe incidents	34	28
Medium incidents	35	71
Low incidents	225	201
BC		
Severe incidents	1	2
Low/medium incidents	12	28
Fertilizers, Melamine and TEN [2]		
Severe incidents	1	1
Medium incidents	0	2
Low incidents	13	13
Total Fertilizers, Melamine and TEN	**14**	**16**

1) Incident for PO also includes near miss incidents. // 2) Due to the divestment, only the first half of the year to June 30, 2023 is reported. The figures are, therefore, not fully comparable.

CO_2 Emissions from Transportation
Wherever possible, Borealis seeks to transport products off-road via rail, barges, vessels or pipelines, and aims to optimize logistics by using terminals which are closer to the customer, requiring shorter transport distances.

Deep sea shipping produces significant emissions of CO_2, sulfur oxides and nitrous oxides, which will be subject to stricter global targets in the future. From 2024, an ETS for maritime operations will be introduced for all shipments calling at European ports. When contracting new long-term shipping capacity, a key decision element therefore is the option to run ships on cleaner gas fuels than traditional gas-oil-based bunkers.

Fig. 70: **Borealis' CO_2 emissions by mode of transport in 2023, according to the Global Logistics Emission Council framework** [1) 2)]



metric tons	Road	Rail/Intermodal	Maritime	Pipeline	Air
PO	61,980	35,769	32,122	–	1,401
BC	5,347	154	358,573	54	–
Fertilizers, Melamine and TEN [3]	13,098	1,046	8,876	–	–

1) According to GLEC calculation methodology. For PO, maritime emissions come directly from shipping lines. // 2) Pipeline is only applicable for BC, Air is only applicable for PO. A CO_2 tracker has been implemented in BC, making the reporting more accurate. // 3) Due to the divestment, only the first half of the year to June 30, 2023 is reported. The figures are, therefore, not fully comparable.

Performance 2023

In total, around 31% of Borealis' European polyolefins shipments are transported by intermodal transport, with the result that road transport generates the large majority of Borealis' emissions from logistics activities (see Fig. 70, above).

The Group is trialing LNG, hydrogen and electric trucks to replace trucks using diesel, thereby reducing emissions from road transport.

Outlook

Polyolefins

- improve logistics costs without jeopardizing service levels for customers; and
- further boost safety by including haulers and on-site logistics service contractors in the total recordable injury rate (TRI) definition.

Base Chemicals

- maintain a high focus on transport safety, as a priority for suppliers and customers;
- reduce costs by optimizing transport routes, minimizing demurrage costs and improving contract conditions with key service providers; and
- focus on the environmental footprint of transportation to reduce GHG emissions, reflecting the introduction of the EU Emissions Trading System (ETS) for maritime operations in 2024.

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Innovation

Goals and Planned Key Actions in 2023	Key Achievements in 2023
Intensify efforts to support the rapid development of technologies that enable increased use of renewable and available energy, renewable and available feedstock for polyolefin manufacturing, and a rapid reduction in CO_2 emissions, reflecting the urgent need to tackle climate change and higher energy prices due to the war in Ukraine	Continued progress with developing products that enable the use of renewable energy, such as materials for manufacturing Medium Voltage Direct Current (MVDC) and High Voltage Direct Current (HVDC) cable insulation and photovoltaic modules Implemented initiatives to increase energy efficiency of Borstar® plants
Further develop recycling technologies, with an emphasis on mechanical recycling	Made progress with developing technologies for recycling polyolefins, focusing on both polymer and chemical recycling
Continue to develop products with advanced performance, enabling their use in applications that are designed for recycling	Continued to develop and implement products with the significantly improved performance needed for efficient design for recycling, including as part of the Nextension program
	Borealis filed 128 new priority patent applications.

Goals and Planned Key Actions for 2024	Goals and Planned Key Actions beyond 2024
Further develop and implement technologies that deliver high-specialty products with the substantially improved performance to enable a one-material concept in multilayered structures, which is essential for efficient sorting and recycling	Implement the newly developed technologies in the 2025–2027 period.
Further develop the Borcycle™ technology	
Further develop specialty materials needed for cable insulation	

Innovation is fundamental to Borealis' ability to achieve its purpose of "Re-inventing essentials for sustainable living". The Group is committed to developing technologies that will provide solutions to the most critical issues facing society, including climate change, pollution and increased energy costs.

Together with OMV Group, Borealis leads the industry in the transformation toward the circular economy, with zero CO_2 emissions. The strategies of both Groups confirm their determination to achieve this transformation, supported by Borealis' technology strategy. Specifically, Polyolefins looks to develop new high-performing materials, Hydrocarbons & Energy is identifying innovative approaches to using new renewable feedstock, and Circular Economy Solutions (CES) is developing technologies to use waste plastic as a crucial resource.

Governance

Borealis' global innovation community is the Group's technology powerhouse, employing more than 500 people in three Innovation Centers in Linz (Austria), Porvoo (Finland) and Stenungsund (Sweden). Other facilities essential for successful innovation include a Borstar® polyethylene pilot plant, a Borstar polypropylene pilot plant and a catalyst pilot plant, which are all in Porvoo.

The Vice President of Innovation and Technology leads the Innovation and Technology department. This is part of the Polyolefins organization, under the leadership of the Executive Vice President Polyolefins, Innovation & Technology and Circular Economy Solutions, who is a member of the Executive Board.

The main driver for an innovation project is an unmet market need that requires new products or technologies. Most innovation projects are therefore proposed by the Marketing or Technology Transfer organizations. Potential projects and their business cases are presented to a decision-making forum called the Innovation Portfolio Table. This consists of all relevant stakeholders, such as the Heads of Polyolefins, Sales and Marketing, Operations and Innovation. The Portfolio Table group decides whether to launch, stop or extend innovation projects, based on their potential, their success to date, their relevance to the

strategy and sustainability, and resource availability. This means that potential risks are identified and mitigated. Projects are managed by a group of professional project managers, as described under Borealis' Innovation Process below, and the project teams consist of researchers, engineers and marketing specialists. The closing of every project includes an evaluation that lists all opportunities and lessons learned, and the corresponding measures that have been incorporated.

Innovation Strategy and Culture

The Group's technology strategy is aligned with the Borealis and OMV Group Strategy launched in early 2022. It puts sustainability even more firmly at the center of Borealis' approach to innovation, focusing on:

- codeveloping technologies for recycling plastics;
- carbon neutrality and CO_2 capturing technologies that will enable the Group to reach its neutrality goals;
- developing highly specialized materials via new proprietary catalyst technologies and compounding that enables design for recyclability; and
- enabling the Group's growth agenda, by preparing Borealis' proprietary technologies for venture-based licensing, making them attractive for various markets and geographical regions.

The strategy aims to push the boundaries of science to develop customer solutions with exceptional performance. This means understanding what the customer wants and leveraging the right competencies, tools and expertise to develop the best solution, with tailored customer service. Borealis maintains the competences it needs to implement its innovation strategy in-house or gains access to them through open innovation collaborations with other centers of competence.

The Base Chemicals business is following Borealis' open innovation strategy in its partnership with OMV Group. Together, Borealis and OMV are looking to advance the monomer recycling of post-consumer plastics and the availability of renewable hydrocarbons, as a more sustainable feedstock for manufacturing polyolefins. The evaluation of monomer recycling technologies is ongoing, to obtain virgin polymer products based on feedstock from recycled plastics. Borealis also participates in the Cracker of the Future consortium, which is developing a new furnace concept using renewable and carbon-neutral energy sources rather than fossil fuels, to significantly reduce carbon emissions.

The importance of Borealis' innovation strategy was confirmed by market developments and product launches in 2023, as described in the Activities 2023 section below.

Borealis' Innovation Process

Borealis' innovation process comprises three main phases:

- Idea creation. This involves scouting and generating ideas and selecting the right ones as innovation projects or as a pre-study for an investment project. In 2023, Borealis continued to engage employees in generating and implementing ideas through Days of New Ideas. These are organized three to four times a year, with the best new ideas selected and endorsed for fast implementation.
- Innovation projects. These projects develop new product platforms, new or improved process or application technologies, or new catalysts.
- Innovation project portfolio management. This provides structure and decision-making, to ensure Borealis' innovation programs achieve their objectives and support venture-based licensing. The portfolio of innovation projects and activities is managed by a separate professional group, which is instrumental in project approval, execution and finalization, and ensures that resource allocation is consistent with Borealis' strategy. Once a project has achieved certain predefined goals, it transitions to the Advanced Products business, where its development and growth continues.

Partnerships to Advance Innovation

In addition to its internal collaborations, Borealis engages widely with relevant stakeholders. It is a member of the Dutch Polymer Institute, attends polyolefins industry conferences and publishes papers. Borealis' Innovation and Technology management team and some of its lead scientists are invited to present at numerous leading conferences worldwide each year, such as the:

- BlueSky/Incorep Polyolefin Conference in Sorento, Italy;
- 31st Leoben Conference on Polymer Science and Engineering, on the topic of "Circular Thinking in Polymer Technology" in Austria;
- PPS 38 (Polymer Processing Society Annual Conference) in St Gallen, Switzerland;
- Society of Polymer Engineers Polyolefin Conference, Houston, Texas, US; and
- 8th International Conference on Polyolefin Characterization.

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Borealis' Innovation experts use every opportunity to participate in these gatherings, contributing with the highest level of research results and describing the Group's successes in developing diverse technologies.

Intellectual Property
When pushing the boundaries of technology, Borealis needs to ensure it has strong intellectual property rights. These protect products and applications, and the Group's position as a licensor.

Borealis has an extensive patent portfolio, comprising around 8,920 granted patents and around 3,199 pending patent applications. In 2023, Borealis filed 128 new priority patent applications.

Attracting the Next Generation of Innovation Talent
The Group must ensure it can attract and develop the talent it needs. There is a diminishing talent pool available, which Borealis looks to address by attracting young people into the industry. Borealis raises its profile with talented individuals through the Borealis Student Award, which goes to the students with the best Diploma, Masters and PhD thesis. The Group also develops its own R&D talent, for example, through its Talent Expert Pool (→ chapter People & Culture, p. 106).

Activities 2023
Polyolefins
The launches in 2023 included a number of Daplen™ products servicing automotive customers. These materials bring the performance needed for inclusion in new vehicle models, enabling reduced weight. Borealis also introduced a talk filled grade containing 40% post-consumer recyclates, for use in manufacturing coffee machines and other small appliances. It provides a great balance between stiffness and impact strength, including at elevated temperatures.

Borealis commercially launched nine new PO product innovations in 2023 (excluding grade modifications), demonstrating its market leadership in innovation and delivering on its Purpose.

Launch of Borcycle™ M products
Borcycle™ transforms plastic-waste streams into value-adding, high-performance and versatile solutions for demanding applications (→ chapter Circular Economy, p. 166). In 2023, Borealis launched two new products using its Borcycle M technology, which is based on mechanical recycling. The Group has successfully increased the recyclate content, while maintaining or improving the product properties.

The Group's important activities in the year also included moving to the front-end engineering design phase in Borealis' investment project for a new Borcycle M technology asset, at its Schwechat location.

Launch of new Bornewables™ Grades
During 2023, Borealis launched four new products made with renewable feedstock, as part of the Bornewables portfolio. Bornewables™ offers product properties equal to fossil-based product, allowing Borealis' partners to quickly and easily transition from fossil-based polypropylene to a renewable feedstock-based polypropylene (→ chapter Circular Economy, p. 166).

Industry Collaboration to Advance Circularity
To accelerate progress towards circularity in manufacturing and using polyolefins, while reducing its CO_2 footprint, Borealis continued to collaborate with organizations with complementary competencies in 2023. In particular, the Group participated in SPIRIT (Sustainable Plastics Industry Transformation), a collaborative research and development program driving the transformation of the plastics industry in Finland (→ chapter Energy & Climate, p. 157).

Base Chemicals
In 2023, Borealis' Base Chemicals business faced an economic downturn and volatile feedstock prices, with subdued demand leading to low operating rates, putting integrated margins under pressure. Key innovation activities continued to focus on supporting the business. This included further optimizing catalysts for propane dehydrogenation, at improved sustainability and selectivity, and working with OMV Group on a series of investigations to improve operations.

The commissioning and start-up of a highly flexible steam cracking pilot installation has increased the Group's capabilities for evaluating the cracking performance and value of new renewable and recycled feedstocks, from a wide variety of sustainable sources. The Group also developed

analytical capabilities to evaluate pyrolysis oil from plastic waste, from its own sources and third parties, as feedstocks for crackers and refineries. The analytical equipment and methods have been transferred to Borealis' operational sites.

A joint exercise with the Group's Asset Technology team to benchmark plastics pyrolysis technologies has given Borealis insight into their viability and availability, and the specifics for site integration and greenfield or brownfield installations. Combined with a thorough evaluation of pyrolysis oil upgrading technologies, primarily hydrotreating/ hydrocracking, the Group has developed a clear understanding of the value chain and converting its own and third-party pyrolysis oil in its assets. Simultaneously, Borealis and OMV performed the first tests for processing pyrolysis oil from Borealis' site in Ostend (Belgium) at OMV-Burghausen, demonstrating the Group's capabilities and ambitions to become a key player in this value chain.

Together with Chalmers, its Swedish university partner, Borealis has started to conclude on a new technology for gasifying plastic waste directly to olefins. This would allow the Group to process plastic waste streams that are less clean or sorted, where the Group expects substantial advantages in feedstock pricing, one of the key cost drivers for chemical recycled materials. With the same partner, Borealis has also finalized a state-funded investigation of carbon capture solutions for post combustion decarbonization of some of the Group's assets, particularly the cracker furnaces as key emitters of CO_2.

Finally, the development of new phenol-lignin blends suitable for producing plywood will allow for a lowest-carbon footprint solution, using renewable phenol from Borealis' Borvida™ portfolio.

Microplastic Research
Microplastics are plastic particles of less than 5 millimeters in diameter. They can be found in the environment, in the food and water we consume, and even in the human body. Borealis takes part in research programs that study the sources of microplastics and their potential impact.
See → chapter Product Safety, p. 134 for more information on microplastics.

CORNET "microplastics@food" and "microplastics@complexFOOD" Projects
Borealis' has supported the EU-funded Collective Research Network (CORNET) project "microplastics@food", which concluded in 2023. The project was led by the Food Cluster of Lower Austria and involved several high-level academic partners.

The project has developed harmonized and reliable detection methods for microplastics, which work well in clear liquids and solutions, as well as soluble food such as sugar or salt. An interesting result from the extensive mineral water study was that multi-use (returnable) glass bottles may contain many more microplastic particles than single-use PET bottles. The project also found that different types of particles appear along the beverage production and filling process chain, with filtration only safeguarding the product quality until the next step in the process.

The next project, "microplastic@complexFOOD", has been approved and will directly follow "microplastics@food", to ensure the continuity of research efforts. The new project will extend to more complex foodstuffs.

Plastics Europe Brigid Project
The Brigid project is studying the biological effects of microplastics on animals and humans. The multi-million euro project is financed by Plastics Europe and is being conducted by a consortium of independent scientific partners, coordinated by TNO, a Dutch research institute. The project will cover different levels of biological interaction, from the cell level to the full organism. In line with other polymer producers, Borealis is supplying polymer samples and expertise to the project, the results of which are intended for public sharing. The project will run until 2026 and is still in an early stage, as the production of large amounts of microparticles from commercial grades, with defined sizes between 1 and 100 µm, has proven more difficult than expected.

Outlook
Borealis remains firmly on track to develop technologies that reduce the human impact on the climate by lowering CO_2 emissions and enabling the reuse and recycling of plastics.

One of Borealis' most important innovation objectives is to enable the production, transportation and use of renewable energy. In addition, in 2024 Borealis will work on:
- further developing recycling technologies, with the emphasis on polymer recycling; and
- continued development of products with advanced performance, enabling their use in applications that are designed for recycling.

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GRI Content Index

Statement of use	Borealis has reported in accordance with the GRI Standards for the period January 1 to December 31, 2023
GRI 1 used	GRI 1: Foundation
Applicable GRI Sector Standard(s)	Oil and Gas Sector Standard

GRI Standard	Disclosure		Location/ Page	Omissions: Requirement(s) omitted	Omissions: Reason	Omissions: Explanation	GRI Sector Standard Ref. No	Further information
GRI 2: General Disclosures 2021	**2-1**	Organizational details	26–33					
	2-2	Entities included in the organization's sustainability reporting	36–37					
	2-3	Reporting period, frequency and contact point	36–37					
	2-4	Restatements of information	37					Restatements of data are indicated with footnotes in this report.
	2-5	External assurance	36–37, 206–207					
	2-6	Activities, value chain and other business relationships	28–33, 216–219					Further information about significant changes can be found in the financial part of the report.
	2-7	Employees	118	b iii.	Not applicable	Borealis has no non-guaranteed hours employees.		
	2-8	Workers who are not employees	121					
	2-9	Governance structure and composition	14–15, 68–75					In 2023, neither the Supervisory Board nor the Executive Board nor the Audit Committee members held shares in Borealis or the majority of the shares in a holding company, thereby preventing any related conflicts of interest. There are no under-represented social groups in the areas of Borealis' operations. There are no *stakeholder representatives* on the Supervisory Board.
	2-10	Nomination and selection of the highest governance body	70					The Supervisory Board is nominated by our owner. Thus, Borealis has no influence in integrating views of shareholders
	2-11	Chair of the highest *governance body*	–	2-11	Not applicable	The Chairman is not also a senior executive.		
	2-12	Role of the highest governance body in overseeing the management of impacts	69, 75–78					
	2-13	Delegation of responsibility for managing impacts	76–78					
	2-14	Role of the highest governance body in sustainability reporting	36					
	2-15	Conflicts of interest	86					Further information can be found in the Code of Conduct.

GRI Standard	Disclosure		Location/ Page	Omissions: Requirement(s) omitted	Omissions: Reason	Omissions: Explanation	GRI Sector Standard Ref. No	Further information
GRI 2: General Disclosures 2022	2-16	Communication of critical concerns	88					
	2-17	Collective knowledge of the highest governance body	70					
	2-18	Evaluation of the performance of the highest governance body	73					
	2-19	Remuneration policies	73, 112–114					
	2-20	Process to determine remuneration	112–114					The Remuneration Committee (a subcommittee of the Supervisory Board) consists of three Supervisory Board members, two being nominated by OMV and one nominated by ADNOC. During discussions and meetings held, the input of our shareholders is taken into account. Furthermore, external (market) views – e.g. via the involvement of remuneration consultants – are also taken into account, in particular regarding Executive Board remuneration.
	2-21	Annual total compensation ratio	113	b.	Information unavailable/ incomplete	The ratio of the percentage increase cannot be reported as 2023 is the first time of evaluation.		
	2-22	Statement on sustainable development strategy	10–13, 16–25					
	2-23	Policy commitments	85–87, 135, 185, 177					Policy commitments are approved unanimously by the Borealis' Executive Board, in its capacity as Borealis' most senior approving body.
	2-24	Embedding policy commitments	84–86, 90–91					
	2-25	Processes to remediate negative impacts	85–86					There are no processes in place other than those mentioned in the chapter Ethics & Compliance. Our ethics policy further ensures users' human rights and protection against reprisals. As the new Ethics Hotline was only introduced in 2021 and is well accepted by our stakeholders, no further improvements are planned in the near future. Further information can be found in the Code of Conduct.
	2-26	Mechanisms for seeking advice and raising concerns	87–88					
	2-27	Compliance with laws and regulations	90					No significant instance of non-compliance with laws and regulations during the reporting period.
	2-28	Membership associations	49					
	2-29	Approach to stakeholder engagement	39–40, 45–47					
	2-30	Collective bargaining agreements	108					

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GRI Standard	Disclosure	Location/ Page	Omissions: Requirement(s) omitted	Omissions: Reason	Omissions: Explanation	GRI Sector Standard Ref. No	Further information
MATERIAL TOPICS							
GRI 3: Material Topics 2021	**3-1** Process to determine material topics	40–41					
	3-2 List of material topics	39–42					In 2023, Borealis started a materiality assessment according to ESRS. The preliminary results do not show any significant deviations to the currently reported material topics, expect for Health & Safety, which is expected to become material. Due to its great importance and the preliminary results, Health & Safety has been included as a core focus area. The list of material topics has thus been expanded accordingly.
Climate Change							
GRI 3: Material Topics 2021	**3-3** Management of material topics	157–165					
GRI 305: Emissions 2016	**305-1** Direct (Scope 1) GHG emissions	160–161				11.1.5	Borealis reports the majority of Scope 1 emissions according to the EU ETS methodology. The consolidation is based on operational control. The GWP rates are CO_2 = 1 CO_2 eq., CH_4 = 28 CO_2 eq., N_2O = 265 CO_2 eq., NF_3 = 16,100 CO_2 eq., SF_6 = 23,500 CO_2 eq., CFC = 13,900 CO_2 eq., HFC = 12,400 CO_2 eq. Borealis reports Scope 1, 2 and 3 emissions according to the GHG Protocol. All relevant Kyoto gases have been included in the calculation (as equivalents). Biogenic emissions are not reported as they are negligible. Emission factors from IPCCC AR6, AIB, IEA, ecoinvent and different emission factors for Scope 3 calculations have been used.
	305-2 Energy indirect (Scope 2) GHG emissions	160–162				11.1.6	
	305-3 Other indirect (Scope 3) GHG emissions	160–164				11.1.7	
	305-4 GHG emissions intensity	165				11.1.8	
	305-5 Reductions of GHG emissions	165				11.2.3	
Circular Economy							
GRI 3: Material Topics 2021	**3-3** Management of material topics	166–171					There are no further goals than those already mentioned in the chapter.
Self-selected indicators	Total capacity for circular solutions established	167					
	Processed circular feedstock	167					

GRI Standard	Disclosure		Location/ Page	Omissions: Requirement(s) omitted	Omissions: Reason	Omissions: Explanation	GRI Sector Standard Ref. No	Further information
Plastic Waste & Management								
GRI 3: Material Topics 2021	**3-3**	Management of material topics	146–147, 152–154					
GRI 306: Waste 2020	**306-1**	Waste generation and significant waste-related impacts	152–153				11.5.2	Further information about downstream waste impacts and activities can be found in the chapter Circular Economy. Impacts concerning microplastics are addressed in the chapters Environmental Management, Product Safety and Logistics. Negative impacts are additionally dealt with in the chapter Borealis Social Fund (Project STOP).
	306-2	Management of significant waste-related impacts	152–153				11.5.3	
	306-3	Waste generated	153, 156				11.5.4	
	306-4	Waste diverted from disposal	154				11.5.5	
	306-5	Waste directed to disposal	154				11.5.6	
GRI 306: Effluents and Waste 2016	**306-3**	Significant spills	154, 185				11.8.2	One spill (pellet loss) of 0.002 metric tons (0.0019 metric tons immediately recovered) on one site in Belgium during the reporting period. Otherwise no significant spills reported.
Product Sustainability								
GRI 3: Material Topics 2021	**3-3**	Management of material topics	134–139, 172–175					
GRI 301: Materials 2016	**301-1**	Materials used by weight or volume	173, 181	a i. a ii.	Information unavailable/ incomplete Information unavailable/ incomplete	Breakdown by renewable and non-renewable materials used is not reported due to confidentiality constraints. It would reveal particular know-how.		
	301-2	Recycled input materials used	–	301-2	Information unavailable/ incomplete	Percentage of recycled input materials used is not reported due to confidentiality constraints. It would reveal particular know-how.		
	301-3	Reclaimed products and their packaging materials	–	301-3	Not applicable	No products or packaging are reclaimed.		

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GRI Standard	Disclosure		Location/ Page	Omissions: Requirement(s) omitted	Omissions: Reason	Omissions: Explanation	GRI Sector Standard Ref. No	Further information
Occupational Health & Safety								
GRI 3: Material Topics 2021	**3-3**	Management of material topics	123–129, 135–136					
GRI 403: Occupational Health and Safety 2018	**403-1**	Occupational health and safety management system	123–124				11.9.2	
	403-2	Hazard identification, risk assessment, and incident investigation	124–125				11.9.3	
	403-3	Occupational health services	125				11.9.4	
	403-4	Worker participation, consultation, and communication on occupational health and safety	123–124				11.9.5	
	403-5	Worker training on occupational health and safety	125–126				11.9.6	
	403-6	Promotion of worker health	125–126				11.9.7	
	403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	135–136				11.9.8	
	403-8	Workers covered by an occupational health and safety management system	124–125				11.9.9	From 2021 onwards, Borealis adopted OMV's TRI criteria, which are based on the reporting guidelines from IOGP (International Association of Oil & Gas Producers). All employees, contractors and sub-contractors are included in data. Suppliers of raw materials, chemicals, additives and other commodities and hauliers are excluded from the TRI statistics (except if Borealis has caused the accident, this would be counted as TRI). Non-employees: When calculating the coverage by an occupational health and safety management system, the standard number of hours worked by full-time employees of the respective Borealis locations were assumed.
	403-9	Work-related injuries	126–129				11.9.10	
	403-10	Work-related ill health	–				11.9.11	We define work-related illness as any case that is reported and confirmed to Borealis via a formal medical statement/ diagnosis. In 2023, zero such statements were received by Borealis.

GRI Standard	Disclosure		Location/ Page	Omissions: Requirement(s) omitted	Omissions: Reason	Omissions: Explanation	GRI Sector Standard Ref. No	Further Information
Product Safety								
GRI 3: Material Topics 2021	**3-3**	Management of material topics	134–139					
GRI 416: Customer Health and Safety 2016	**416-1**	Assessment of the health and safety impacts of product and service categories	135–136				11.3.3	All products are assessed for health and safety impacts.
	416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	136					
GRI 417: Marketing and Labeling 2016	**417-1**	Requirements for product and service information and labeling	135–136					
	417-2	Incidents of non-compliance concerning product and service information and labeling	136					No significant instance of non-compliance with laws and regulations during the reporting period.
	417-3	Incidents of non-compliance concerning marketing communications	–	417-3	Not applicable	Only B2B products are sold.		
FURTHER IMPORTANT TOPICS								
Ethics & Compliance								
GRI 3: Material Topics 2021	**3-3**	Management of material topics	84–91					
GRI 205: Anti Corruption 2016	**205-1**	Operations assessed for risks related to corruption	–				11.20.2	In 2023, a re-certification of ISO 37001 has been conducted for all Borealis Group standards. No significant risks were identified for any operations.
	205-2	Communication and training about anti-corruption policies and procedures	85, 90–91				11.20.3	
	205-3	Confirmed incidents of corruption and actions taken	90				11.20.4	No confirmed or suspected incidents of corruption in 2023.
GRI 206: Anti Competitive Behavior 2016	**206-1**	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	90				11.19.2	

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GRI Standard	Disclosure		Location/ Page	Omissions: Requirement(s) omitted	Omissions: Reason	Omissions: Explanation	GRI Sector Standard Ref. No	Further information
Ethics & Compliance								
GRI 406: Non Discrimination 2016	**406-1**	Incidents of discrimination and corrective actions taken	–				11.11.7	No incidents of discrimination during 2023.
GRI 407: Freedom of Association and Collective Bargaining 2016	**407-1**	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	–				11.13.2	No significant risks in Borealis operations detected in 2023. The new setup and structure allow for a solid supply chain social monitoring and assessments. Further information can be found in chapter Procurement of Raw Materials, Packaging, Technical Suppliers & Services.
GRI 408: Child Labor 2016	**408-1**	Operations and suppliers at significant risk for incidents of child labor	–					No significant risks in Borealis operations assessed in 2023. Further information can be found in chapter Procurement of Raw Materials, Packaging, Technical Suppliers & Services.
GRI 409: Forced or Compulsory Labor 2016	**409-1**	Operations and suppliers at significant risk for incidents of forced or compulsory labor	–				11.12.2	No significant risks were identified as result of our regular assessment processes in 2023.
GRI 410: Security Practices 2016	**410-1**	Security personnel trained in human rights policies or procedures	–	410-1	Information unavailable/ incomplete	Special training for security personnel cannot be reported due to the unavailability of data in our current system. It is not planned to report this information in the near future as this is not material for Borealis.	11.18.2	
GRI 411: Rights of Indigenous Peoples 2016	**411-1**	Incidents of violations involving rights of indigenous peoples	–	411-1	Not applicable	Borealis does not have any indigenous people in the area of influence that could be affected.	11.17.2	
GRI 413: Local Communities 2016	**413-1**	Operations with local community engagement, impact assessments, and development programs	–	413-1	Information unavailable/ incomplete	There are no harmonized assessments implemented across all locations and information is not collected centrally. It is not planned to report this information in the near future as this is not material for Borealis.	11.15.2	
	413-2	Operations with significant actual and potential negative impacts on local communities	–	413-2	Information unavailable/ incomplete	There are no harmonized assessments implemented across all locations and information is not collected centrally. It is not planned to collect this information in the near future as this is not material for Borealis.	11.15.3	

GRI Standard	Disclosure		Location/ Page	Omissions: Requirement(s) omitted	Omissions: Reason	Omissions: Explanation	GRI Sector Standard Ref. No	Further Information
Sustainability Governance								
GRI 3: Material Topics 2021	**3-3**	Management of material topics	68–83					
GRI 201: Economic Performance 2016	**201-1**	Direct economic value generated and distributed	230–231, 234–236, 252–253, 281–283				11.14.2	This information is part of the consolidated financial statement.
	201-2	Financial implications and other risks and opportunities due to climate change	52–67	a iii. a iv.	Information unavailable/ incomplete Information unavailable/ incomplete	The financial implication of risks is currently not assessed. In 2023, the assessment has been done qualitatively in the course of the double materiality assessment. The financial assessment will then be carried out in the course of the next few years (ESRS phase-in).	11.2.2	
Energy Management								
GRI 3: Material Topics 2021	**3-3**	Management of material topics	157–165					
GRI 302: Energy 2016	**302-1**	Energy consumption within the organization	156, 162–163				11.1.2	To avoid double counting, data concerning heating and cooling consumption is already incorporated within the other figures.
	302-2	Energy consumption outside the organization	–	302-2	Not applicable	Energy consumption for preparation of the products is not within the sphere of influence of Borealis.	11.1.3	
	302-3	Energy intensity	163–164				11.1.4	The energy intensity per business unit is reported. All types of energy are included in the intensity ratios. Energy efficiency intensity is the number of MWh of primary energy divided by total metric production tons. Basis for the energy intensity indicator: production volume of all production plants, energy consumption of the whole organisation, including infrastructure, R&D, offices.
	302-4	Reduction of energy consumption	162					All types of energy are included in the reductions.
	302-5	Reductions in energy requirements of products and services	–	203-5	Not applicable	Sold products do not consume any energy during use phase.		

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GRI Standard	Disclosure		Location/ Page	Omissions: Requirement(s) omitted	Omissions: Reason	Omissions: Explanation	GRI Sector Standard Ref. No	Further information
Water Management								
GRI 3: Material Topics 2021	**3-3**	Management of material topics	146–147, 149–152					
GRI 303: Water and Effluents 2018	**303-1**	Interactions with water as a shared resource	149–152				11.6.2	
	303-2	Management of water discharge-related impacts	149–152				11.6.3	Legal compliance sets the minimum standards for the quality of effluent discharge. No additional standards are followed, except for plastic spills (OCS standard).
	303-3	Water withdrawal	150–151	a iv. a v.	Not applicable	Borealis does not withdraw any produced water and third-party water.	11.6.4	All water withdrawal is measured in accordance with local legal requirements. Borealis only regards drinking water supplied by municipalities as freshwater. The water taken from lakes, rivers as well as the ground water varies quite significantly over the course of a year in respect of dissolved solvents which is why it is regarded as "other water". The WWF Water Risk Filter is used to identify water stress levels of the water bodies our sites are connected to. With each yearly update of the risk filter, the assessment is reviewed and updated.
	303-4	Water discharge	151	d.	Information unavailable/ incomplete	There are no harmonized assessments implemented across all locations and information is not collected centrally. It is not planned to collect this information in the near future as this is not material for Borealis.	11.6.5	
	303-5	Water consumption	152	c.	Not applicable	Borealis does not have any significant water-related impacts because of water storage.	11.6.6	

GRI Standard	Disclosure		Location/ Page	Omissions: Requirement(s) omitted	Omissions: Reason	Omissions: Explanation	GRI Sector Standard Ref. No	Further information
Air Quality								
GRI 3: Material Topics 2021	**3-3**	Management of material topics	146–149					
GRI 305: Emissions 2016	**305-6**	Emissions of ozone-depleting substances (ODS)	–	305-6	Not applicable	Borealis does not have any ODS.		
	305-7	Nitrogen oxides (NO_x), sulfur oxides (SO_x), and other significant air emissions	148–149, 156	a iii. a v. a vi.	Not applicable Not applicable Information unavailable/ incomplete	POPS (Persistent organic pollutants) and HAPS (Hazardous air pollutants) are not relevant for Borealis. Borealis carries out spot measurements for monitoring PM (Particulate matter). Reporting on spot measurements is not possible. Information about dust measurements will only be available by the end of 2026 due to legal obligation (WGC BREF).	11.3.2	Emissions to air are a mix of measurements or calculations based on fuel consumption and emission factors.
Emergency Governance								
GRI 3: Material Topics 2021	**3-3**	Management of material topics	130–133					
GRI G4: Oil & Gas Sector Supplement	**OG13**	Number of process safety events, by business activity	132–133					
Sustainable Sourcing								
GRI 3: Material Topics 2021	**3-3**	Management of material topics	176–186					
GRI 308: Supplier Environ-mental Assessment 2016	**308-1**	New suppliers that were screened using environmental criteria	180					
	308-2	Negative environmental impacts in the supply chain and actions taken	180					
GRI 414: Supplier Social Assessment 2016	**414-1**	New suppliers that were screened using social criteria	180				11.10.8	
	414-2	Negative social impacts in the supply chain and actions taken	180				11.10.9	
GRI 204: Procurement Practices 2016	**204-1**	Proportion of spending on local suppliers	179				11.14.6	Only technical supplies are reported as there are no significant suppliers locally. We procure mainly only globally.

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GRI Standard	Disclosure		Location/ Page	Omissions: Requirement(s) omitted	Omissions: Reason	Omissions: Explanation	GRI Sector Standard Ref. No	Further information
Human Capital Development								
GRI 3: Material Topics 2021	**3-3**	Management of material topics	106–122					
GRI 401: Employment 2016	**401-1**	New employee hires and employee turnover	120				11.10.2	
	401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	116				11.10.3	
	401-3	Parental leave	117	e.	Information unavailable/ incomplete	Return to work and retention rates are not reported as the accuracy of data cannot be ensured due to the unavailability of data in our current system. It is not planned to report this information in the near future as this is not material for Borealis.	11.10.4	
GRI 402: Labor Management Relations 2016	**402-1**	Minimum notice periods regarding operational changes	109	a.	Not applicable	The minimum number of weeks cannot not be reported as this depends on national laws and is thus different from country to country.	11.10.5	Laying off employees takes place according to contract and legal requirements.
GRI 404: Training and Education 2016	**404-1**	Average hours of training per year per employee	111				11.10.6	
	404-2	Programs for upgrading employee skills and transition assistance programs	111–112				11.10.7	
	404-3	Percentage of employees receiving regular performance and career development reviews	112					

GRI Standard	Disclosure		Location/ Page	Omissions: Requirement(s) omitted	Omissions: Reason	Omissions: Explanation	GRI Sector Standard Ref. No	Further Information
Diversity and Equal Opportunity								
GRI 3: Material Topics 2021	**3-3**	Management of material topics	106–122					As no material negative impacts have been identified, no corresponding actions are reported.
GRI 405: Diversity and Equal Opportunity 2016	**405-1**	Diversity of governance bodies and employees	119				11.11.5	
	405-2	Ratio of basic salary and remuneration of women to men	114				11.11.6	
GRI 201: Economic Performance 2016	**201-3**	Defined benefit plan obligations and other retirement plans	114, 243, 282–288	d.	Information unavailable/ incomplete	Percentage of employee salary cannot be reported as it is different from country to country and therefore a reporting on percentages on Group level is not possible. It is not planned to report this information in the near future as this is not material for Borealis		Further information can be found in the financial part of the report.
GRI 202: Market Presence 2016	**202-1**	Ratios of standard entry level wage by gender compared to local minimum wage	113					
	202-2	Proportion of senior management hired from the local community	121				11.11.2	

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GRI Standard	Disclosure		Location/ Page	Omissions: Requirement(s) omitted	Omissions: Reason	Omissions: Explanation	GRI Sector Standard Ref. No	Further information
Stakeholder Engagement								
GRI 3: Material Topics 2021	**3-3**	Management of material topics	39–40, 45–47					No material negative impacts have been identified. The tracking of lessons learned and the corresponding incorporation within the organization is dependent on the topic and the stakeholder group. This is done by the relevant department.
GRI 201: Economic Performance 2016	**201-4**	Financial assistance received from government	255, 320	201-4	Information unavailable/ incomplete	Not all kinds of financial assistance received by country are reported as this is not material for Borealis. Material government grants are reported within the financial part of the report. More details can be found in the report of the parent company where this indicator is considered to be material.	11.22.2	
GRI 415: Public Policy 2016	**415-1**	Political Contributions	–	415-1	Not applicable	The monetary value of financial and in-kind political contributions are not significant and thus not reported. If the value is significant, it will be included within the financial part of the report.	11.21.3	

Topics in the applicable GRI Sector Standards determined as not material

Topic		Explanation
Oil and Gas Sector Standard		
11.4	**Biodiversity**	Borealis' activities have no material impacts on biodiversity, including on plant and animal species, genetic diversity or natural ecosystems as there is negligible change in land use and production sites are situated in industrial areas.
11.7	**Closure and rehabilitation**	Borealis' activities have no material impacts on the environment, local communities and workers due to closure and rehabilitation as the business is built in such a way that production facilities are operated on a long-term basis (even after a sale).
11.15	**Local communities**	Borealis' activities have no material impacts on local communities; as there are negligible socioeconomic, cultural, health and human rights impacts on local communities as Borealis operates in industrial areas.
11.16	**Land and resource rights**	Borealis' activities have no material impacts on human rights and tenure rights, including from resettlement of local communities in the course of the use of land and natural resources; there are no resettlements as Borealis conducts no explorations.
11.17	**Rights of indigenous peoples**	Borealis' activities have no material impacts on the rights of indigenous people as operations are not performed within indigenous peoples' lands but in industrial areas without any exploration.
11.18	**Conflict and security**	Borealis' activities have no material impacts on security practices to operate safely as there are no operations in conflict areas and Borealis does not conduct operations relating to exploration and pipelines.
11.21	**Payments to governments**	Borealis' activities have no material impacts on payments to governments as transparency is complied with by applying all relevant laws.
11.22	**Public policy**	Borealis' activities have no material impacts on public policy development as Borealis operates mainly in the European Union with strict regulations among other things regarding lobbying.

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Vienna, February 22, 2024
Executive Board:

Thomas Gangl m.p.
Chief Executive Officer

Daniel Turnheim m.p.
Chief Financial Officer

Wolfram Krenn m.p.
Executive Vice President
Base Chemicals & Operations

Philippe Roodhooft m.p.
Executive Vice President
Joint Ventures & Growth Projects

Craig Arnold m.p.
Executive Vice President
Polyolefins, Circular Economy Solutions
and Innovation & Technology

Independent Assurance Report on the Non-financial Reporting according to § 267a UGB

We have performed an independent limited assurance engagement on the consolidated non-financial report according to § 267a UGB ("NFI report") for the financial year 2023, which has been published as Non-financial Report 2023 of Borealis AG, Vienna, Austria (referred to as "the Company").

Conclusion
Based on the procedures performed and the evidence we have obtained, nothing has come to our attention that causes us to believe that the NFI report of the Company is not in accordance with the legal requirements of the Austrian Sustainability and Diversity Improvement Act (§ 267a UGB), the provisions of Article 8 of the Regulation (EU) 2020/852 as amended and the supplementing delegated Regulation (EU) 2021/2178 (hereafter "EU Taxonomy Regulation") and the sustainability reporting guidelines of the Global Reporting Initiative ("GRI Standards") in its current version (option "in accordance with") in all material respects.

Management's Responsibility
The Company's management is responsible for the proper preparation of the NFI report in accordance with the reporting criteria. The Company applies the legal requirements of the Austrian Sustainability and Diversity Improvement Act (§ 267a UGB) and the GRI Standards in its current version (option "in accordance with") as reporting criteria. In addition, the company prepares disclosures in accordance with the EU Taxonomy Regulation, which are published as part of sustainability reporting.

The Company's management is responsible for the selection and application of appropriate methods for non-financial reporting (especially the selection of significant matters) as well as the use of appropriate assumptions and estimates for individual non-financial disclosures, given the circumstances. Furthermore, their responsibilities include the design, implementation and maintenance of systems, processes and internal controls that are relevant for the preparation of the sustainability report in a way that is free of material misstatements, whether due to fraud or error.

Auditor's Responsibility
Our responsibility is to state whether, based on our procedures performed and the evidence we have obtained, anything has come to our attention that causes us to believe that the Company's NFI report is not in accordance with the legal requirements of the Austrian Sustainability and Diversity Improvement Act (§ 267a UGB), the legal requirements of the EU Taxonomy Regulation and the GRI Standards in its current version (option "in accordance with") in all material respects.

Our engagement was conducted in conformity with Austrian Standards for Independent Assurance Engagements (KFS/PG 13) and in accordance with International Standard on Assurance Engagements (ISAE 3000) applicable to such engagements. These standards require us to comply with our professional requirements including independence requirements, and to plan and perform the engagement to enable us to express a conclusion with limited assurance, taking into account materiality.

An independent assurance engagement with the purpose of expressing a conclusion with limited assurance ("limited assurance engagement") is substantially less in scope than an independent assurance engagement with the purpose of expressing a conclusion with reasonable assurance ("reasonable assurance engagement"), thus providing reduced assurance. Despite diligent engagement planning and execution, it cannot be ruled out that material misstatements, illegal acts or irregularities within the non-financial report will remain undetected.

The procedures selected depend on the auditor's judgment and included the following procedures in particular:
- Inquiries of personnel at the group level, who are responsible for the materiality analysis, in order to gain an understanding of the processes for determining material sustainability topics and respective reporting threshholds of the Company;
- A risk assessment, including a media analysis, on relevant information on the Company's sustainability performance in the reporting period;
- Evaluation of the design and implementation of the systems and processes for the collection, processing and monitoring of disclosures on environmental, social and employee-related matters, respect for human rights, anti-corruption as well as bribery and also includes the consolidation of data;

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- Inquiries of personnel at the group level, who are responsible for providing, consolidating and implementing internal control procedures relating to the disclosure of concepts, risks, due diligence processes, results and performance indicators;
- Inspection of selected internal and external documents, in order to determine whether qualitative and quantitative information is supported by sufficient evidence and presented in an accurate and balanced manner;
- Assessment of the processes for local data collection, validation and reporting, as well as the reliability of the reported data through a survey performed at sites on a sample basis;
- Examining the process for greenhouse gas balancing and the related reporting regarding completeness and appropriateness in accordance with the GHG Protocol Corporate and Value Chain Standards;
- Analytical evaluation of the data and trend of quantitative disclosures regarding the GRI Standards listed in the GRI-Index, submitted by all locations for consolidation at the group level;
- Evaluation of the consistency of the Austrian Sustainability and Diversity Improvement Act (§ 267a UGB), the EU Taxonomy Regulation and the GRI Standards in its current version (option "in accordance with") to disclosures and indicators of the NFI report, which apply to the Company;
- Evaluation of the overall presentation of the disclosures by critically reading the NFI report.

The procedures that we performed do not constitute an audit or a review. Our engagement did not focus on revealing and clarifying of illegal acts (such as fraud), nor did it focus on assessing the efficiency of management. Furthermore, it is not part of our engagement to audit future-related disclosures, prior year figures, statements from external sources of information, expert opinions or references to more extensive external reporting formats of the Company.

Restriction on use
Because our report will be prepared solely on behalf of and for the benefit of the principal, its contents may not be relied upon by any third party, and consequently, we shall not be liable for any third party claims. We agree to the publication of our assurance certificate and NFI report. However, publication may only be performed in its entirety and as a version has been certified by us.

General Conditions of Contract
Our responsibility and liability towards the Company and any third party is subject to paragraph 7 of the General Conditions of Contract for the Public Accounting Professions.

Vienna, February 22, 2024
KPMG Austria GmbH Wirtschaftsprüfungs- und Steuerberatungsgesellschaft

Gerhard Wolf m.p.
Austrian Chartered Accountant



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Financial Report 2023

Consolidated Financial Statements including Group Management Report

Auditor's Report

Report on the Consolidated Financial Statements

Audit Opinion

We have audited the consolidated financial statements of Borealis AG, Vienna, Austria, and its subsidiaries ("the Group"), which comprise the consolidated Balance Sheet as at December 31, 2023, the Consolidated Income Statement and Consolidated Statement of Comprehensive Income, Consolidated Statement of Changes in Equity and Consolidated Cash Flow for the year then ended, and the Notes to the Consolidated Financial Statements.

In our opinion, the consolidated financial statements comply with the legal requirements and present fairly, in all material respects, the consolidated financial position of the Group as at December 31, 2023, and its consolidated financial performance and consolidated cash flows for the year then ended in accordance with International Financial Reporting Standards (IFRSs) as adopted by the EU, and the additional requirements pursuant to Section 245a UGB (Austrian Commercial Code) as well as other legal or regulatory requirements.

Basis for our Opinion

We conducted our audit in accordance with the EU Regulation 537/2014 ("AP Regulation") and Austrian Standards on Auditing. These standards require the audit to be conducted in accordance with International Standards on Auditing (ISAs). Our responsibilities under those standards are further described in the "Auditor's Responsibilities" section of our report. We are independent of the audited Group in accordance with Austrian company law and professional regulations, and we have fulfilled our other responsibilities under those relevant ethical requirements. We believe that the audit evidence we have obtained up to the date of the auditor's report is sufficient and appropriate to provide a basis for our audit opinion on this date.

Key Audit Matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, however, we do not provide a separate opinion thereon.

Recoverability of assets – PPE, Intangible assets and Goodwill

Refer to notes "Significant Accounting Judgements, Estimates and Assumptions", 7 "Depreciation, amortization and impairment", 5 "Property, plant and equipment", 6 "Leases" and 18 "Financial Income/Expenses".

Risk for the Consolidated Financial Statements

In the consolidated financial statements of Borealis AG, as of December 31, 2023, an amount of EUR 3,681 million is presented under "property, plant and equipment", an amount of EUR 662 million under "right-of-use assets" and an amount of EUR 721 million is presented under "intangible assets" which includes goodwill in the amount of EUR 152 million. These amounts are then allocated to cash generating units ('CGUs') as described in Note 7 "Depreciation, Amortization and Impairment".

Goodwill is tested for impairment at least annually. The carrying amounts of property, plant and equipment, right-of-use assets and intangible assets have been tested for impairment triggers on November 30, 2023. In addition assets are tested for impairment whenever triggering events occur that indicate that assets may be impaired. For this purpose, Borealis AG, Vienna, estimates the recoverable amount using the discounted cash flow method.

The key judgmental areas considered by Borealis AG in assessing the value in use include forecasted volumes sold, industry margins, discount rates as well as long term growth rates. As described in Note 7 "Depreciation, Amortization and Impairment", these significant assumptions are forward-looking and can be affected by future economic and market conditions.

Borealis AG recorded an impairment loss of EUR 34 million on "property, plant and equipment", "right-of-use assets" as well as and other assets as of December 31, 2023 due to impairments recognized in relation to the Renasci cash generating unit. Please refer to Note 7 "Depreciation, Amortization and Impairment" for the underlying disclosure

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notes. In addition, financial expenses include an amount of EUR 44 million relating to the investment in Renasci before acquiring control as well as the valuation of shares in associated companies owned by Renasci. Please refer to Note 18 "Financial Income/Expenses".

There is a risk for the consolidated financial statements that the valuation of property, plant and equipment, right-of-use assets and intangible assets is misstated.

Our Response

The procedures we performed to evaluate the impairment assessments:

- We examined an understanding over Borealis AG's process for evaluating the recoverable amount of relevant CGUs, as well as over the identification of triggering events and the determination of key management assumptions underlying the recoverable amount of the assets tested.
- We assessed whether the methodology adopted in the discounted cash flow models was consistent with accepted valuation approaches in IAS 36 - Impairment of Assets.
- We assessed the determination of cash generating units based on how cash flows are generated and industry practice.
- We compared the key assumptions for volumes sold and industry margins used within the future cash flow models to those included in the mid-term planning presented to the supervisory board.
- We challenged the discounted cash flow models assumptions and judgements by performing a sensitivity analysis, considering a range of likely outcomes based on various scenarios.
- With the assistance of our valuation specialists we assessed a range of reasonable input assumptions for determining discount rates as well as long term growth rates by comparing them with market and industry-specific benchmarks.
- We verified the mathematical accuracy of the discounted cash flow models.
- We assessed the adequacy of Borealis AG's disclosures in the consolidated financial statements and its compliance with the relevant IFRS standards.

Recoverability of equity-accounted investments

Refer to notes "Significant Accounting Judgements, Estimates and Assumptions", 7 "Depreciation, amortization and impairment" and 9 "Investments in Associates Companies and Joint Ventures".

Risk for the Consolidated Financial Statements

The carrying value of equity-accounted investments amounts to EUR 2,479 million as of December 31, 2023, including mainly Borouge PLC, Borouge 4 LLC and Bayport Polymers LLC ('Baystar') joint ventures.

Under IAS 28 Borealis assesses the recoverability of the investments in associated companies and joint ventures on each reporting date whenever triggering events occur that indicate that equity accounted investments may be impaired. The assessment of the recoverable amount of equity-accounted investments requires judgement in:

- determining whether there is an indication that the investment should be impaired and
- measuring any such impairment loss.

The key judgmental areas considered by Borealis AG in assessing the value in use for the at equity accounted investment Baystar include forecasted volumes sold, industry margins, discount rates as well as long term growth rates.

Despite the operational launch of the cracker in 2022 there is still a risk remaining in relation to cashflow projections due to equipment calibration of the cracker and the operational launch of the polymerization plant "Bay 3".

In order to address this risk, Borealis AG estimates the recoverable amount using the discounted cash flow method. Given the complexity of the impairment model, the estimation uncertainty over input data and parameters used and the immanent discretionary decisions, the recoverability of the equity accounted investment Baystar is considered as a key audit matter.

For the investment Borouge PLC, which is listed on the Abu Dhabi stock exchange, there is a risk that the market value will fall below the carrying amount of the investment. For the investment Borouge 4 LLC, which is in the process of constructing a chemical plant in Abu Dhabi, there is a risk of significant delays in the construction of the plant.

There is a risk for the consolidated financial statements that the valuation of equity-accounted investments is misstated.

Our response
We assessed the recoverability of equity-accounted investments as follows:
- We obtained an understanding over Borealis AG's process regarding the identification of indicators for impairment and and the determination of key assumptions underlying the recoverable amount of the equity-accounted investments tested.
- We assessed the adequacy of Borealis AG's disclosures in the consolidated financial statements and its compliance with the relevant IFRS standards.
- We compared the carrying amount for Borouge PLC with the proportionate market capitalization.
- We used the Company's documentation for Borouge 4 LLC to assess whether significant delays had occurred in the construction process and discussed the respective project with the Company's Management Board.

For Baystar we performed the following procedures:
- We compared the main assumptions used within the future cash flow models for volumes sold and industry margins to those included in budget presented to the supervisory board.
- We analyzed margin forecasts with external market data and other publicly available information.
- We challenged the discounted cash flow models assumptions and judgements by performing a sensitivity analysis, considering a range of likely outcomes based on various scenarios.
- With the assistance of our valuation specialists we assessed a range of reasonable input assumptions for determining discount rates or perpetual growth rates.
- We verified the mathematical accuracy of the valuation models.

Other Matter
The audit of the financial statements of Borealis AG as of December 31, 2022 was performed by another auditor, who expressed an unqualified audit opinion on the financial statements dated February 22, 2023.

Other Information
Management is responsible for other information. Other information is all information provided in the annual report, other than the consolidated financial statements, the group management report and the auditor's report.

Our opinion on the consolidated financial statements does not cover other information and we do not provide any kind of assurance thereon.

In conjunction with our audit, it is our responsibility to read this other information and to assess whether, based on knowledge gained during our audit, it contains any material inconsistencies with the consolidated financial statements or any apparent material misstatement of fact.

If we conclude that there is a material misstatement of fact in other information, we must report that fact. We have nothing to report in this regard.

Responsibilities of Management Audit Committee 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 (IFRSs) as adopted by the EU, the additional requirements pursuant to Section 245a UGB (Austrian Commercial Code) as well as other legal or regulatory requirements and for such internal controls as management determines are necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

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Management is also responsible for assessing the Group'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 management either intents to liquidate the Group or to cease operations, or has no realistic alternative but to do so.

The audit committee is responsible for overseeing the Group's financial reporting process.

Auditor's Responsibilities

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our audit opinion. Reasonable assurance represents a high level of assurance, but provides no guarantee that an audit conducted in accordance with the AP Regulation and Austrian Standards on Auditing (and therefore ISAs), will always detect a material misstatement, if any. Misstatements may result from fraud or error and are considered material if, individually or in aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As part of an audit in accordance with the AP Regulation and Austrian Standards on Auditing, we exercise professional judgment and maintain professional skepticism throughout the audit.

Moreover:

- We identify and assess the risks of material misstatement in the consolidated financial statements, whether due to fraud or error, we design and perform audit procedures responsive to those risks and obtain sufficient and appropriate audit evidence to serve as a basis for our audit opinion. The risk of not detecting material misstatements resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations or override of internal control.
- We obtain 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 Group's internal control.
- We evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- We conclude on 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 Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our audit report to the respective note in the consolidated financial statements. If such disclosures are not appropriate, we will modify our audit opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.
- We evaluate the overall presentation, structure and content of the consolidated financial statements, including the notes, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- We obtain sufficient appropriate audit evidence regarding the financial information of the entities and business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.
- We communicate with the audit committee regarding, amongst other matters, the planned scope and timing of our audit as well as significant findings, including any significant deficiencies in internal control that we identify during our audit.

– We communicate to the audit committee that we have complied with the relevant professional requirements in respect of our independence, that we will report any relationships and other events that could reasonably affect our independence and, where appropriate, the related safeguards.
– From the matters communicated with the audit committee, we determine those matters that were of most significance in the audit i.e. key audit matters. We describe these key audit matters in our auditor's report unless laws or other legal regulations preclude public disclosure about the matter or when in very rare cases, we determine that a matter should not be included in our audit report because the negative consequences of doing so would reasonably be expected to outweigh the public benefits of such communication.

Report on Other Legal Requirements

Group Management Report

In accordance with Austrian company law, the group management report is to be audited as to whether it is consistent with the consolidated financial statements and prepared in accordance with legal requirements.

Management is responsible for the preparation of the group management report in accordance with Austrian company law and other legal or regulatory requirements.

We have conducted our audit in accordance with generally accepted standards on the audit of group management reports.

Opinion

In our opinion, the group management report is consistent with the consolidated financial statements and has been prepared in accordance with legal requirements. The disclosures pursuant to Section 243a UGB (Austrian Commercial Code) are appropriate.

Statement

Based on our knowledge gained in the course of the audit of the consolidated financial statements and our understanding of the Group and its environment, we did not note any material misstatements in the group management report.

Additional Information in accordance with Article 10 AP Regulation

We were elected as auditors at the Annual General Meeting on February 28, 2023 and were appointed by the supervisory board on June 1, 2023 to audit the financial statements of Company for the financial year ending on December 31, 2023. We have been auditors of the Company since the consolidated financial statements at December 31, 2023.

We declare that our opinion expressed in the "Report on the Consolidated Financial Statements" section of our report is consistent with our additional report to the Audit Committee, in accordance with Article 11 AP Regulation.

We declare that we have not provided any prohibited non-audit services (Article 5 Paragraph 1 AP Regulation) and that we have ensured our independence throughout the course of the audit, from the audited Group.

Engagement Partner

The engagement partner is Mr Karl Braun.

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Vienna, February 22, 2024
KPMG Austria GmbH Wirtschaftsprüfungs- und Steuerberatungsgesellschaft

Karl Braun m.p.
Austrian Chartered Accountant

This report is a translation of the original report in German, which is solely valid. // The consolidated financial statements together with our auditor's opinion may only be published if the consolidated financial statements and the group management report are identical with the audited version attached to this report. Section 281 Paragraph 2 UGB (Austrian Commercial Code) applies.

Group Management Report

All amounts in the management report are not considering the reclassification of the discontinued operation and related balances held for sale. The amounts therefore include data from Borealis' nitrogen business for six months 2023 and 12 months 2022.

Safety Performance
In 2023, Borealis AG and its subsidiaries (the Company or Group) reported a Total Recordable Injuries (TRI) rate per million working hours of 4.0, a marked deterioration compared to the rate of 2.9 obtained in 2022. A large number of low impact (actual and potential) incidents were recorded, a third of which took place at the major construction site of the new propane dehydrogenation (PDH) plant in Kallo (Belgium). Borealis subsequently initiated an expanded training program to improve the safety performance there. No fatalities or life-threatening injuries were recorded in 2023.

In line with the Group's commitment to "Zero Harm," Borealis aims to further improve its safety record by eliminating accidents and safety incidents altogether. Lessons learned from the sole fatality in 2022, as well as incidents which occurred in 2023, are applied across all Group locations to avert future safety incidents. One key effort is "B-Safe," a proactive risk management program implemented in 2022 and currently being rolled out across the entire Group. As of the end of 2023, 4,000 Borealis employees had already received a one- or three-day training session, depending on their respective role. With its focus on implementing risk identification measures, learning from previous incidents, proactive intervention and elevated awareness for the safety of others, B-Safe will be further embedded in the Group throughout 2024.

Health and safety on the job must be assured for Borealis' own employees as well as those hired by subcontractors working for the Borealis Group. The Executive Board welcomes all measures implemented by Borealis senior management that help fulfill the Group's commitment to "Zero Harm" while at the same time heeding the most stringent ethical standards.

Ukraine and Geopolitical Conflict
The Borealis Executive Board and senior management have taken specific actions in response to the war in Ukraine. Maintaining business continuity while ensuring human health and safety is the paramount concern. Borealis employs very few people in Russia and has no production operations in either Russia or Ukraine. Sales to Russia and Belarus have been halted. After terminating contracts with Russian-based suppliers, Borealis is now procuring feedstock from the US. The reliable and cost-effective transportation of liquefied petroleum gas (LPG) from North America to the Borealis crackers in Porvoo (Finland) and Stenungsund (Sweden) as well as to the PDH unit in Kallo (Belgium) is made possible by long-term charter contracts for custom-built LPG vessels.

While operations at Borealis sites have not been disrupted by the conflicts in Europe or the Middle East, plans are in place to address contingencies such as supply chain disruptions. In monitoring the geopolitical situation closely, the Group continually adapts and updates its measures to ensure stable material procurement for Borealis production sites.

Business Overview
The Brent crude market remained volatile throughout 2023, with the average price of USD 83/bbl lower than the 2022 average of USD 101/bbl. Even given supply management and the extension of OPEC+ supply cuts into the first quarter of 2024, concerns regarding the global macroeconomic climate and China's lagging recovery weighed heavily on the oil markets. Core inflation remained sticky in developed markets, resulting in rising interest rates which are however expected to have peaked in the fourth quarter of 2023.

Naphtha prices increased from USD 559/metric ton (t) in December of 2022 to a 2023 peak of USD 717/t in March, supported by higher crude prices and increased blending of naphtha into the gasoline pool as the differential between crude and naphtha narrowed. In July, naphtha prices fell to USD 552/t, in line with low seasonal demand from refineries as well as lower crude prices. At year end, naphtha prices stood at USD 640/t.

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Ethylene and propylene contract prices were impacted by the naphtha price development. Ethylene started the year at EUR 1,170/t and, supported by healthy demand in the spring turnaround season, peaked in March at EUR 1,290/t. Unprecedented industry destocking occurred during the seasonally weak summer months. Ethylene prices hit a low of EUR 1,120/t in July and ended the year at EUR 1,185/t. The price of propylene rose from EUR 1,075/t in January to EUR 1,185/t in April, closing out the year at EUR 1,050/t.

The polyolefins market remained weak overall in 2023 but was temporarily bolstered from January to April by the spring turnaround season and optimism surrounding China's post-Covid opening. Industry profitability plunged in the summer months, with unprecedented levels of industry destocking due to underlying factors such as import pressure, high inventories, expectation of falling polyolefins prices, and the annual demand slowdown during the holidays. Industry profitability and operating rates fell to levels last recorded during the height of the global financial crisis of 2007–2008. While industry profitability recovered somewhat post summer with seasonal decline towards year end, it remained very weak.

Strategy

The Borealis Strategy 2030 is a strategic evolution centered on sustainability. Since its launch in 2022, it has guided Borealis in its efforts to transform the Company and expand its global presence while at the same time significantly reducing the Group's CO_2 footprint. Built on the strong foundation of its people, corporate culture and safety mindset, the Borealis Strategy 2030 enables Borealis to deliver value-added solutions in collaboration with its customers and partners to accelerate the transition to a circular economy of plastics. Its emphasis on innovation and technology in tandem with performance excellence is a catalyst for growth in high potential areas such as specialty polyolefins, compounding, catalyst technologies and the licensing thereof.

Joint Ventures and Global Growth Projects

Borealis achieves geographic expansion by way of joint ventures, mergers and acquisitions and by new builds on several continents. It is crucial to boost the production capacity of both base chemicals as well as advanced and sustainable polyolefin-based solutions based on proprietary Borealis technologies in order to better serve global customers and drive the circular economy transition.

The largest global growth project currently underway is Borouge 4, situated within the Borouge joint venture founded by Borealis and the Abu Dhabi National Oil Company (ADNOC) in 1998. Ground was broken in 2022 for the construction of Borouge 4, the new USD 6.2 billion facility at the existing complex in Ruwais (UAE). The increased production capacity of advanced base chemicals and polyolefins, which will be unlocked once Borouge 4 comes onstream, will further enhance its role as it supplies large volumes to customers in the Middle East and Asia as well as feedstock to the adjacent TA'ZIZ Industrial Chemicals Zone.

The Baystar™ joint venture with TotalEnergies in Pasadena, Texas (US) passed a most significant milepost in October 2023 with the start-up of the new 625,000 metric ton/year Borstar® polyethylene (PE) unit (Bay 3). This growth project has brought the state-of-the-art Borstar third generation (3G) technology to the US in the most advanced Borstar plant ever built outside of Europe. With the completion of the USD 1.4 billion PE unit, Baystar has doubled its production capacity. As a fully integrated petrochemicals venture, it will supply value-added specialty polymers primarily to the booming energy, infrastructure and consumer product sectors in North America. In addition to the new Bay 3, the Baystar site comprises an ethane-based steam cracker (started up in 2022), two legacy PE production units and the TotalEnergies ethane cracker in adjacent Port Arthur.

A major European growth endeavor is the new, world-scale PDH plant at the existing Borealis production site in Kallo. Upon its expected start-up in 2025, the projected annual propylene production will be 740,000 metric tons. Up until late 2022, construction had been halted after misconduct on the part of one of the site's former contractors led Borealis to terminate all contracts and restart the tender process. Substantial progress has been made since work resumed in mid-summer 2023, and on-site mobilization has picked up speed. Borealis does not tolerate breaches of work ethics or contractual non-compliance in any aspects of its operations. The Kallo case has resulted in the implementation of in-depth monitoring measures to ensure full compliance in the future.

Acquisitions
In October, Borealis successfully closed its acquisition of Italy-based Rialti, a leading polypropylene (PP) compounder of recyclates used in injection molding and extrusion processes. In the same month, Borealis declared its intent to acquire Integra Plastics, an advanced mechanical recycling company based in Bulgaria. Once regulatory approvals have been obtained, this transaction will further boost recycling capacity for the Borealis portfolio. At the end of November, Borealis increased its share in Belgium-based recyclers Renasci from 50.01% to 98.56%.

Divestments
The divestment process of the Borealis nitrogen business unit (including fertilizers, technical nitrogen and melamine products) which commenced in February 2021 was completed as of July 5, 2023. Final regulatory approvals were obtained at the end of June 2023, after which Borealis divested its former asset to Czech-based AGROFERT, whose binding offer had been submitted in June 2022. The parties continue the process of customary closing accounts adjustments. Payment may be deferred in part subject to contractually stipulated conditions. The Borealis Executive Board has full confidence that AGROFERT, as a leading European fertilizer concern, will remain committed to maintaining supply security and the development of production facilities in the long term.

In September 2022, a binding agreement made by YILDIRIM for the acquisition of Borealis' shares in Rosier was first announced. On January 2, 2023, Borealis reported that it had divested all of its shares in Rosier after finalizing the agreement with the YILDIRIM Group.

Circular Economy
In the Borealis Strategy 2030, the strategic goal of geographical expansion is complemented by that of transformation: Borealis is cementing its position as a fully customer-centric supplier of sustainable material solutions which add value to society and accelerate the transition to a circular economy. Long an industry front-runner in circularity, Borealis aims to further increase the share of circular products in its overall production output in the coming years. These include recycled and renewable-based polymers in its Borcycle™ C, Borcycle™ M, and Bornewables™ grade portfolios, as well as the renewable hydrocarbons in the Borvida™ family of base chemicals.

Upon the certification of the Borealis polyolefin compounding site in Monza (Italy) in July 2023, all Borealis polyolefin and polyolefin compounding sites in Europe have now been certified ISCC PLUS (International Sustainability and Carbon Certification). This mark of quality ensures traceability by way of objective, third-party verification of critical points along the supply chain.

Recycling facilities operated by Renasci in Ostend (Belgium), mtm in Niedergebra (Germany) and Ecoplast in Wildon (Austria) have also been ISCC PLUS-certified. Borealis was the first virgin polyolefins player in Europe to have entered mechanical recycling by acquiring mtm plastics in 2016, and Austria-based Ecoplast in 2018. Now 100% owned by the Borealis Group, the combined mtm and Ecoplast output will be augmented by high-quality volumes from the recent acquisition Rialti and, at a later date to be determined, Integra Plastics.

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In addition to ongoing collaboration with OMV centered on the patented OMV ReOil® technology, Borealis is working closely with its upstream partner Neste and its Neste RE™ technology to take the commercialization of chemically recycled plastics to the next level. The majority stake acquired in late 2023 in Renasci also gives Borealis access to chemically recycled feedstock for the grades in its ISCC PLUS-certified Borcycle™ C portfolio. Because the chemical recycling process valorizes residual waste streams which would otherwise be landfilled or incinerated, it is a valuable complement to mechanical recycling. The virgin-grade quality of monomers produced in chemical recycling processes makes them suitable for use in the production of high-end polyolefin applications in food-grade consumer packaging, infrastructure and healthcare.

Technological Innovation

As a pillar of the strong Borealis foundation, innovation drives transformation in all areas of business activity. Making good on the corporate purpose of "Reinventing Essentials for Sustainable Living" requires ongoing investment in research and development (R&D). Proprietary technologies such as Borstar® form the base for material solutions which help the industry address urgent societal and environmental issues such as decarbonization, the green-energy transition and waste reduction. Its suite of technologies enables Borealis to continually expand its offer of advanced specialty polyolefins in order to capitalize on promising market opportunities in lucrative niche applications in sectors like renewable energy, mobility, healthcare, consumer packaging and the circular sphere.

In May, Borealis launched a new class of engineering polymers produced from renewably-sourced feedstock: Stelora™ opens up an abundance of options for technically advanced applications requiring high heat resistance, such as in e-mobility and renewable energy generation. The introduction of the Bornewables line of Queo™, a portfolio of polymers and elastomers based on renewable feedstock, took place in the same month.

The EverMinds™ platform founded in 2018 is one way in which Borealis is spearheading the circular economy transition. By encouraging collaboration among value chain partners and other stakeholders in the name of circularity, Borealis is facilitating the development of a broad range of eco-efficient applications across diverse industry sectors. In 2023, highlights included the development of a new monomaterial pouch for dry foodstuffs containing over 95% PP and fully compatible for mechanical recycling. Bornewables grades were used to enhance the circularity of BOPP film used in flexible packaging, while Bornewables PP for absorbent hygiene products were able to help improve the ecological footprint of nonwovens.

Innovation at Borealis is global in scope. Nearly 600 are employed in one of three innovation hubs: the Innovation Headquarters in Linz (Austria) as well as the innovation centers in Porvoo (Finland) and Stenungsund (Sweden). Borealis also operates Borstar pilot plants for PE in Porvoo, and for PP in both Porvoo and Schwechat (Austria). Catalyst manufacturing plants in Linz and Porvoo are augmented by a pilot facility in Porvoo.

Borealis continues to head the list of patent filers in Austria. In 2023, Borealis filed 128 new priority patent applications at the European Patent Office, the same number filed as in 2022. As of December 2023, the Borealis Group holds around 12,000 individual patents or patent applications which are subsumed in approximately 1,500 patent families. The growing number of patents is proof positive of the Group's dedication to Value Creation through Innovation.

Energy and Climate

Borealis Strategy and Implementation

Increased greenhouse gas concentrations cause environmental and societal impacts and lead to global warming, extreme weather events, and rising sea levels. Global efforts, like the Paris Agreement, aim to limit temperature increases to well below 2°C, with a target of 1.5°C. To achieve this, industries like the chemical sector must reduce emissions throughout their operations and value chains.

Borealis adheres to and uses the Greenhouse Gas Protocol to calculate emissions across three scopes: direct emissions (Scope 1), emissions from purchased energy (Scope 2), and other indirect emissions (Scope 3). This framework guides efforts to mitigate climate change effectively.

The sustainability ambition at the heart of the Borealis Strategy 2030 calls for significant lower reported Scope 1 and Scope 2 emissions, from 5.1 million metric tons/year (baseline 2019) to 2 million metric tons/year by 2030 [1]. Besides process improvements Borealis intends to reach this goal by using ever-increasing amounts of electricity from renewable sources to power its Polyolefins and Base Chemicals production operations in Europe. To this end, multiple long-term power purchase agreements (PPA) have been signed over the past several years. A crucial milepost was reached in 2023 as five new PPAs put Borealis over a 40% share of renewables in the total electricity supply to its European operations. Borealis achieved this intermediate goal two years earlier than originally projected. All PPAs will supply energy from wind farms to Borealis' operations in Finland, Sweden and Belgium as well as hydropower to Sweden. By 2030, 100% of the electricity sourced for the operation of the Polyolefins and Base Chemicals businesses will be of renewable origin.

Furthermore, Borealis sees improving energy efficiency as a cornerstone of its climate ambition. The group aims to implement 10% energy savings for the consumption of 2015 by 2030.

In July, Borealis reported the successful completion of a major revamp of its Stenungsund cracker furnace. Marked by excellent safety performance, the seven-year effort resulted in significantly higher energy efficiency and process safety standards for the cracker. As one of the most feedstock-flexible crackers in Europe, Stenungsund will continue to be a vital supplier of ethylene and propylene to the Borealis Group's international customers, particularly in Wire & Cable.

Using digitalization to drive Climate neutrality is key to the customer-centric approach taken by Borealis. Neoni, an innovative tool developed by the in-house Borealis Digital Studio, computes cradle-to-gate emissions data for commercially available Borealis polyolefins as well as base chemicals manufactured in Europe. Neoni allows Borealis customers to differentiate between virgin, renewably-sourced and mechanically recycled polyolefins offered by Borealis in order to determine which materials should be used to further their own sustainability goals.

Building Awareness

Borealis is actively involved in various initiatives aimed at raising awareness and fostering learning both internally and externally. This includes contributing to the development of science-based target methodologies for the chemicals sector through the SBTi's Expert Advisory Group.

Borealis are also participating in a CEFIC working group to understand the implications of different options for setting sector guidelines in the chemical industry.

Additionally, Borealis is part of the "Sustainable Plastics Industry Transformation" (SPIRIT) program in Finland, which focuses on activities like replacing fossil-based feedstocks with renewable ones, developing recycling technologies, decarbonizing production operations, and exploring enablers for the green transition. Borealis is co-funding a research project, FUTNERC, with the Swedish Energy Agency and Preem, aimed at achieving net-zero greenhouse gas emissions from refineries and chemical plants by 2050. Moreover, Borealis has launched a Sustainability Academy with OMV and OMV Petrom, focusing on climate change and ESG to engage and train their entire organization on the journey towards climate neutrality.

1) This includes the divestment of the Fertilizer division. Following Greenhouse gas protocol is seen as a base year emission shift

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Outlook

Borealis' energy and climate objectives for 2024 include advancing their digitalization project to improve reporting on climate, energy, and environmental data.

- To refine the current accounting model based on a CO_2 budget for Scopes 1, 2, and 3 to better understand our climate impact.

- Additionally, Borealis plans to evaluate the feasibility of setting science-based targets, integrating climate criteria into key decision processes, and limiting ETS emissions to 1.477 million metric tons of CO_2e.

Borealis also aims to achieve specific energy performance targets for both hydrocarbons and polyolefins and has already approved implementation of 70,000 MWh in energy savings from 2024 onwards.

Management assessment of impact

In an accelerated decarbonization scenario ensuring reaching the climate goals according to the Paris Agreement, Borealis management would not see negative effects on the overall demand of polyolefin solutions. Pricing of polyolefin is driven by base chemical markets like naphtha, ethane, propane etc. An accelerated change of the worlds energy landscape might lead to different price movements in those relevant base chemicals, effecting the profitability of some assets in the polyolefin value chain. Driven by the expected strong demand of polyolefin solutions Borealis's management does not see substantial negative effects on the overall integrated value chain.

- Useful lives

The pace of energy transition may have an impact on the remaining useful lives of assets. Borealis fixed assets will be fully depreciated over the next 5 to 15 years. It is, therefore, not expected that energy transition has a material impact on the expected useful lives of property, plant, and equipment.

Financial Performance

Borealis' net profit plunged from a record high of EUR 2,111 million in 2022 to EUR 168 million in 2023. This drop must be considered in the context of current market challenges which affect all petrochemical companies as well as the one-off positive effects specific to the Borealis Group that contributed to the outstanding results obtained in 2022. The former includes ongoing market volatility; stubborn inflation and high energy costs, particularly in Europe; weak margins; and record polyolefins overcapacity in the face of feeble demand. Factors specific to Borealis include profits enjoyed in 2022 due to the blockbuster Borouge IPO in June, as well as the re-measurement gain of EUR 266 million from the disposal group related to the divested Borealis nitrogen business unit.

In 2023, the contribution to net results from Borealis joint ventures declined from EUR 1,001 million in 2022 (supported by the Borouge IPO amounted to EUR 604 million) to EUR 160 million in 2023. The Borouge contribution, while still significant at EUR 317 million, was negatively impacted by market conditions, soft demand, reduced margins and the Borouge 2 turnaround in the first quarter of the year, which had a negative impact on production volumes.
As in 2022, the 2023 Baystar contribution, which at EUR -158 million, compared to EUR -58 million in the previous year, failed to fulfil expectations, due in the main to lower sales prices as well as the slow ramping up of production at both the new Borstar PE plant and the ethane-based steam cracker.

The after-tax return on capital employed (ROCE) of 2% in 2023 was significantly lower than the 19% reported in 2022. The marked drop reflects the one-off boost provided by the 2022 sale of the stake in Borouge, but is also due to adverse market conditions and lower sales volumes. The five-year average ROCE of 12% also remains well above the Group's target of 11% throughout the cycle.

In 2023, Borealis net debt decreased to EUR -152 million. This resulted in a gearing ratio of -2% at the end of 2023, compared to -1% at the end of 2022. This gearing reflects a very strong balance sheet. Liquidity reserves, composed of undrawn committed credit facilities and cash balances, amounted to EUR 3,478 million at year end 2023, compared to EUR 3,408 million at year end 2022. Borealis also benefits from a well-diversified financing portfolio and a balanced maturity profile. The solvency ratio was 70% at the end of 2023, compared to 66% at year end 2022.

Review of Results

Sales

In 2023, Borealis sold 3.50 million metric tons of polyolefins, slightly less than the 3.54 million sold in 2022. The decline is due primarily to imports into the European market. The macroeconomic situation was difficult throughout the year, with weak economic growth, high energy prices in Europe and ongoing supply chain bottlenecks. The industry situation was also bleak, with sluggish demand in the face of record-level polyolefins capacity additions and increased imports to Europe. In response, the Group has adopted initiatives to improve inventory and working capital management by lowering cracker utilization and protecting margins from oversupply.

In the first half of the year (prior to divestment of the Borealis nitrogen business unit as of the beginning of July 2023), Borealis Fertilizer sales were 1.35 million metric tons. This compares to the 1.63 million metric tons reported for the same period in 2022. Melamine sales also decreased, from 0.06 million metric tons in the first half of 2022, to 0.04 million metric tons in the same period in 2023 due to lower demand.

Cost Development

The lower feedstock price environment saw a sharp reduction in 2023 production costs compared to 2022. The negative macroeconomic scenario throughout the year, with weak economic growth and high inflation, resulted in sluggish demand and lower sales and distribution costs, which decreased from EUR 873 million in 2022 to EUR 755 million in 2023. Administration costs increased from EUR 278 million in 2022 to EUR 297 million in 2023. Guided by an unwavering commitment to Value Creation through Innovation, spending on research and development (comprising costs for the Borealis Innotech organization and depreciation of R&D assets) increased from EUR 112 million in 2022 to EUR 120 million in 2023.

At the end of 2023, the Borealis Group employee headcount was 5,943. This reduction of 1,706 versus the previous year was driven by the divestment of the Borealis nitrogen business unit.

Strong Foundation Performance Excellence (SFPE): Weathering the storm

The implementation-focused performance improvement program has been launched in 2022 as part of Borealis 2030 Strategy. The program is set up to deliver significant sustainable profit improvements and helps to protect margins short-term and mitigate the current downturn in the industry.

2023 marked an important year for SFPE as strong results could be reported from the profitability improvement measures across our value chain. This program supported the results by around EUR 140 million in 2023. The measures aim at optimizing product pricing, reducing variable costs through feedstock sourcing improvements, enhancing operational efficiency in energy consumption, uplifting the reliability of our assets and leveraging integrated margin opportunities. Given the prolonged and deeper downturn, a dedicated fixed costs program has been launched as part of SFPE in addition to other short-term measures to weather the storm. Focus points of the fixed costs program include optimizing inventories, enhancing maintenance processes and managing discretionary expenses.

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Additionally, the program focuses on streamlining internal and external spend structures in line with our Borealis values. The targeted fixed costs reductions will achieve a mid-term run rate of 100 million in savings.

Operating Loss/Profit

Operating loss in 2023 was EUR -9 million versus operating profit of EUR 1,081 million in 2022. The Polyolefins operating profit declined from EUR 526 million in 2022 to EUR -79 million in 2023 due to lower demand and one-time impairments. Borealis Base Chemicals delivered an operating profit of EUR 162 million, down from the EUR 243 million reported in 2022. The operating result was lower due to lower demand and lower margins.

Operating profits were impacted by high inventory effects (EUR -233 million), due to a weaker environment in all business areas. The full-year Borouge contribution was solid (EUR 317 million), albeit below the previous year. The Baystar contribution fell short of expectations; its overall contribution was negative (EUR -158 million) despite an improved contribution from the already existing PE plants Bay 1 and Bay 2 in the second half of 2023. The operating profit from the Borealis nitrogen business unit was negative.

Financial Income and Expenses

The decrease in net financial income from EUR 104 million in 2022 to EUR 43 million in 2023 was mainly due to less favorable currency effects.

In 2023, the Borealis Group earned EUR 141 million in interest income from loans granted to its joint ventures and its cash deposits, compared to the EUR 56 million earned in the previous year.

Taxes

Income from taxes amounted to EUR 51 million in 2023, compared to tax charges of EUR -342 million in 2022. The lower overall tax charge in 2023 was to a large extent driven by weaker business performances and tax gains in connection with the Borealis nitrogen business divestment.

Net Income from Equity Accounted Investments

The contribution from Borealis joint ventures declined significantly, from EUR 1,001 million in 2022 to EUR 160 million in 2023. The Borouge 2 turnaround in the first half of 2023 as well as generally softer demand and lower sales prices reduced the overall Borouge contribution. The Baystar contribution was also lower than projected due to the slower than expected ramping up of the new ethane-based cracker.

Capital Expenditure

Investments in property, plant and equipment amounted to EUR 729 million in 2023, compared to EUR 667 million in 2022. A major portion of the total is associated with the construction of the new world-scale PDH plant in Kallo; final debottlenecking efforts at the PP plant in Kallo; and the upgrade of semicon units in Antwerp. Health, Safety and Environment (HSE) capital expenditure amounted to EUR 153 million, compared to EUR 107 million in 2022. Investments in intangible assets amounted to EUR 79 million in 2023, compared to EUR 58 million in 2022.

Depreciation, amortization and impairment amounted to EUR 411 million in 2023 versus EUR 352 million in 2022.

Financial Position

At year end, total assets and capital employed stood at EUR 13,412 million and EUR 11,422 million, respectively, compared to EUR 14,685 million and EUR 11,952 million at the end of 2022.

Cash Flows and Liquidity Reserves

Cash flow from operating activities was EUR 552 million and supported primarily by a positive working capital development. In 2023, the Borealis Group benefited from the divestment of the nitrogen business unit and Rosier, which together generated a positive cash flow of EUR 691 million. These positive flows were, however, offset by capital contributions and financing throughout 2023 in the joint ventures Borouge (EUR 150 million) and Baystar (EUR 91 million); increased CAPEX investments of EUR 808 million (tangible and intangible); and payments related to the acquisition of Rialti in the latter part of the year.

Net interest-bearing debt decreased significantly to EUR -152 million at year end, down from EUR -70 million at the end of 2022 (see table below).

EUR million	2023	2022
Change of net interest-bearing debt		
Cash flows from operating activities	552	898
Capital expenditure (tangible and intangible)	-808	-725
Capital contributions to and financing and acquisition of associated companies, joint ventures and non-consolidated subsidiaries	-245	-668
Dividends of associated companies, joint ventures and non-consolidated subsidiaries	456	595
Proceeds from disposal of shares in joint ventures	0	745
Repayments of financing by joint ventures	0	602
Acquisitions of subsidiaries, net of cash	-54	0
Acquisition of non-controlling interest	-1	-1
Proceeds from disposal of subsidiaries, net of cash disposed	691	0
Other (mainly relating to foreign exchange differences)	30	48
Dividend paid to equity holders of the parent and non-controlling interests	-388	-699
Additions lease liabilities	-100	-503
Changes in the consolidation scope	-50	0
Total decrease (+)/increase(-) of net interest-bearing debt	**83**	**292**

Shareholders' Equity

Shareholders' equity at year end 2023 was EUR 9,219 million, compared to EUR 9,785 million in 2022. For further information on equity see note 13 in the consolidated financial statements.

EUR million	2023	2022
Equity development		
Net result attributable to the parent	206	2,108
Exchange and fair value adjustment (net)	-405	163
Gross increase/decrease	-199	2,271
Dividend distribution	-400	-698
Changes in consolidation scope and non-controlling interests	0	-10
Reclassification of cash flow hedges to balance sheet	33	46
Net increase/decrease	-566	1,609
Opening equity	9,785	8,176
Closing equity	**9,219**	**9,785**

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Risk Management

Borealis has a documented risk management process ensuring that all parts of the Group routinely identify and assess their risks and develop and implement appropriate mitigation actions. Risk management contributes to achieving the Group's long-term strategies and short-term goals. Borealis believes that an effective risk culture makes it harder for an outlier, be it an event or an offender, to put the Company at risk.

Borealis captures emerging risks which may materialize during the business plan period, and strategic risks that may affect the delivery of the Group's long-term strategy. In addition, Borealis distinguishes between "outside-in" and "inside-out" risks. In 2023, particular emphasis was placed on geopolitical and energy supply-related risks.

The Group's overall risk landscape is periodically consolidated, reported and reviewed. Borealis distinguishes between different risk categories as outlined below. While this list is not exhaustive, it does illustrate the most relevant risk types.

Strategic and reputational risks are those that may severely impact the Borealis Group's strategy or reputation. Strategic risks are often related to unfavorable long-term developments, such as market or industry developments, technology, innovation, a change in the competitive environment, or a threat to the reputation of the Group.

Operational and tactical risks usually refer to unfavorable and unexpected short-term or mid-term developments and include all risks that may have a direct impact on the Group's daily business operations. All operational risks are assessed according to documented guidelines and procedures that are administered by the respective business functions.

A proactive approach to risk prevention management has been implemented in the Operations function, covering risks in the areas of Production; Health, Safety and Environment (HSE); Product Stewardship; Plant Availability and Quality. The risk management approach also safeguards the Responsible Care® approach towards risks in operations. The standard risk management process includes a common risk matrix and risk registers, built bottom-up from plant to portfolio level, enabling a common risk rating system for the whole of operations.

HSE risks are assessed according to the procedures and framework described in the Borealis Risk-based Inspection Manual. The HSE Director is responsible for managing all HSE-related risks and periodically reports the Borealis HSE risk landscape to the Executive Board.

Borealis assesses and discloses the potential negative impact of its activities on the environment and society, and related mitigation measures, in its Non-financial Report in accordance with legal obligations (NaDiVeG). The main risks analyzed are:

- Unplanned emissions from operations that might cause additional emissions to air or soil, and water pollution, waste, noise and other disturbances to the local community;
- Process safety incidents causing the sudden and uncontrolled release of explosive materials and release of potentially harmful toxins;
- Chemical substances that, if not handled properly and according to their intended use, could lead to negative impacts on human health;
- Environmental pollution caused by pellet loss or plastic littering;
- Pandemic-related risks to business as well as Borealis employees.

Climate-related risks and mitigation actions are also specifically analyzed according to TCFD (Task Force on Climate-Related Financial Disclosures) guidelines and disclosed in the Borealis Non-financial Report. Related transition risks are, for example, higher GHG emission prices, increasing operating costs, increasing pressure on the usage of fossil fuel-based feedstock and a negative industry image. Physical risks are mainly related to potential supply chain disruptions, due, for example, to extreme weather events or political unrest. However, the risks associated with climate change also represent opportunities for innovation, such as product portfolio extensions that include low-emission, circular and/or renewable-based products as well as partnerships that help transform the industry towards climate neutrality.

Project-related risks are assessed in the Borealis project approval process. The applicable key risks related to an individual project are assessed. These risks include financial, market, technical, legal, patent infringement, strategic, operational, country-related and political factors. The risk assessment also reflects the probability of project completion within the estimated time frame and forecasted resource requirements, and the likelihood that key project objectives will be achieved. Project-related risks are managed by the project manager and reported to the Project Steering Committee.

Financial and market risks may refer to risks arising for instance from unexpected changes in market supply, demand, commodity prices, services or financing costs. Risks may also arise from liquidity, interest rates, foreign exchange rates, credit and insurance, the inability of a counterparty to meet a payment or delivery commitment, and may, for example, extend to incorrect assumptions or the inappropriate application of a model. The assessment of financial risk management is described in detail in note 17 of the consolidated financial statements. The Treasury & Funding Vice President and the General Counsel are responsible for reporting and coordinating the management of all financial risks.

Compliance risks involve legal and regulatory risks, codes of conduct (ethics policy), standards as well as contracting compliance. Doing business in an ethical manner is vital to the Group's good reputation and continued success. Tactical or generic risks are risks identified as part of standards or compliance. These risks mainly relate to processes or control weaknesses.

Information security risks relate to the confidentiality, integrity and availability of critical company information. The Vice President Digital Solutions and the General Counsel support line managers with the assessment of information security risk and the development and implementation of risk mitigation actions.

The Executive Board periodically reviews the Group's key risks, defines the Group's risk tolerance levels, monitors the implementation of mitigation actions, and reports the key risks and mitigation steps to the Supervisory Board. The Executive Board safeguards the integration of risk assessment in its strategic planning.

The Supervisory Board is responsible for reviewing the effectiveness of Borealis' risk management practices and processes, risk appetite and tolerance levels, the Group's risk exposure, and the effectiveness of mitigation actions. The Supervisory Board delegates some of these responsibilities to the Audit Committee, which is a sub-committee of the Supervisory Board.

All Borealis employees are responsible for managing risk, within their authority and in their field of work, in order to ensure that risk management is properly embedded in the organization and reflected in the daily decision-making processes.

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Changes to the Supervisory Board and Executive Board
In April 2023, Daniela Vlad, OMV Executive Vice President *Chemicals & Materials and member of the OMV Executive* Board, was appointed Chairperson of the Borealis Supervisory Board, replacing Alfred Stern, OMV CEO. Daniel Turnheim was appointed Borealis Chief Financial Officer for a three-year period taking effect as of June 1, 2023. He takes over from Mark Tonkens, who left the Borealis Executive Board by mutual agreement at the end of May 2023. As of February 1, 2024, Craig Arnold assumes the position of Executive Vice President Polyolefins, Circular Economy Solutions and Innovation & Technology held by Lucrèce Foufopoulos-De Ridder up until December 31, 2023.

Economic Development and Outlook
The year 2023 was a turbulent and challenging one for the entire industry. The Borealis Executive Board and its senior management anticipate a prolonged and deepening trough as increased global production capacity collides with lagging demand. These shorter-term factors are joined by long-term developments that are reshaping the petrochemicals industry, such as carbon reduction efforts; the transition to a circular economy; structural changes in key industries such as mobility and energy; and digitalization and technological disruption, to name only a few.

The Borealis Strategy 2030 is, however, a solid foundation which provides stability in turbulent times. Thanks to carefully managed growth and expansion efforts, and leadership in innovation and the circular economy sphere, Borealis is ideally positioned to capitalize on future market opportunities as they arise.

Making good on the commitment to "Zero Harm" will be the chief priority in 2024. While the Group posted excellent results in process and occupational safety in 2023, there is still work to be done on improving the TRI rate. The recently launched initiative "HSSE 2030" envisions Borealis as the industry leader in health, safety, security and the environment by 2030. We have full confidence that Borealis will make meaningful progress towards this goal in 2024 thanks to the dedication and commitment of its people.

Other Information
In accordance with Section 267a (6) of the Austrian Commercial Code (UGB), Borealis prepares a separate consolidated non-financial report.

As a company subject to non-financial reporting obligations according to Article 19a of Directive 2013/34/EU of the European Parliament and of the Council, Borealis falls within the scope of the EU Taxonomy. Applying the EU Taxonomy enables Borealis to be transparent about its sustainable economic activities and to demonstrate the development of the sustainability performance of all business areas within the Group. For 2023, Borealis discloses within the separate consolidated non-financial report the share of taxonomy-eligible and non-taxonomy-eligible economic activities in its total turnover, CAPEX and OPEX, as well as the taxonomy alignment levels of these KPIs.

		2023 excl. NITRO [1]	2023 Incl. NITRO [1]	2022 excl. NITRO [2]	2022 Incl. NITRO [2]	2021 Incl. NITRO [2]	2020 Incl. NITRO [2]	2019
Income and profitability								
Total sales and other income	EUR mn	7,282	8,043	9,613	12,225	10,153	6,937	8,103
Operating profit	EUR mn	18	-9	703	1,081	1,517	351	605
Operating profit as percentage of total sales and other income	%	0	0	7	9	15	5	7
Net profit	EUR mn	216	168	1,613	2,111	1,396	589	872
Return on capital employed, net after tax	%	–	2	–	19	19	8	11
Cash flow and investments								
Cash flow from operating activities	EUR mn	438	552	602	898	967	1,083	872
Investments in property, plant and equipment	EUR mn	659	729	544	667	660	614	376
Cash and cash equivalents	EUR mn	2,348	–	2,226	2,242	1,551	83	83
Financial position								
Balance sheet total	EUR mn	13,412	–	–	14,685	12,985	10,583	10,118
Net interest-bearing debt	EUR mn	-152	–	–	-70	223	1,833	1,569
Equity attributable to owners of the parent	EUR mn	9,219	–	–	9,785	8,176	6,417	6,445
Gearing	%	-2	–	–	-1	3	29	24
Health, Safety & Environment [3]								
Total Recordable Injuries (TRI) [4]	number/ mn work hours	4.0	4.0	2.6	2.9	2.3	3.9	3.4
EU ETS CO_2 emissions	mn metric tons	1.3	2.3	1.4	3.4	3.9	4.1	4.6
Primary energy consumption	GWh	14,824	17,294	14,923	21,364	21,730	22,340	25,831
Flaring performance	metric tons	32,239	32,239	39,955	39,955	38,538	42,543 [5]	27,619
Waste generation	metric tons	73,467	79,235	82,425	92,383	102,023	97,905	86,109
Water withdrawal	m^3 mn	334	449	407	657	735	755	750
Number of employees	full-time equivalents [6]	–	–	–	–	6,934	6,920	6,869
	headcount [7]	5,943	–	5,631	7,649	7,508	–	–

1) NITRO 2023: Borealis divested the Borealis Fertilizers, Melamine and Technical Nitrogen (TEN) Business at the beginning of July 2023; therefore only Fertilizers, Melamine and TEN data for first six months is included for NITRO. For further details please refer to note 8.1. Sale of Borealis NITRO in the Notes to the Consolidated Financial Statements // 2) NITRO 2020–2022: Borealis Fertilizers, Melamine and Technical Nitrogen Business excl. Rosier Group. See also footnote 1 // 3) Environmental data might be subject to minor adjustments due to ongoing audits and missing third-party data at the time of closing of this report. // 4) Rosier Group is excluded from TRI 2022 excl. NITRO. // 5) Severe upsets led to significant emergency flaring during shutdowns; further there was a lack of recycling capacity. // 6) Full-time equivalents considers part-time employed staff only as 0.5 // 7) Number of employees has been presented in headcount instead of full-time equivalents since 2022. A comparison to previous years is only possible with 2021.

Definitions

Capital employed: Total assets less non-interest-bearing debt
Return on capital employed: Operating profit, profit and loss from sale of operations, net result of associated companies and joint ventures plus interest income, after imputed tax, divided by average capital employed
Solvency ratio: Total equity, less goodwill, divided by total assets
Gearing ratio: Interest-bearing debt, less cash and cash equivalents, divided by total equity
HSE: Health, Safety and Environment

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Vienna, February 22, 2024
Executive Board:

Thomas Gangl m.p.
Chief Executive Officer

Daniel Turnheim m.p.
Chief Financial Officer

Wolfram Krenn m.p.
Executive Vice President
Base Chemicals & Operations

Philippe Roodhooft m.p.
Executive Vice President
Joint Ventures & Growth Projects

Craig Arnold m.p.
Executive Vice President
Polyolefins, Circular Economy Solutions
and Innovation & Technology

Consolidated Financial Statements

Consolidated Income Statement

EUR thousand	2023	2022	Note
Net sales	**7,082,152**	**9,332,809**	1, 2
Other operating income	200,197	279,791	29
Total sales and other income	**7,282,349**	**9,612,600**	
Production costs	-6,288,669	-7,938,488	6, 7, 14, 15
Gross profit	**993,680**	**1,674,112**	
Sales and distribution costs	-686,107	-722,828	6, 7, 14, 15
Administration costs	-276,980	-238,663	6, 7, 14, 15
R&D costs	-13,071	-9,449	3, 6, 7, 14, 15
Operating profit	**17,522**	**703,172**	
Net results of associated companies and joint ventures	160,456	397,113	9
Gain from disposal of equity accounted investments	0	604,171	9
Financial income	161,287	65,129	18
Financial expenses	-103,465	-49,902	18
Net foreign exchange gains/losses	-15,264	85,943	18
Profit before taxation	**220,536**	**1,805,626**	
Taxes on income	-4,862	-192,494	11
Net profit for the year from continuing operations	**215,674**	**1,613,132**	
Discontinued operation			
Loss (profit) from discontinued operation, net of tax	-47,652	497,502	8
Net profit for the year	**168,022**	**2,110,634**	
Attributable to:			
Non-controlling interests	-38,461	2,532	
Equity holders of the parent	206,483	2,108,102	

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Consolidated Statement of Comprehensive Income

EUR thousand	2023	2022	Note
Net profit for the year	**168,022**	**2,110,634**	
Items that may be subsequently reclassified to the income statement			
Net gain/loss on translation of financial statements of foreign operations	-97,297	133,664	
Reclassifications to the income statement during the period	0	-42,744	
Tax effect recognized in other comprehensive income	0	0	
Net gain/loss on long-term loans to foreign operations	209	-7,645	19
Reclassifications to the income statement during the period	0	0	
Tax effect recognized in other comprehensive income	-48	1,428	
Net gain/loss on loans to hedge investments in foreign operations	5,510	-12,208	19, 22, 23
Reclassifications to the income statement during the period	0	3,009	
Tax effect recognized in other comprehensive income	-1,267	1,674	
Fair value adjustments of cash flow hedges	-323,022	348,464	19, 22, 23, 24, 25
Reclassifications to the income statement during the period	-60,732	-385,114	19, 22, 23, 24, 25
Tax effect recognized in other comprehensive income	88,263	14,483	
Share of other comprehensive income of joint ventures accounted for using the equity method	-4,818	-2,769	9
Items that will not be reclassified to the income statement			
Actuarial gains and losses	-17,713	139,325	15
Tax effect recognized in other comprehensive income	3,176	-35,543	
Share of other comprehensive income of joint ventures accounted for using the equity method	2,439	7,342	9
Net income/expense recognized in other comprehensive income	**-405,300**	**163,366**	
Total comprehensive income	**-237,278**	**2,274,000**	
Attributable to:			
Non-controlling interests	-38,027	3,335	
Equity holders of the parent	-199,251	2,270,665	

Consolidated Balance Sheet

EUR thousand	31.12.2023	31.12.2022	Note
Assets			
Non-current assets			
Intangible assets	720,792	633,950	3, 4, 7
Property, plant and equipment			5, 7
Production plants	2,130,363	1,854,194	
Machinery and equipment	33,429	28,192	
Construction in progress	1,516,882	1,277,834	
Total property, plant and equipment	3,680,674	3,160,220	
Right-of-use assets	662,204	599,136	6
Investments in associated companies and joint ventures	2,479,258	2,796,851	9
Other investments	23,621	18,459	10, 28
Loans granted	900,915	628,305	10, 27, 28, 30
Other receivables and other assets	88,012	193,363	2, 10, 27, 28
Deferred tax assets	112,307	23,794	11
Total non-current assets	**8,667,783**	**8,054,078**	
Current assets			
Inventories	1,303,306	1,479,516	12
Receivables			
Trade receivables	600,266	788,440	26, 27, 28, 30
Income taxes	7,380	2,965	
Loans granted	0	65,712	10, 27, 28, 30
Other receivables and other assets	485,331	545,243	10, 27, 28, 30
Total receivables and other assets	1,092,977	1,402,360	
Cash and cash equivalents	2,347,631	2,226,207	27, 28
Assets of the disposal group held for sale	0	1,523,215	8
Total current assets	**4,743,914**	**6,631,298**	
Total assets	**13,411,697**	**14,685,376**	

EUR thousand	31.12.2023	31.12.2022	Note
Equity and liabilities			
Equity			
Shareholders' equity			
Share capital and contributions by shareholders	1,599,397	1,599,397	13
Reserves	60,263	412,694	
Retained earnings	7,559,146	7,772,773	
Total shareholders' equity	9,218,806	9,784,864	
Non-controlling interests	7,529	7,122	
Total equity	**9,226,335**	**9,791,986**	
Liabilities			
Non-current liabilities			
Loans and borrowings	1,206,373	1,512,201	20, 21, 28
Lease liabilities	630,430	563,239	6, 20, 21
Deferred tax liabilities	192,933	264,714	11
Employee benefits	271,697	276,512	15
Provisions	69,334	61,585	16
Other liabilities	110,074	36,185	21, 28
Total non-current liabilities	**2,480,841**	**2,714,436**	
Current liabilities			
Loans and borrowings	310,045	41,929	20, 21, 28
Lease liabilities	48,420	42,635	6, 20, 21
Trade payables	849,547	862,826	21, 28, 30
Income taxes	29,066	45,761	
Provisions	52,546	48,214	16
Contract liabilities	42,868	50,182	2
Other liabilities	372,029	387,249	21, 28, 30
Liabilities directly related to the disposal group	0	700,158	8
Total current liabilities	**1,704,521**	**2,178,954**	
Total liabilities	**4,185,362**	**4,893,390**	
Total equity and liabilities	**13,411,697**	**14,685,376**	

Consolidated Statement of Changes in Equity [1)]

EUR thousand	Share capital and contributions by share-holders	Reserve for actuarial gains/losses recognized in equity	Hedging reserve	Reserve for unrealized exchange gains/losses	Retained earnings	Total attributable to the equity holders of the parent	Non-controlling interests	Total equity
Balance as of January 1, 2022	**1,599,397**	**-255,699**	**227,023**	**232,321**	**6,372,494**	**8,175,536**	**-4,251**	**8,171,285**
Net profit for the year	0	0	0	0	2,108,102	**2,108,102**	2,532	**2,110,634**
Other comprehensive income	0	111,124	-22,167	73,606	0	**162,563**	803	**163,366**
Total comprehensive income	**0**	**111,124**	**-22,167**	**73,606**	**2,108,102**	**2,270,665**	**3,335**	**2,274,000**
Dividend distribution	0	0	0	0	-698,000	**-698,000**	-850	**-698,850**
Increase/(decrease) in non-controlling interests	0	0	0	0	-9,447	**-9,447**	8,888	**-559**
Reclassifications of cash flow hedges to balance sheet	0	0	46,110	0	0	**46,110**	0	**46,110**
Reclassifications within Equity	0	376	0	0	-376	**0**	0	**0**
Balance as of December 31, 2022	**1,599,397**	**-144,199**	**250,966**	**305,927**	**7,772,773**	**9,784,864**	**7,122**	**9,791,986**
Net profit for the year	0	0	0	0	206,483	**206,483**	-38,461	**168,022**
Other comprehensive income	0	-12,098	-299,599	-94,037	0	**-405,734**	434	**-405,300**
Total comprehensive income	**0**	**-12,098**	**-299,599**	**-94,037**	**206,483**	**-199,251**	**-38,027**	**-237,278**
Dividend distribution	0	0	0	0	-400,000	**-400,000**	-1,073	**-401,073**
Changes in the consolidation scope	0	19,126	0	868	-19,124	**870**	39,494	**40,364**
Increase/(decrease) in non-controlling interests	0	0	0	0	-986	**-986**	13	**-973**
Reclassifications of cash flow hedges to balance sheet	0	0	33,309	0	0	**33,309**	0	**33,309**
Balance as of December 31, 2023	**1,599,397**	**-137,171**	**-15,324**	**212,758**	**7,559,146**	**9,218,806**	**7,529**	**9,226,335**

1) For further information see note 13.

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Consolidated Cash Flow

EUR thousand	2023	2022	Note
Cash flows from operating activities			
Payments from customers	7,950,534	12,126,435	
Payments to employees and suppliers	-7,290,005	-10,833,990	
Interest received	119,063	31,265	18
Interest paid	-50,262	-39,828	18
Other financial expenses paid/income received	-20,462	3,114	18
Income taxes paid	-157,085	-389,231	11
	551,783	**897,765**	
thereof from discontinued operation	114,108	236,445	
Cash flows from investing activities			
Investments in property, plant and equipment	-728,721	-666,657	5
Investments in intangible assets	-79,242	-58,073	4
Acquisitions of subsidiaries, net of cash	-53,949	0	8
Dividends of associated companies and joint ventures and non-consolidated subsidiaries	456,215	595,379	9
Capital contributions to and financing and acquisition of associated companies and joint ventures and non-consolidated subsidiaries	-245,419	-668,026	9
Proceeds from disposal of subsidiaries, net of cash disposed	691,439	0	8
Proceeds from disposal of shares in joint ventures	0	745,068	9
Repayments of financing by joint ventures	0	601,685	30
	40,323	**549,376**	
thereof from discontinued operation	590,181	-122,462	

EUR thousand	2023	2022	Note
Cash flows from financing activities			
Non-current loans and borrowings obtained	0	420	20
Current loans and borrowings obtained	61	1,330	20
Current loans and borrowings repaid	-44,091	-76,612	20
Principal elements of lease payments	-54,103	-53,635	6
Acquisition of non-controlling interests	-972	-558	
Dividends paid to equity holders of the parent	-386,667	-698,000	
Dividends paid to non-controlling interests	-1,073	-850	
	-486,845	**-827,905**	
thereof from discontinued operation	-3,166	-7,336	
Net cash flow of the period	**105,261**	**619,236**	
Cash and cash equivalents as of January 1	2,242,405	1,551,487	
Effect of exchange rate fluctuations on cash held	-35	71,682	
Cash and cash equivalents as of December 31	**2,347,631**	**2,242,405**	
thereof reported under Cash and cash equivalents	2,347,631	2,226,207	
thereof reported under Assets of the disposal group held for sale	0	16,198	8

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Notes to the Consolidated Financial Statements

Reporting Entity
Borealis AG (the Company or Group) is a company domiciled in Austria. The address of the Company's registered office is Trabrennstrasse 6–8, 1020 Vienna, Austria. Borealis is one of the world's leading providers of advanced and circular polyolefin solutions and a European market leader in base chemicals, fertilizers and the mechanical recycling of plastics.

Borealis Reports the Business Result in three Segments: In the Polyolefins segment, Borealis focuses on the application areas Mobility, Energy, Consumer Products, Infrastructure, Advanced Products and Business Development.

Base Chemicals essentially includes the following product ranges: Phenol, Acetone, Ethylene and Propylene.

The third segment "Borealis NITRO" consisting of Fertilizers, Melamine and Technical Nitrogen Products was sold on July 5, 2023. The Company's share in fertilizer production sites in the Netherlands and Belgium ("Rosier") had not been part of this segment since 2022. The sale of Rosier was completed on January 2, 2023.

Statement of Compliance
The consolidated financial statements have been prepared in compliance with the International Financial Reporting Standards issued by the IASB as adopted by the EU and additional Austrian disclosure requirements. The consolidated financial statements as of December 31, 2023 were authorized for publication by the Executive Board on February 22, 2024.

Basis of Preparation
The consolidated financial statements are presented in thousand euro (EUR thousand), rounded to the nearest thousand, hence rounding differences may arise. The consolidated financial statements are prepared on the historical cost basis, except for the following assets and liabilities, which are stated at their fair value: derivative financial instruments and financial assets at fair value through profit or loss (FVPL) or at fair value through other comprehensive income (FVOCI). Recognized assets and liabilities that are hedged are stated at fair value in respect of the risk that is being hedged.

Consolidation Principles
The consolidated financial statements include the financial statements of Borealis AG, the parent company, and all the companies over which it has control. The Group controls an entity when the Group is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. Companies in which the Group has a significant influence (interest of 20% or more), but no control or joint control, are considered associated companies. A joint venture is a type of joint arrangement whereby the parties that have joint control of the arrangement have rights to the net assets of the joint venture. Joint control is the contractually agreed sharing of control of an arrangement, which exists only when decisions on the relevant activities require the unanimous consent of the parties sharing control.

The consolidated financial statements are based on financial statements of the parent company and of each individual subsidiary. The consolidated financial statements have all been prepared in accordance with the Group's accounting policies. Items of a similar nature have been combined. Intra-group transactions (revenues and costs), intra-group profits, internal shareholdings and intra-group balances have been eliminated.

Acquired subsidiaries, associated companies and joint ventures are included in the consolidated financial statements from the date of control or significant influence, respectively, and until (joint) control or significant influence ceases. In case the acquisition is accounted for as a business combination, a re-measurement of the acquired net assets is made on the date of acquisition. Any remaining positive difference between the fair value of the assets and liabilities and the purchase consideration is capitalized as goodwill and subject to an annual impairment test. Any gain from a bargain purchase is recognized in the income statement. Investments in associated companies and investments in joint ventures are recorded under the equity method in the consolidated financial statements.

Significant Accounting Judgements, Estimates and Assumptions
The preparation of the Group's consolidated financial statements requires management to make judgements, estimates and assumptions that affect the reported amounts of revenues, expenses, assets and liabilities and the disclosure of contingent liabilities, at the end of the

reporting period. However, uncertainty about these assumptions and estimates could result in outcomes that require a material adjustment to the carrying amount of the asset or liability affected in future periods. The judgements, estimates and assumptions mainly relate to the useful life and impairment of intangible assets and property, plant and equipment (note 4 and note 5), determination of lease liabilities (note 6), value of tax assets and liabilities and unused tax losses (note 11), inventory impairment (note 12), actuarial assumptions for employee benefits (note 15), future cash outflows for provisions (note 16), allowance for impairment in respect of trade receivables (note 27), estimate of fair value less cost of disposal (note 8) and are included in the description of the respective note for the position.

Foreign Currency

Transactions and Balances

Monetary assets and liabilities denominated in foreign currencies have been converted into euro (EUR) at the exchange rates quoted on the reporting date. Non-monetary items that are measured at historical cost in a foreign currency are translated using the exchange rate as at the date of transaction.

Foreign exchange gains and losses related to working capital are presented in the income statement as part of operating profit (other operating income and production costs). Otherwise, the foreign exchange gains and losses are recorded as financial items in the income statement. However, the exchange adjustments arising from the following items are recognized in other comprehensive income: conversion of the net assets of foreign subsidiaries and associated companies as of January 1 using the closing rate on December 31, conversion of long-term intra-group receivables that are considered part of investments in subsidiaries or associated companies, conversion of long-term loans hedging net assets of foreign subsidiaries and associated companies or intra-group receivables considered part of investments in subsidiaries and associated companies and conversion of the net income of foreign subsidiaries calculated at monthly rates to figures converted using the exchange rates applicable as of the reporting date.

Group Companies

Consolidated financial statements are presented in euro (EUR), the functional currency of the parent.

Financial statements of foreign subsidiaries in functional currencies other than EUR have been converted at the exchange rates quoted on the reporting date for assets and liabilities. The income statements of foreign subsidiaries have been converted on the basis of monthly exchange rates. The exchange differences arising from the conversion are recognized in other comprehensive income.

Summary of Significant Accounting Policies

Income Statement

Revenue Recognition

Borealis' main business model is to produce, market and sell various goods (polyolefins, base chemicals, fertilizers and related nitrogen products) to its customers. Each sale typically includes an obligation to deliver one particular type of goods. No bundling of various goods in one contract currently exists and price is not interdependent on prices in other contracts, delivery of other goods or promises. In case of additional services provided as part of the contract that typically do not meet the requirements of a separate performance obligation in accordance with IFRS 15, no allocation of the transaction price to multiple performance obligations is necessary.

Revenue is recognized when control of the products has been transferred, i.e. when the products are delivered to the customer. All Borealis contracts for delivery of goods include INCOTERMS, such as DDP, CIF or FCA, which govern changes to the control of goods. This will be the point of revenue recognition by Borealis. Payment is generally due up to 90 days from delivery.

For some contracts, variable considerations have been agreed, typically volume discounts for goods purchased during the particular period, i.e. one year. Borealis regularly estimates the anticipated discount based on the best available data supported by a large number of similar contracts and historical information.

Generally, Borealis does not expect to have any contracts where the period between the transfer of the promised goods to the customer and payment by the customer exceeds one year. Consequently, Borealis does not adjust the promised amount of consideration for the effects of a significant financing component.

The Group typically provides warranties for general repairs of defects that existed at the time of sale, as required by

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law. These assurance-type warranties are accounted for under IAS 37 Provisions, Contingent Liabilities and Contingent Assets. No other warranties or rights to return are offered by Borealis.

Net sales comprise revenue from contracts with customers and revenue from other sources arising in the course of the ordinary activities of the Group, excluding value-added tax and after deduction of goods returned, discounts and allowances.

The Group recognizes contract liabilities for consideration received in respect of unsatisfied performance obligations. If the Group satisfies a performance obligation before it receives the consideration, the Group recognizes a contract asset or a receivable in its balance sheet, depending on whether something other than the passage of time is required before the consideration is due.

All transactions that are not representative of sales revenues are presented under Other operating income.

Research and Development
Research costs are charged to the income statement in the year they have been incurred.

Development costs relating to a definable product or process that is demonstrated to be technically and commercially feasible are recognized as an intangible asset to the extent that such costs are expected to be recovered from future economic benefits. The expenditure capitalized includes the costs of materials, direct labor and an appropriate proportion of direct overheads.

Other development costs not meeting these criteria are recognized in the income statement as an expense when incurred.

Results from Associated Companies and Joint Ventures
The proportionate share of the net profit or loss after or before tax, as appropriate, of these companies is included in the consolidated income statement.

Financial Income/Expenses
Interest income and expenses are included in the income statement using the effective interest rate at the amounts relating to the financial year.

Financial income/expenses also include borrowing costs, costs incurred on finance leases, realized and unrealized gains and losses from exchange and price adjustments of financial instruments, investments and items in foreign currencies not related to working capital.

Taxes on Income
The income tax charged to the income statement comprises expected tax payable on the taxable income for the year, using tax rates enacted or substantively enacted as of the reporting date, adjusted for the change in deferred tax assets and liabilities for the year and for any tax payable in respect of previous years. Income tax that relates to items recognized in other comprehensive income is recognized in other comprehensive income as well.

Balance Sheet
Intangible Assets
Intangible assets are stated at cost, less accumulated amortization and impairment losses.

Goodwill arising from an acquisition represents the excess of the purchase consideration over the fair value of the net identifiable assets acquired. Goodwill is not amortized but is subject to an annual impairment test.

Licenses and patents acquired externally are stated at cost, less accumulated amortization and impairment losses. Amortization is calculated according to the straight-line method based on an estimated useful life of 3–10 years.

Capitalized development costs are stated at cost, less accumulated amortization and impairment losses. Amortization is charged to the income statement on a straight-line basis over the expected useful life of the asset of 3–10 years. Development costs not yet amortized are subject to an annual impairment test.

Costs to purchase and develop software for internal use are capitalized and amortized on a straight-line basis over 3–7 years.

Emission rights are reported as intangible assets. They are measured at cost, if purchased on the market, or at fair value, if received through government grants. A liability to return emission rights for actual emissions made is recognized as well.

Property, Plant and Equipment

Property, plant and equipment is valued at cost, less accumulated depreciation and impairment losses. Cost comprises purchase price, site preparation and installation. Day-to-day servicing expenses are not included in the cost of the assets. If certain conditions are met, the costs of major inspections and overhauls are recognized in the carrying amount of the property, plant and equipment.

Production plants include land, buildings, related immovable machinery and equipment. Machinery and equipment are recognized at purchase price and any directly attributable costs.

Depreciation is made on a straight-line basis over the expected useful life of the components of the assets. The useful lives of major assets are determined individually, while the lives of other assets are determined in groups of similar assets. Land is not depreciated. Buildings are depreciated over 20–40 years, production facilities over 15–20 years and machinery and equipment over 3–15 years.

The present value of the expected cost for the decommissioning of the asset after its use is included in the cost of the respective asset if the recognition criteria for a provision are met. The estimated future costs of decommissioning are reviewed annually and adjusted as appropriate. Changes in the estimated future costs or in the discount rate applied are added to or deducted from the cost of the asset. Borrowing costs directly attributable to the acquisition, construction or production of a qualifying asset are capitalized as part of the cost of that asset.

Impairment Losses

The carrying amounts of both property, plant and equipment and intangible assets are reviewed on each reporting date to determine whether there is any indication of impairment. If any such indication exists, and for annual impairment tests of goodwill and intangible assets with an indefinite useful life, the asset's recoverable amount is estimated as the greater of the fair value less cost of disposal and value in use. An impairment loss is recognized whenever the carrying amount of an asset or its cash-generating unit exceeds its recoverable amount. Impairment losses are recognized in the income statement.

Leases

Leases are recognized as a right-of-use asset and a corresponding liability on the date at which the leased asset is available for use by the Group. Each lease payment is split between the liability and finance cost. The finance cost is charged to the income statement over the lease term so as to produce a constant periodic rate of interest on the remaining balance of the liability for each period. The right-of-use asset is depreciated over the shorter of the asset's useful life and the lease term on a straight-line basis.

Liabilities arising from a lease are initially measured on a present value basis. Lease liabilities include the present value of the following lease payments:

- fixed payments (including in-substance fixed payments), less any lease incentives receivable,
- variable lease payments that are based on an index or a rate,
- amounts expected to be payable by the lessee under residual value guarantees, if any,
- the exercise price of a purchase option, if it is reasonably certain that the lessee will exercise that option, and
- payments of penalties for terminating the lease, if the lease term reflects the lessee exercising that option.

Lease payments to be made under reasonably certain extension options are also included in the measurement of the liability.

Moreover, non-lease components are separated from the lease components for measurement of right-of-use assets and lease liabilities.

The lease payments are discounted using the interest rate implicit in the lease. If that rate cannot be determined, which is generally the case for leases in the Group, the lessee's incremental borrowing rate is used, i.e. the rate that the lessee would have to pay to borrow the funds necessary to obtain an asset of similar value in a similar economic environment with similar terms and conditions.

The Group determines its incremental borrowing rate by obtaining interest rates from external financing sources and makes certain adjustments (to reflect the terms of the lease and the creditworthiness of the Company, amongst others).

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Right-of-use assets are initially measured at cost comprising the following:
- the amount of the initial measurement of the lease liability,
- any lease payments made on or before the commencement date, less any lease incentives received,
- any initial direct costs, and
- costs, if any, of restoring the asset at the end of the lease term to the condition required by the terms and conditions of the lease.

After the commencement date, the right-of-use asset is depreciated over the shorter of the asset's useful life and the lease term using a linear method of depreciation. If it is reasonably certain that the Group will exercise a purchase option, the right-of-use asset is depreciated over the underlying asset's useful life.

Payments associated with short-term leases and leases of low-value assets are recognized on a straight-line basis as an expense in the income statement. Short-term leases are leases with a lease term of 12 months or less. Low-value assets comprise office and IT equipment (such as water dispensers, coffee machines or franking machines), textiles or smaller containers.

Non-current Assets Held for Sale and Discontinued Operations

Non-current assets (or disposal groups comprising assets and liabilities) that are expected to be recovered primarily through sale rather than through continuing use are classified as held for sale. Prior to classification as held for sale, the assets (or components of a disposal group) are re-measured in accordance with IFRS 5. Thereafter, the assets (or disposal group) are generally measured at the lower of their carrying amount and fair value, less cost of disposal. Any impairment loss on a disposal group is first allocated to goodwill and then to remaining non-current assets on a pro rata basis; no loss is allocated to financial assets, deferred tax assets and employee benefit assets, which continue to be measured in accordance with the Group's accounting policies. Impairment losses on initial classification as held for sale and subsequent gains or losses on re-measurement are recognized in the income statement. Gains are not recognized in excess of any cumulative impairment loss.

A discontinued operation is a component of the Group's business, the operations and cash flows of which can be clearly distinguished from the rest of the Group and which:
- represents a separate major line of business or geographic area of operations,
- is part of a single coordinated plan to dispose of a separate major line of business or geographic area of operations, or
- is a subsidiary acquired exclusively with a view to resale.

Classification as a discontinued operation occurs at the earlier of disposal or when the operation meets the criteria to be classified as held for sale.

When an operation is classified as a discontinued operation, the comparative income statement is re-presented as if the operation had been discontinued from the start of the comparative year.

Associated Companies and Joint Ventures

Associated companies and joint ventures are accounted for using the equity method. The consolidated financial statements include the Group's share of the comprehensive income of equity-accounted investees.

Cash and Cash Equivalents

Cash and cash equivalents comprise cash in bank and liquid short-term deposits.

Inventories

Raw materials, work in progress and finished goods are stated at the lower of cost and net realizable value. Costs incurred are based on the first in, first out principle (FIFO method) and comprise direct materials, direct labor and an appropriate proportion of variable and fixed overhead expenditure, the latter being allocated on the basis of normal operating capacity. Cost includes the reclassification from equity of any gains or losses on qualifying cash flow hedges relating to purchases of raw material but excludes borrowing costs. Costs are assigned to individual items of inventory based on weighted average costs. Costs of purchased inventory are determined after deducting rebates and discounts. The net realizable value is the estimated selling price in the ordinary course of business less the estimated costs of completion and the estimated costs necessary to make the sale. Measurement of spare parts is based on the weighted average cost method.

Government Grants
Government grants include grants for research and development as well as investment grants. Government grants relating to assets are deducted from the carrying amount of the related asset and recognized in the income statement as a reduction of depreciation (production costs) over the useful life of the asset. Income from other government grants is shown as part of other operating income.

Provisions
A provision is recognized if, as a result of a past event, the Group has a present legal or constructive obligation against third parties that can be reliably estimated and if it is probable that an outflow of economic benefits will be required to settle the obligation. Provisions reflect the present value of future cash outflows. The cash flows are discounted at a current pre-tax rate that reflects the risks specific to the liability. The unwinding of the discount is expensed as incurred and recognized in the income statement as finance cost.

For decommissioning provisions, the present value of the expected cost for the decommissioning of the asset after its use is included in the cost of the respective asset if the recognition criteria for a provision are met. The estimated future costs of decommissioning are reviewed annually and adjusted as appropriate. Changes in the estimated future costs or in the discount rate applied are added to or deducted from the cost of the asset.

Deferred and Income Taxes
Deferred tax assets and liabilities are computed individually for each company in accordance with the balance sheet liability method, providing for temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for tax purposes. Deferred tax assets and liabilities are offset when there is a legally enforceable right to offset current tax assets and liabilities and when the deferred tax balances relate to the same taxation authority.

Deferred tax is measured at the tax rates that are expected to be applied to the temporary differences when they reverse, based on the laws that have been enacted or substantively enacted as of the reporting date.

A deferred tax asset is recognized only to the extent that it is probable that future taxable profits will be available, against which the temporary differences and unused tax loss carry forwards can be utilized within a period of five years, based on a five-year business plan.

Deferred tax assets are reviewed on each reporting date and are re-measured to the extent that it is probable they will be realized.

Since the 2021 financial year, selected Austrian Borealis entities have been a member of a tax group in line with Section 9 of the Corporate Income Tax Act ("KStG") with OMV Aktiengesellschaft as the Group parent. Hence, income tax receivables/liabilities from respective tax group members are no longer presented under the balance sheet item Income taxes, but under Other current receivables/liabilities. According to the tax group agreement, if the income derived by the respective entities during a financial year is positive, the entities have to make a tax compensation payment for this financial year to the Group parent. In the event of a negative tax result, the parent company does not have to pay any tax compensation. Negative tax results are carried forward by the Group parent and will be deducted from positive tax results of the Group members in the future.

Current tax assets and tax liabilities are offset where the entity has a legally enforceable right to offset and intends to either settle on a net basis, or to realize the asset and settle the liability simultaneously.

The uncertain tax positions, for example tax disputes, are accounted for by applying the most likely amount. The most likely amount is the single most likely amount in a range of realistically possible options. The Company evaluates the unit of account related to the uncertain tax positions on a case-by-case basis.

Reserves
A reserve has been established under the consolidated equity for unrealized exchange differences related to deferred foreign exchange gains and losses on intercompany loans, hedge loans and the equity of foreign operations. The hedging reserve contains fair value adjustments to financial instruments held for hedging purposes. The reserve for actuarial gains/losses recognized in equity contains the actuarial gains and losses on employee benefit plans.

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Employee Benefits

Defined Contribution Plans

Obligations for contributions to defined contribution plans are recognized as an expense in the income statement as incurred.

For defined contribution plans, the Group pays contributions to publicly or privately administered pension insurance plans on a mandatory, contractual or voluntary basis. The Group has no further payment obligations once the contributions have been paid. The contributions are recognized as employee benefit expenses when they are due. Prepaid contributions are recognized as an asset to the extent that a cash refund or a reduction in future payments is available.

Defined Benefit Plans

The Group's net obligation in respect of defined benefit pension plans and other post-employment benefit plans is calculated separately for each plan by estimating the amount of future benefits that employees have earned in return for their service in the current and prior periods. The benefit is discounted to determine its present value and the fair value of any plan assets is deducted. A qualified actuary performed the calculation using the projected unit credit method.

The discount rate used in the actuarial measurements is determined with reference to long-term yields of AA-rated corporate bonds. In countries where no deep market for such bonds exists, the market yield of government bonds is used.

The Group has the following plans in place: defined benefit pension plans, post-employment medical plans, severance plans and other long-term employee benefit plans. Pension plans in place are both funded and unfunded. The plan asset funds are predominantly held in the form of insurance contracts.

The parameters of the pension promise vary from country to country. There are both plans open and closed to new entrants, contributory as well as non-contributory.

Post-employment medical plans mainly cover the medical expenses of retirees in Belgian companies. They are non-contributory and closed to new entrants. The expected costs of these benefits are accrued over the period of employment using the same accounting methodology as used for defined benefit pension plans.

Severance plans cover employees of Austrian companies who started their service before January 1, 2003. They are entitled to receive severance payments upon termination of their employment or on reaching their pension age.

Furthermore, the Group operates severance plans in Italy and the United Arab Emirates. The benefits depend on the years of service and remuneration level. These plans are non-contributory and unfunded.

Other long-term employee benefits include jubilee schemes and pre-pension benefits. Jubilee schemes entitle the members to benefits in the form of a payment and/or additional paid holiday when reaching a defined length of service. These plans are non-contributory and unfunded.

All actuarial gains and losses relating to post-employment benefit plans are recognized in other comprehensive income. Actuarial gains and losses related to other long-term services are recognized in the income statement.

Past-service costs are recognized immediately in the income statement. Net interest expenses resulting from employee benefits are included in the consolidated income statement as part of the operating profit.

Fair Value

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants on the measurement date. The fair value measurement is based on the presumption that the transaction to sell the asset or transfer the liability takes place either on the principal market for the asset or liability or, in the absence of a principal market, on the most advantageous market for the asset or liability.

The principal or the most advantageous market must be accessible to the Group. The fair value of an asset or a liability is measured using the assumptions that market participants would use when pricing the asset or liability, assuming that market participants act in their best economic interest. A fair value measurement of a non-financial asset takes into account a market participant's ability to generate economic benefits by using the asset in its highest and best use or by selling it to another market participant that would use the asset in its highest and best use.

The Group uses valuation techniques that are appropriate in the circumstances and for which sufficient data are available to measure fair value, maximizing the use of relevant observable inputs and minimizing the use of unobservable inputs.

For assets and liabilities that are recognized in the financial statements on a recurring basis, the Group determines whether transfers have occurred between levels in the hierarchy by reassessing categorization (based on the lowest level input that is significant to the fair value measurement as a whole) at the end of each reporting period. For the purpose of fair value disclosures, the Group has determined classes of assets and liabilities on the basis of the nature, characteristics and risks of the asset or liability and the level of the fair value hierarchy as explained in note 28.

Financial Instruments

Recognition and Derecognition

Financial assets and financial liabilities are recognized on the trade date, when the Group becomes a party to the contractual provisions of the financial instrument. Financial assets are derecognized when the contractual rights to the cash flows from the financial asset expire, or when the financial asset and substantially all the risks and rewards are transferred. A financial liability is derecognized when it is extinguished, discharged, cancelled or expires.

Classification and Initial Measurement of Financial Assets

Financial assets are initially recognized at their fair value, except for those trade receivables that do not contain a significant financing component and are measured at the transaction price in accordance with IFRS 15. For all financial assets which are not subsequently measured at fair value, the fair value on initial recognition is adjusted for transaction costs (where applicable). Financial assets, other than those designated and effective as hedging instruments, are classified into the following categories:

- amortized cost,
- fair value through profit or loss (FVPL),
- fair value through other comprehensive income (FVOCI).

The classification is determined by both:

- the entity's business model for managing the financial asset,
- the contractual cash flow characteristics of the financial asset.

Subsequent Measurement of Financial Assets

Financial Assets at Amortized Cost

Financial assets are measured at amortized cost if the assets meet the following conditions (and are not designated as FVPL):

- they are held within a business model whose objective is to hold the financial assets and collect their contractual cash flows,
- the contractual terms of the financial assets give rise to cash flows that are solely payments of principal and interest on the principal amount outstanding.

After initial recognition, these are measured at amortized cost using the effective interest rate method. Discounting is omitted where the effect of discounting is immaterial. The Group's cash and cash equivalents, trade receivables (except trade receivables under the factoring program), loans granted and parts of other receivables fall into this category of financial instruments.

Financial Assets at Fair Value through Profit or Loss (FVPL)

Financial assets that are held within a different business model other than "hold to collect" or "hold to collect and sell" are categorized at FVPL. Furthermore, irrespective of the business model, financial assets whose contractual cash flows are not solely payments of principal and interest are accounted for at FVPL.

Derivative financial instruments for which hedge accounting is not applied fall into this category.

The Group has a pool of specifically designated trade receivables that are all subject to factoring. This pool of receivables represents a hold to sell business model and is measured using FVPL.

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The category also contains equity investments. Equity investments are either measured at FVPL or at FVOCI. Until December 31, 2020, Borealis elected irrevocably to classify all of its non-listed equity investments as investments at FVPL.

Furthermore, the category contains marketable securities and bonds which are classified as debt instruments. As such, marketable securities and bonds do not fulfil the solely payment of principal and interest (SPPI) criteria and have to be measured at FVPL.

Assets in this category are measured at fair value with gains or losses recognized in the income statement. The fair values of financial assets in this category are determined by reference to active market transactions or using a valuation technique where no active market exists.

Financial Assets at Fair Value through OCI (FVOCI)
The category contains equity investments. From January 1, 2021, all new non-listed equity investments, which are held for strategic purposes and not for trading, are classified as investments at FVOCI. Gains and losses on equity investments measured at FVOCI are never recycled to the income statement and they are not subject to impairment assessment. Dividends are recognized in the income statement unless they represent a recovery of part of the cost of an investment.

Impairment of Financial Assets
The Group has three types of financial assets that are subject to IFRS 9's expected credit loss (ECL) model:
- trade receivables (excluding trade receivables held to sell) and contract assets,
- cash and cash equivalents,
- debt investments carried at amortized cost.

For the measurement of the ECLs, a distinction is made between:
- financial instruments for which credit risk has not increased significantly since initial recognition ("Stage 1" – 12-month expected credit losses),
- financial instruments for which credit risk has increased significantly since initial recognition ("Stage 2" – lifetime expected credit losses).

"Stage 3" covers financial assets that have objective evidence of impairment as of the reporting date (credit impaired financial assets).

ECLs are a probability-weighted estimate of credit losses. Credit losses are measured as the present value of all cash shortfalls (i.e. the difference between the cash flows due to the entity in accordance with the contract and the cash flows that the Group expects to receive).

Lifetime ECLs are the ECLs that result from all possible default events over the expected life of a financial instrument.

12-month ECLs are the portion of ECLs that result from default events that are possible within the 12 months after the reporting date.

On each reporting date, the Group assesses whether financial assets carried at amortized cost are credit-impaired. A financial asset is credit-impaired when one or more events have occurred that have a detrimental impact on the estimated future cash flows of the financial asset.

Evidence that a financial asset is credit-impaired includes the following observable data:
- significant financial difficulty of the borrower or issuer,
- a breach of contract such as a default or being more than 90 days past due,
- it is probable that the borrower will enter into bankruptcy or other financial reorganization.

A financial asset is written off when there is no reasonable expectation of recovering the contractual cash flows, such as in the case of bankruptcy.

Trade Receivables and Contract Assets
Trade receivables and contract assets are impaired by using the simplified approach, which does not distinguish between 12-month ECLs and lifetime ECLs, but all assets are generally impaired using lifetime ECLs. For trade receivables and contract assets, the Group distinguishes between trade receivables up to 90 days past due and trade receivables more than 90 days past due. For trade receivables up to 90 days past due, the Group calculates ECLs based on external and internal rating and associated probabilities of default. Available forward-looking information is taken into account if it has a material impact on the amount of impairment recognized. Trade receivables more than 90 days past due are assessed individually and credit-impaired if necessary. See note 27 for further information on how credit risk is managed.

Loss allowances for trade receivables measured at amortized cost are deducted from the gross carrying amount of the assets and recognized in sales and distribution costs in the income statement.

Cash and Cash Equivalents
While cash and cash equivalents are also subject to the impairment requirements of IFRS 9, the identified impairment loss (based on the general approach) was immaterial.

Debt Investments Carried at Amortized Cost
The Group's debt investments at amortized cost are considered to have low credit risk and the loss allowance recognized during the period was therefore limited to 12 months of expected losses. Debt investments are considered to be low credit risk when they have a low risk of default and the counterparty has a strong capacity to meet its contractual cash flow obligations in the near term.

On that basis, the identified impairment loss (ECL based on the general approach) was immaterial. If there is any objective evidence for an impairment, debt investments are impaired individually (credit-impaired). See note 27 for further information.

Classification and Measurement of Financial Liabilities
Financial liabilities are initially measured at fair value and, where applicable, adjusted for transaction costs unless the Group designated a financial liability at fair value through profit or loss (FVPL). Subsequently, financial liabilities are measured at amortized cost using the effective interest method except for derivatives, which are carried at fair value with gains or losses recognized in the income statement (other than derivative financial instruments that are designated and effective as hedging instruments). Financial liabilities recognized for the financial guarantee contracts are subsequently measured at the higher of:
- the amount of the loss allowance determined according to the expected credit losses model and;
- the amount initially recognized less the cumulative income recognized according to IFRS 15.

All interest-related charges and, if applicable, changes in an instrument's fair value that are recognized in the income statement are included within financial expenses or financial income.

The Group's financial liabilities include loans and borrowings, lease liabilities, trade payables, liabilities from financial guarantee contracts and parts of other liabilities and derivative financial instruments.

Derivatives and Hedging Activities
Derivatives are initially recognized at fair value on the date a derivative is entered into and are subsequently re-measured at their fair value at the end of each reporting period.

The accounting for subsequent changes in fair value depends on whether the derivative is designated as a hedging instrument, and if so, the nature of the item being hedged. The Group designates certain derivatives as either:
- hedges of the fair value of recognized assets or liabilities or a firm commitment (fair value hedges),
- hedges of a particular risk associated with the cash flows of recognized assets and liabilities and highly probable forecast transactions (cash flow hedges), or
- hedges of a net investment in a foreign operation (net investment hedges).

In the periods presented, the Group does not have any fair value hedges outstanding and no derivatives are considered as net investment hedges.

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At inception of the hedge relationship, the Group documents the hedge relationship between hedging instruments and hedged items including whether changes in the cash flows of the hedging instruments are expected to offset changes in the cash flows of hedged items. The Group documents its risk management objective and strategy for undertaking its hedge transactions. A hedging relationship qualifies for hedge accounting only if all of the following hedge effectiveness requirements are met:

- there is an economic relationship between the hedged item and the hedging instrument,
- the effect of credit risk does not dominate the value changes that result from that economic relationship,
- the hedge ratio of the hedging relationship is the same as that resulting from the quantity of the hedged item that the entity actually hedges and the quantity of the hedging instrument that the entity actually uses to hedge that quantity of the hedged item.

Cash Flow Hedging

When a derivative is designated as a cash flow hedging instrument, the effective portion of changes in the fair value of the derivative is recognized in OCI and accumulated in the hedging reserve. The effective portion of changes in the fair value of the derivative that is recognized in OCI is limited to the cumulative change in fair value of the hedged item, determined on a present value basis, from inception of the hedge. Any ineffective portion of changes in the fair value of the derivative is recognized immediately in the income statement. The Group designates the full change in fair value of foreign exchange forwards as the hedging instrument in cash flow hedging relationships. As of the reporting date, Borealis has several foreign exchange forwards, but no outstanding foreign exchange options.

When the hedged forecast transaction subsequently results in the recognition of a non-financial item such as inventory, the amount accumulated in the hedging reserve and the cost of the hedging reserve is directly included in the initial cost of the non-financial item when it is recognized.

For all other hedged forecast transactions, the amount accumulated in the hedging reserve and the cost of the hedging reserve is reclassified to the income statement in the same period or periods during which the hedged expected future cash flows affect the income statement.

If the hedge no longer meets the criteria for hedge accounting or the hedging instrument is sold, expires, is terminated or is exercised, then hedge accounting is discontinued prospectively. When hedge accounting for cash flow hedges is discontinued, the amount that has been accumulated in the hedging reserve remains in equity until, for a hedge of a transaction resulting in the recognition of a non-financial item, it is included in the non-financial item's cost on its initial recognition or, for other cash flow hedges, it is reclassified to the income statement in the same period or periods as the hedged expected future cash flows affect the income statement.

If the hedged future cash flows are no longer expected to occur, then the amounts that have been accumulated in the hedging reserve are immediately reclassified to the income statement.

Net Investment Hedges

Any gain or loss on the hedging instrument relating to the effective portion of the hedge is recognized in OCI and accumulated in the reserve for unrealized exchange gains/losses. The gain or loss relating to the ineffective portion is recognized immediately in the income statement. Gains and losses accumulated in equity are reclassified to the income statement when the foreign operation is partially disposed of or sold.

Derivatives That Do Not Qualify for Hedge Accounting

Certain derivative instruments do not qualify for hedge accounting. Changes in the fair value of any derivative instrument that does not qualify for hedge accounting are recognized immediately in the income statement.

Offsetting of Financial Instruments
Financial assets and financial liabilities can be offset and the net amount is reported in the consolidated balance sheet if there is a currently enforceable legal right to offset the recognized amounts and there is an intention to settle on a net basis or to realize the assets and settle the liabilities simultaneously.

Cash Flow Statement
The consolidated cash flow statement shows the Group's cash flow provided by/used in operating, investing and financing activities. The cash flow from operating activities is calculated using the direct method. The cash flow from investing activities comprises payments made on the purchase and disposal of operations and the purchase and disposal of property, plant and equipment, intangible assets as well as financial assets. The cash flow from financing activities comprises changes in the Group's share capital, as well as loans, repayments of principals of interest-bearing debt and the payment of dividends.

Segment Reporting
A segment is a distinguishable component of the Group that is engaged in business activities from which it may earn revenues and incur expenses, whose operating results are regularly reviewed by the Executive Board (chief operating decision maker) and are used to make decisions on resources to be allocated to the segment and assess its performance and for which separate financial information is available (reportable segment).

Moreover, a geographic segment is based on risks and rewards of a particular economic environment (geographic region). The Executive Board decided to show the net sales by geographic segment next to the reportable segment.

The Executive Board has identified three reportable segments:

Polyolefins – this part of the business manufactures and markets polyolefin products in the application areas Mobility, Energy, Consumer Products, Infrastructure, Advanced Products and Business Development. Since they have similar long-term growth rates and raw material economics, as well as demonstrate similarities in other aspects required by the Standard, they are accordingly reported as one segment to the Executive Board.

Base Chemicals – activities in this segment cover production and marketing of a wide range of base chemicals, such as phenol, acetone, ethylene, propylene and similar.

Borealis NITRO – until the sale of the Nitro segment on July 5, 2023, Borealis was also engaged in the production and marketing of fertilizers, technical nitrogen and melamine. These activities were carried out by two business units – Fertilizers and Melamine. Fertilizers and Melamine provided separate reports on their performance, but based on their similar economic characteristics, as well as the size of Melamine being below the required thresholds, they had been aggregated into one reporting segment.

All other segments – Corporate, Middle East and Asia and Research & Development – are not reportable segments, as they are either not included separately in the reports provided to the Executive Board or only contain results of the associated companies. In 2022, the Company's share in fertilizer production sites in the Netherlands and Belgium ("Rosier") became a not reportable segment instead of being part of Borealis NITRO as previously. The sale of Rosier was completed on January 2, 2023.

New Accounting Standards
New and Amended Standards Adopted by Borealis
In 2023, the following amended standards became effective and have been adopted by Borealis, where effective means effective for annual periods beginning on or after that date (as endorsed by the EU):

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Standards		IASB effective date	EU effective date
New Standards and Interpretations			
IFRS 17	Insurance Contracts	January 1, 2023	January 1, 2023
Amended Standards			
IAS 1 and IFRS Practice Statement 2	Disclosure of Accounting Policies	January 1, 2023	January 1, 2023
IAS 8	Definition of Accounting Estimates	January 1, 2023	January 1, 2023
IAS 12	Deferred Tax related to Assets and Liabilities arising from a Single Transaction	January 1, 2023	January 1, 2023
IFRS 17	Initial Application of IFRS 17 and IFRS 9 – Comparative Information	January 1, 2023	January 1, 2023

The adoption of the amended standards stated above is included in the consolidated financial statements. This did not have a material impact on the financial position or performance of the Group.

Amendments to IAS 12: International Tax Reform Pillar Two Model Rules

In addition to the above-mentioned new and amended standards, the Borealis Group applies the mandatory temporary exception to recognizing and disclosing information about deferred tax assets and liabilities arising from Pillar Two income taxes as required by the amendment to IAS 12 effective for annual periods beginning on or after January 1, 2023.

The mandatory temporary exception applies retrospectively. The retrospective application does not have any impact on the Group's consolidated financial statements because no new legislation to implement the top-up tax was enacted or substantively enacted as of December 31, 2022, in any jurisdiction in which the Group operates and no related deferred tax was recognized at that date.

Amended Standards Not Yet Effective

A number of amendments to standards have been issued but are not yet effective (as adopted by the EU). Borealis will adopt the standards on the effective date. Effective means effective for annual periods beginning on or after that date (as endorsed by the EU). Borealis does not expect a material impact of these amended standards on the consolidated financial statements.

Standards		IASB effective date	EU effective date
Amended Standards			
IAS 1	Classification of Liabilities as Current or Non-current	January 1, 2024	January 1, 2024
IAS 1	Non-current Liabilities with covenants	January 1, 2024	January 1, 2024
IFRS 16	Lease Liability in a Sale and Leaseback	January 1, 2024	January 1, 2024
IAS 7 and IFRS 7	Disclosures: Supplier Finance Arrangements	January 1, 2024	
IAS 21	The Effects of Changes in Foreign Exchange Rates: Lack of Exchangeability	January 1, 2025	

Amounts

All amounts are in EUR thousand unless otherwise stated. The amounts in parentheses relate to the preceding year.

1. Segment Reporting

EUR thousand	2023				
	Polyolefins	Base Chemicals	Borealis NITRO [1]	Non-Allocated	Consolidated
Net sales by segment					
Total segment sales	5,687,200	4,339,017	688,404	193,604	10,908,225
Inter-segment sales		-3,137,600			-3,137,600
	5,687,200	**1,201,417**	**688,404**	**193,604**	**7,770,625**

Prices for Group inter-segment sales are mainly based on monthly market prices for ethylene and propylene contracts.

Segment result					
Operating profit	-78,781	162,223	-27,792	-65,017	-9,367
Measurement of discontinued operation and result from disposal			-76,785		-76,785
Net results of associated companies and joint ventures	-158,363	1,664	0	317,155	160,456
Gain from disposal of equity accounted investments					0
Financial result				42,893	42,893
Taxes on income				50,825	50,825
Non-controlling interests				38,461	38,461
Net profit for the year attributable to equity holders of the parent					**206,483**
Net sales by geographic segment (by delivery destination)					
EU countries	3,703,558	985,166	639,753	69,066	5,397,543
thereof Austria	125,334	0	119,145	58,457	302,936
Non-EU countries in Europe	760,551	175,955	40,888	28	977,422
US	254,934	35,844	3,795	11,747	306,320
Middle East and Asia	448,420	4,394	687	112,168	565,669
Other regions	519,737	58	3,281	595	523,671
	5,687,200	**1,201,417**	**688,404**	**193,604**	**7,770,625**

EUR thousand	31/12/2023				
Other information					
Segment assets	4,776,344	3,677,420	0	4,957,933	13,411,697
thereof Austria	2,158,394	1,450,631	0	4,839,841	8,448,866
Segment liabilities	0	0	0	4,185,362	4,185,362
Investments in property, plant and equipment	271,198	171,894	71,038	214,591	728,721
Depreciation, amortization and impairment	214,697	131,585	0	64,833	411,115

1) Borealis NITRO: Borealis Fertilizers, Melamine and Technical Nitrogen Products business unit.

Over 90% of the above relate to segment EU countries.

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EUR thousand	2022				
	Polyolefins	Base Chemicals	Borealis NITRO [1]	Non-Allocated	Consolidated
Net sales by segment					
Total segment sales	7,040,820	5,967,369	2,351,335	445,582	15,805,106
Inter-segment sales	0	-4,121,826	0	0	-4,121,826
	7,040,820	**1,845,543**	**2,351,335**	**445,582**	**11,683,280**

Prices for Group inter-segment sales are mainly based on monthly market prices for ethylene and propylene contracts.

Segment result					
Operating profit	525,852	243,125	339,440	-27,251	1,081,166
Measurement of discontinued operation			266,344		266,344
Net results of associated companies and joint ventures	-58,246	401	0	454,958	397,113
Gain from disposal of equity accounted investments				604,171	604,171
Financial result				103,978	103,978
Taxes on income				-342,138	-342,138
Non-controlling interests				-2,532	-2,532
Net profit for the year attributable to equity holders of the parent					**2,108,102**
Net sales by geographic segment (by delivery destination)					
EU countries	4,667,610	1,327,787	2,161,658	257,179	8,414,234
thereof Austria	196,376	174	381,362	71,934	649,846
Non-EU countries in Europe	929,462	479,464	136,747	9,664	1,555,337
US	307,937	31,644	25,950	8,490	374,021
Middle East and Asia	560,295	6,436	3,359	133,023	703,113
Other regions	575,516	212	23,621	37,226	636,575
	7,040,820	**1,845,543**	**2,351,335**	**445,582**	**11,683,280**

EUR thousand	31.12.2022				
Other information					
Segment assets	4,788,230	3,549,352	848,815	5,498,979	14,685,376
thereof Austria	2,413,308	1,652,827	590,376	4,890,720	9,547,231
Segment liabilities	0	0	0	4,893,390	4,893,390
Investments in property, plant and equipment	149,720	158,394	126,396	232,147	666,657
Depreciation, amortization and impairment	172,838	131,303	0	48,150	352,291

1) Borealis NITRO: Borealis Fertilizers, Melamine and Technical Nitrogen Products business unit.

Over 90% of the above relate to segment EU countries.

Reconciliation of reportable segments to the consolidated income statement EUR thousand	2023	2022
Total revenue for reportable segments	7,770,625	11,683,280
Elimination of discontinued operation	-688,473	-2,350,471
Net sales	**7,082,152**	**9,332,809**
Total profit for reportable segments	206,483	2,108,102
Non-controlling interests	-38,461	2,532
Elimination of discontinued operation	47,652	-497,502
Net profit for the year from continuing operations	**215,674**	**1,613,132**

2. Revenue from Contracts with Customers

EUR thousand	2023	2022
Revenue from contracts with customers	7,754,706	11,700,536
Revenue from other sources	15,919	-17,256
Net sales	**7,770,625**	**11,683,280**
Elimination of discontinued operation	-688,473	-2,350,471
Net sales from continuing operations	**7,082,152**	**9,332,809**

Borealis generates revenue primarily from the sale of Polyolefins and Base Chemicals to its customers. Revenue from other sources mainly includes gains/losses for realized cash flow hedges on net sales from foreign exchange forwards (see also note 19). Revenue from other sources relating to the discontinued operation amounted to EUR 1,108 thousand (EUR 2,505 thousand).

In the following table, revenue from contracts with customers is disaggregated by segment and geographic market. The table also includes a reconciliation of the disaggregated revenue with the Group's reportable segments (see note 1).

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EUR thousand	2023				
	Polyolefins	Base Chemicals	Borealis NITRO [1]	Non-Allocated	Consolidated
EU countries	3,696,251	985,166	638,645	1,277	5,321,339
Non-EU countries in Europe	760,551	175,955	40,888	28	977,422
US	253,135	35,844	3,795	11,747	304,521
Middle East and Asia	443,933	4,394	687	112,168	561,182
Other regions	518,543	58	3,281	68,360	590,242
Revenue from contracts with customers	**5,672,413**	**1,201,417**	**687,296**	**193,580**	**7,754,706**
Revenue from other sources	14,787	0	1,108	24	15,919
Net sales (as reported in note 1)	**5,687,200**	**1,201,417**	**688,404**	**193,604**	**7,770,625**

EUR thousand	2022				
	Polyolefins	Base Chemicals	Borealis NITRO [1]	Non-Allocated	Consolidated
EU countries	4,665,925	1,327,787	2,159,153	257,143	8,410,008
Non-EU countries in Europe	929,490	479,464	136,747	9,664	1,555,365
US	314,397	31,644	25,950	8,490	380,481
Middle East and Asia	568,267	6,436	3,359	133,023	711,085
Other regions	582,538	212	23,621	37,226	643,597
Revenue from contracts with customers	**7,060,617**	**1,845,543**	**2,348,830**	**445,546**	**11,700,536**
Revenue from other sources	-19,797	0	2,505	36	-17,256
Net sales (as reported in note 1)	**7,040,820**	**1,845,543**	**2,351,335**	**445,582**	**11,683,280**

1) Borealis NITRO: Borealis Fertilizers, Melamine and Technical Nitrogen Products business unit.

The following table provides information about receivables, contract assets and contract liabilities from contracts with customers.

EUR thousand	31.12.2023	31.12.2022
Receivables	600,266	788,440
Contract assets	7,856	8,139
Contract liabilities	42,868	50,182

Contract assets are included in other receivables and other assets, thereof EUR 0 thousand (EUR 0 thousand) current and EUR 7,856 thousand (EUR 8,139 thousand) non-current.

The Group applies the practical expedient in IFRS 15.121 and does not disclose information about remaining performance obligations that have original expected durations of one year or less.

For impairment recognized on receivables and contract assets, please see note 27 Credit Risk.

The contract liabilities mainly include advance consideration received from customers and expected volume discounts payable to customers in relation to sales made. The contract liabilities of the previous year have been realized during 2023.

3. Research and Development

At the end of the year, 579 employees (headcount) were engaged in research and development relating entirely to continuing operations (554 employees in 2022). The total cost of these activities including impairment costs, amounted to EUR 13,071 thousand compared to EUR 9,449 thousand in 2022 (see note 7). Internal development costs amounting to EUR 37,128 thousand (EUR 34,249 thousand) were capitalized as intangible assets.

4. Intangible Assets

EUR thousand	2023				
	Goodwill	Development costs	Capitalized software	Others	Total
Cost					
As of January 1	134,186	520,231	131,569	452,325	**1,238,311**
Exchange adjustments	-1,217	-1	16	-2,067	**-3,269**
Additions	0	59,850	4,422	169,946	**234,218**
Changes in consolidation scope	20,687	0	4	28,097	**48,788**
Disposals	-1,400	-563	-11,226	-133,714	**-146,903**
Transfers	0	-20,881	21,025	-37	**107**
As of December 31	**152,256**	**558,636**	**145,810**	**514,550**	**1,371,252**
Accumulated amortization					
As of January 1	1,400	319,036	102,382	181,543	**604,361**
Exchange adjustments	0	0	11	-294	**-283**
Disposals	-1,400	-563	-9,282	-2,291	**-13,536**
Amortization	0	19,425	14,115	15,786	**49,326**
Impairment	0	68	0	10,589	**10,657**
Transfers	0	0	0	-65	**-65**
As of December 31	**0**	**337,966**	**107,226**	**205,268**	**650,460**
Carrying amount as of January 1	132,786	201,195	29,187	270,782	**633,950**
Carrying amount as of December 31	**152,256**	**220,670**	**38,584**	**309,282**	**720,792**

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EUR thousand	2022				
	Goodwill	Development costs	Capitalized software	Others	Total
Cost					
As of January 1	133,648	488,333	120,639	468,140	**1,210,760**
Exchange adjustments	538	0	43	-310	**271**
Additions	0	34,930	5,449	191,532	**231,911**
Reclassification to assets of the disposal group held for sale	0	0	0	-565	**-565**
Disposals	0	0	-189	-209,610	**-209,799**
Transfers	0	-3,032	5,627	3,138	**5,733**
As of December 31	**134,186**	**520,231**	**131,569**	**452,325**	**1,238,311**
Accumulated amortization					
As of January 1	1,400	297,501	86,788	166,428	**552,117**
Exchange adjustments	0	-1	39	-1,113	**-1,075**
Reclassification to assets of the disposal group held for sale	0	0	0	-526	**-526**
Disposals	0	0	-172	-141	**-313**
Amortization	0	18,567	15,727	16,895	**51,189**
Impairment	0	2,969	0	0	**2,969**
As of December 31	**1,400**	**319,036**	**102,382**	**181,543**	**604,361**
Carrying amount as of January 1	132,248	190,832	33,851	301,712	**658,643**
Carrying amount as of December 31	**132,786**	**201,195**	**29,187**	**270,782**	**633,950**

Other intangible assets mainly include patents and licenses as well as emission rights.

Additions arising from internal development amounted to EUR 37,128 thousand (EUR 34,249 thousand). Intangible assets received by way of government grants as allowances for emissions (EU Emissions Trading System) amounted to EUR 120,369 thousand for the year 2023. Additionally, pending allowances for the year 2022 amounting to EUR 367 thousand (EUR 85,680 thousand in 2022 for 2021) were received during 2023. This was in addition to the previous year's free allocation of EUR 179,076 thousand. The emissions of the year 2022 were settled in April 2023. Emission rights purchased from external parties amounted to EUR 74 thousand (EUR 0 thousand) and returned certificates which were borrowed by external parties amounted to EUR 34,879 thousand (EUR 2,170 thousand). An equivalent of EUR 270,076 thousand (EUR 208,165 thousand) was returned to the respective EU ETS regulatory authorities for the emissions in 2022. *For details on line transfers see note 5.*

5. Property, Plant and Equipment

EUR thousand	2023			
	Production plants	Machinery and equipment	Construction in progress	Total
Cost				
As of January 1	5,911,890	123,702	1,277,834	**7,313,426**
Exchange adjustments	6,710	-237	-1,448	**5,025**
Additions	261,343	1,860	488,896	**752,099**
Changes in consolidation scope	40,506	1,585	8,031	**50,122**
Disposals	-97,248	-5,180	-9,508	**-111,936**
Transfers	238,638	8,404	-246,923	**119**
As of December 31	**6,361,839**	**130,134**	**1,516,882**	**8,008,855**
Accumulated depreciation				
As of January 1	4,057,696	95,510	0	**4,153,206**
Exchange adjustments	5,028	-151	0	**4,877**
Disposals	-94,378	-5,096	-8,686	**-108,160**
Depreciation	248,895	6,442	0	**255,337**
Impairment	14,170	0	8,686	**22,856**
Transfers	65	0	0	**65**
As of December 31	**4,231,476**	**96,705**	**0**	**4,328,181**
Carrying amount as of January 1	1,854,194	28,192	1,277,834	**3,160,220**
Carrying amount as of December 31	**2,130,363**	**33,429**	**1,516,882**	**3,680,674**

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EUR thousand	2022			
	Production plants	Machinery and equipment	Construction in progress	Total
Cost				
As of January 1	6,028,838	125,105	936,278	**7,090,221**
Exchange adjustments	-160,284	-576	-5,381	**-166,241**
Additions	93,441	3,350	435,129	**531,920**
Reclassification to assets of the disposal group held for sale	-66,115	-2,285	-1,477	**-69,877**
Disposals	-62,322	-4,570	-58	**-66,950**
Transfers	78,332	2,678	-86,657	**-5,647**
As of December 31	**5,911,890**	**123,702**	**1,277,834**	**7,313,426**
Accumulated depreciation				
As of January 1	4,051,585	94,713	0	**4,146,298**
Exchange adjustments	-110,134	-570	0	**-110,704**
Reclassification to assets of the disposal group held for sale	-61,958	-2,167	0	**-64,125**
Disposals	-60,413	-4,181	0	**-64,594**
Depreciation	257,782	7,715	0	**265,497**
Impairment	834	0	0	**834**
Impairment reversal	-20,000	0	0	**-20,000**
As of December 31	**4,057,696**	**95,510**	**0**	**4,153,206**
Carrying amount as of January 1	1,977,253	30,392	936,278	**2,943,923**
Carrying amount as of December 31	**1,854,194**	**28,192**	**1,277,834**	**3,160,220**

Production plants include the following carrying amounts: land amounting to EUR 36,962 thousand (EUR 34,811 thousand), buildings amounting to EUR 325,957 thousand (EUR 296,391 thousand), immovable machinery amounting to EUR 1,572,637 thousand (EUR 1,326,884 thousand) and immovable equipment amounting to EUR 194,807 thousand (EUR 196,108 thousand).

In 2023, borrowing costs amounting to EUR 15,973 thousand (EUR 13,978 thousand) have been capitalized, using an average interest rate of 1.5% (1.6%). Additions to property, plant and equipment that were not paid at the end of the reporting period amounted to EUR 24,736 thousand (EUR 1,174 thousand).

Additions comprise major projects advanced in 2023, which are the new world-scale propane dehydrogenation (PDH) plant at the existing production site in Kallo (Belgium), the Semicon project in Antwerp (Belgium), which supports growth in the Energy segment by creating continuous production chains and improving quality control, and the debottlenecking project of the Kallo PP3 plant project to increase PP production capacity.

The line transfers show transfers of EUR 20,988 thousand (EUR 5,733 thousand) between property, plant and equipment and intangible assets and transfers of EUR 226 thousand (EUR 86 thousand) to right-of-use assets according to IFRS 16.

As of December 31, 2023, Borealis' contractual commitments amounted to EUR 205,977 thousand (EUR 165,294 thousand) for the acquisition of property, plant and equipment (see note 21). The main increase results from the new automotive compounding capacity in Schwechat, Austria, with capital commitments of EUR 46,668 thousand (EUR 0 thousand).

Assets Pledged
Assets pledged amounted to EUR 57,427 thousand (EUR 11,419 thousand) and relate to property, plant and equipment. The commitments covered by the above assets amounted to EUR 22,617 thousand (EUR 1,439 thousand) at the end of the year.

6. Leases
The recognized right-of-use assets relate to the following types of assets:

EUR thousand	31.12.2023	31.12.2022
Production plants	594,703	553,118
Machinery and equipment	67,501	46,018
Carrying amount	**662,204**	**599,136**

Additions to the right-of-use assets, including the effect of reassessed contracts, amounted to EUR 100,853 thousand (EUR 494,801 thousand) in 2023.

Leased production plants include land, building space, immovable equipment and logistics facilities, such as storage tanks, warehouses, ports and pipelines. Leased machinery and equipment include company cars, material handling equipment, such as forklifts, railcars and an ethane marine carrier. The majority of leases by number relate to company cars with a typical term of four years and to material handling equipment with a typical term of six years. In general, leases for company cars and material handling equipment do not contain extension options, but a new contract for a replacement asset is usually put in place after the lease has ended.

Lease liabilities are presented in the balance sheet as follows:

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EUR thousand	31.12.2023	31.12.2022
Current lease liabilities	48,420	42,635
Non-current lease liabilities	630,430	563,239
Carrying amount	**678,850**	**605,874**

The lease liabilities are mainly driven by two material contracts, which together represent 66% (71%) of the carrying amount as of the reporting date: leasing contracts for hydrocarbons logistics and storage infrastructure related to the new PDH plant in Kallo, Belgium. The minimum lease term for the contracts ends in 2052. All contracts contain extension options.

The following amounts relating to leases were included in the income statement:

EUR thousand	2023	2022
Included in production costs, sales and distribution costs, administration costs and R&D costs		
Depreciation charge of right-of-use assets	54,648	47,157
Production plants	35,282	31,358
Machinery and equipment	19,366	15,799
Impairment of right-of-use assets	11,816	0
Expense relating to short-term leases	5,961	4,349
Expense relating to leases of low value assets that are not shown above as short-term leases	1,095	684
Expense relating to variable lease payments not included in lease liabilities	1,620	1,294
Included in financial expenses		
Interest expense	11,732	8,310

The total cash outflow for leases was EUR 72,688 thousand (EUR 68,272 thousand) in 2023. For details on impairment of right-of-use assets, see note 7.

Variable Lease Payments
Uncertainty arises from variable lease payments that depend on an index or a rate. Such variable lease payments are usually included in contracts for rented land, building space, pipelines or storage and aim to compensate the lessor for price inflation during the contract period. The rates relate to baskets of industry-specific price indices or to single consumer price indices of countries mainly in the euro zone. Borealis does not expect any material increases of the Group's lease liability resulting from changes in those indices.

Extension and Termination Options
Extension and termination options are included in a number of leases across the Group. These options are used to maximize operational flexibility in terms of managing contracts. The majority of extension and termination options held are exercisable only by the Group and not by the respective lessor.

In determining the lease term, management considers all facts and circumstances that create an economic incentive to exercise an extension option, or not to exercise a termination option. Extension options (or periods covered by termination options) are only included in the lease term if it is reasonably certain that the lease will be extended (or not terminated).

Potential undiscounted future cash outflows of EUR 197,017 thousand (EUR 175,312 thousand) have not been included in the lease liability because it is not reasonably certain that the leases will be extended (or not terminated). This mainly relates to the vessels and the Belgium land lease.

The assessment of reasonable certainty is only reviewed if a significant event or a significant change in circumstances occurs which affects this assessment and is within the control of the lessee. In 2023, the effect of reassessed contracts was EUR 0 thousand (EUR 3,410 thousand in 2022).

As of the reporting date, the Group has lease commitments in the amount of EUR 90,990 thousand (EUR 32,785 thousand) mainly within the scope of the long-term charter and gas storage contracts.

7. Depreciation, Amortization and Impairment

Depreciation, amortization and impairment are allocated in the income statement as follows:

EUR thousand	2023	2022
Production costs [1]		
Depreciation and amortization	306,487	306,640
Impairment	35,108	3,900
Impairment reversal	0	-20,000
Sales and distribution costs		
Depreciation and amortization	36,817	35,609
Administration costs		
Depreciation and amortization	22,482	23,183
Impairment	1,762	0
Research & development costs [1]		
Impairment	8,459	2,887
Total	**411,115**	**352,219**

1) Reclassification for 2022 figures between Production costs and Research & development costs, total amount is unchanged.

On November 30, 2023, Borealis acquired an additional stake of 48.55% in Renasci N.V. (Renasci). The agreed purchase price per share was below the purchase price of the acquisition in January 2023 which qualifies as an impairment trigger. The purchase price was considered as the basis for the determination of the fair value less cost of disposal as recoverable amount. The re-assessment of the investment led to an impairment in the amount of EUR 34,377 thousand, which was allocated to intangible assets in the amount of EUR 8,391 thousand, production plants in the amount of EUR 14,170 thousand and right-of-use assets in the amount of EUR 11,816 thousand. Please refer also to notes 4, 5, 6, 9 and 18. Against the background of a delayed ramp-up of the production capacities, the new ownership structure enables Renasci to focus on its core business and leverage synergies across the Borealis Group.

Borealis has planned a project for a mechanical recycling plant based on our Borcycle™ M technology in Schwechat. Since 2022, external planning costs for this project in the define phase have been capitalized. The business case for this project was re-evaluated in 2023. The results showed that the balance between risks and returns was not sustainable. Hence, the decision was taken to stop all activities for this mechanical recycling plant at Borealis' production site in Schwechat, which led to an impairment

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of property, plant and equipment in the amount of EUR 6,978 thousand.

On an annual basis, the Group tests whether any impairment of goodwill is required. The recoverable amount of a cash-generating unit (CGU) is determined based on value in use calculations which require the use of assumptions. The calculations use cash flow projections based on financial budgets covering a five-year period. Key assumptions of the forecasted cash flows are volumes sold and underlying industry margins. These are estimated based on industry reports issued by highly regarded business intelligence providers and management's experience. Cash flows beyond the five-year period are extrapolated using the estimated growth rates stated below. These growth rates are consistent with forecasts included in industry reports specific to the industry in which each CGU operates.

Post-tax discount rates (weighted average cost of capital) reflect specific risks relating to the relevant segments and the countries in which they operate.

The long-term growth rate is the weighted average growth rate used to extrapolate cash flows beyond the budget period. The rates are consistent with forecasts included in industry reports.

The impairment test for goodwill and fixed assets is prepared with the valuation date of November 30, 2023. The impairment test for at-equity consolidated entities is prepared with the valuation date of December 31, 2023.

The allocated goodwill for each CGU as well as parameters influencing the calculation of the value in use can be seen in the following table:

Impairment test parameters 2023

Segment	**Polyolefins**				
Cash-generating unit	Polyethylene	Polypropylene	Recyclates	Brazil [1]	South Korea [1]
Allocated goodwill in EUR thousand	50,687	42,387	33,695	4,348	21,027
Post-tax discount rate	7.5%	7.5%	7.3%	9.8%	7.5%
Growth rate	1.0%	1.3%	2.7%	2.7%	2.6%

1) The change in the allocated goodwill of the CGU compared to December 31, 2022, results entirely from foreign currency revaluation, since this unit is based on a functional currency.

Impairment test parameters 2022

Segment	**Polyolefins**				
Cash-generating unit	Polyethylene	Polypropylene	Recyclates	Brazil	South Korea
Allocated goodwill in EUR thousand	50,687	22,000	33,695	4,205	22,196
Post-tax discount rate	7.4%	7.4%	7.2%	10.2%	7.5%
Growth rate	0.9%	1.3%	1.9%	2.7%	2.4%

In addition to the parameters above, sensitivities regarding discount rates are taken into consideration. An increase of 1% in the discount rate for the CGU Recyclates will result in an impairment of EUR 1,842 thousand. Additionally, a stress case test was performed for the CGUs Polyethylene and Polypropylene with regards to adverse development of oil price.

In an accelerated decarbonization scenario ensuring the reaching of the climate goals according to the Paris Agreement, Borealis' management would not see any negative effects on the overall demand for polyolefin solutions. Pricing of polyolefin is mainly driven by base

chemical markets like naphtha, ethane and propane etc. An accelerated change in the world's energy landscape might lead to different price movements in those relevant base chemicals, temporarily affecting the profitability of some assets in the polyolefin value chain. Driven by the expected strong demand for polyolefin solutions, Borealis' management does not see any substantial negative effects on the overall integrated value chain.

8. Changes in consolidation scope

8.1. Sale of Borealis NITRO

The divestment process of the Borealis nitrogen business unit including fertilizers, technical nitrogen and melamine products (Borealis NITRO) commenced in the first quarter of 2021. This led to the reclassification of the Borealis NITRO disposal group to assets and liabilities held for sale as of March 31, 2021, without having an impact on the income statement at that time. The Group analyzed the component held for sale and determined that this represents a separate major line of business, which is why it is reported as a discontinued operation. The Company's share in fertilizer production sites in the Netherlands and Belgium ("Rosier") was not considered part of the potential sales process at that time and its assets and related liabilities did not belong to the Borealis NITRO disposal group held for sale.

The period to complete the sale was extended by events and circumstances beyond Borealis' control. The developments resulting from the war in Ukraine and related sanctions caused Borealis to decline a binding offer received from EuroChem Group AG in February 2022 and to consider other options. On June 2, 2022 Borealis received a new binding offer from AGROFERT, a.s. (Agrofert), for which the business was valued on an enterprise value basis at EUR 810,000 thousand. Borealis accepted this offer on July 28, 2022, after the mandatory information and consultation procedures with employee representatives had been finalized. On the same date, both companies entered into an agreement to sell and transfer all shares in the legal entities included in the scope of the transaction. During June 2023, Borealis and Agrofert entered into three amendment agreements related to the transaction. As of June 30, 2023, all necessary regulatory approval had been obtained and the final preparatory steps for the closing of the transaction were started.

The sale of Borealis NITRO was completed on July 5, 2023. Following the completion of the sale, Borealis no longer holds any shares in Borealis NITRO. For further information on the companies included in this disposal group, please refer to note 9 and note 33.

As of December 31, 2023, the process of agreeing on the final closing accounts (and in consequence the final purchase price) is still ongoing between Borealis and Agrofert. The transaction led to a net cash inflow of EUR 660,691 thousand in 2023, consisting of EUR 849,010 thousand net consideration received less EUR 188,319 thousand cash disposed. The transaction-related agreements stipulate additional payments between buyer and seller during future periods, including deferred instalments of the purchase price. As of December 31, 2023, related assets amounted to EUR 60,520 thousand and are included under other receivables and other assets (thereof EUR 1,777 thousand non-current). Related liabilities amounted to EUR 28,226 thousand and are included under non-current other liabilities.

Losses of EUR 76,785 thousand on the disposal of Borealis NITRO's assets and liabilities were recognized in 2023. This included impairment losses of EUR 69,960 thousand from the re-measurement of the NITRO disposal group at fair value less cost to sell, recognized prior to completion and applied to reduce the carrying amount of property, plant and equipment within the Borealis NITRO disposal group. The remaining losses largely arose from the work on the closing accounts and determination of the final purchase price and from the fair-value re-measurement of receivables related to certain pass-through elements under the Share Purchase Agreement.

Furthermore, tax income of EUR 55,041 thousand (tax expense of EUR 78,899 thousand) has been recognized in the profit from discontinued operation. This includes deferred tax income related to a re-measurement of the expected liquidation loss of Borealis France S.A.S., which owns the French companies in the Borealis NITRO disposal group. It also includes tax income arising from the re-measurement of tax liabilities for the sale of Austrian companies in the Borealis NITRO disposal group.

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The results of the discontinued operation are shown in the table below, whereas 2023 relates to the period until disposal:

EUR thousand	2023	2022
Total sales	688,473	2,374,822
Elimination of inter-segment revenue	0	-24,351
Net sales	**688,473**	**2,350,471**
Other operating income	71,764	261,990
Total sales and other income	**760,237**	**2,612,461**
Total expenses	-787,126	-2,258,818
Elimination of inter-segment expenses	0	24,351
Expenses	**-787,126**	**-2,234,467**
Operating (loss) profit	**-26,889**	**377,994**
Financial result	335	2,808
Measurement of discontinued operation and result from disposal	-76,785	266,344
Profit (loss) before taxation	**-103,339**	**647,146**
Taxes on income	646	-70,745
Taxes on measurement of discontinued operation	55,041	-78,899
Profit (loss) from discontinued operation, net of tax	**-47,652**	**497,502**
Attributable to:		
Non-controlling interests	0	0
Equity holders of the parent	-47,652	497,502

The following table shows the effect of the Borealis NITRO disposal on the Group's financial position.

EUR thousand	2023
Intangible assets	-125,950
Property, plant and equipment	-628,177
Right-of-use assets	-25,168
Investments in associated companies and joint ventures	-3,266
Other investments	-16,103
Other receivables and other assets (non-current)	-9,133
Deferred tax assets	-1,461
Inventories	-139,079
Trade receivables	-118,053
Income tax receivables	-11,159
Other current receivables and other current assets	-122,847
Cash and cash equivalents	-188,319
Non-current lease liabilities	6,139
Non-current deferred tax liabilities	27,559
Non-current employee benefits	46,626
Non-current provisions	24,961
Other non-current liabilities	3,987
Current lease liabilities	3,685
Trade payables	164,099
Current income taxes	58,587
Current provisions	13,924
Other current liabilities	145,701
Net assets and liabilities	**-893,447**
Consideration received, satisfied in cash	849,010
Cash and cash equivalents disposed of	-188,319
Net cash inflows	**660,691**

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8.2. Sale of Rosier

On September 26, 2022, Borealis and YILDIRIM Group's YILFERT Holding announced that they had signed a binding agreement for the acquisition of Borealis' shares in Rosier S.A. (Rosier). The Rosier disposal group was consequently reclassified to assets and liabilities held for sale. Impairment losses of EUR 2,984 thousand for write-down of the Rosier disposal group to the lower of its carrying amount and its fair value less costs to sell have been included in production costs for the year 2022. The impairment losses have been applied to reduce the carrying amount of property, plant and equipment within the Rosier disposal group. Whilst the component held for sale represents a single cash-generating unit (CGU), it is neither a separate major line of business nor a geographical area of operations for Borealis. The Group therefore concluded not to report Rosier as a discontinued operation.

The sale of Borealis' 98.09% participation in Rosier S.A. (Rosier) to YILDIRIM Group was completed on January 2, 2023. Following the completion of the sale, Borealis no longer holds any shares in Rosier. Related to the preparation of the closing accounts and the determination of the final purchase price, losses of EUR 2,716 thousand on the disposal of Rosier's assets and liabilities were recognized as part of production costs during the first six months of 2023.

The following table shows the effect of the Rosier disposal on the Group's financial position. The deconsolidated assets and liabilities relate to Rosier and its fully owned subsidiaries, Rosier France S.A.S. and Rosier Nederland B.V.

EUR thousand	2023
Intangible assets	-47
Property, plant and equipment	-3,217
Right-of-use assets	-1,049
Deferred tax assets	-852
Inventories	-32,562
Trade receivables	-8,396
Other current receivables and other current assets	-1,520
Cash and cash equivalents	-4,194
Non-current lease liabilities	749
Provisions	635
Other non-current liabilities	29
Current lease liabilities	375
Trade payables	9,204
Other current liabilities	2,432
Net assets and liabilities	**-38,413**
Consideration received, satisfied in cash	34,942
Cash and cash equivalents disposed of	-4,194
Net cash inflows	**30,748**

8.3. Business Combination Renasci

On January 11, 2023, Borealis via Borealis Circular Solutions Holding GmbH, Vienna, Austria, acquired an additional stake of 22.59% of the shares in Renasci N.V. (Renasci). The increased shareholding was achieved by means of a capital contribution for newly issued shares and through the purchase of shares from the sellers, Ouroboros Invest N.V. and Carlo Vermeersch, both based in Belgium.

Together with a shareholding of 27.42% already owned before the acquisition in January 2023, Borealis became the majority owner of Renasci, holding 50.01% of the share capital in total.

Following the step acquisition, Borealis holds a majority of shares, which all have the same rights. Borealis obtained power and control of Renasci, as the relevant activities are firstly directed by voting rights and veto rights are protective rights according to IFRS 10 only. Hence, Borealis obtained control of Renasci in line with IFRS 10, which led to the discontinuation of the use of the equity method according to IAS 28 and the application of the rules for business combinations according to IFRS 3.

Renasci introduces an innovative process that combines multiple compatible waste treatment technologies, allowing for maximum material and energy recovery. The process offers a totally new approach to waste processing by converting plastic containing waste streams such as demolition waste and specific household waste streams into usable end products, instead of sending them to landfill.

The acquisition has been accounted for using the acquisition method. The acquisition date fair value of the acquired assets and liabilities is considered final. The consolidated financial statements include the results of Renasci for the twelve-month period from the acquisition date.

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The fair value of the identifiable assets and liabilities of Renasci as at the date of acquisition were:

EUR thousand	Fair value recognized on acquisition
Assets	
Non-current assets	
Intangible assets	19,343
Property, plant and equipment	34,961
Right-of-use assets	28,340
Investments in associated companies and joint ventures	52,500
Current assets	
Inventories	416
Trade receivables	2,222
Other receivables and other assets	183
Cash and cash equivalents	7,037
Total assets acquired	**145,002**
Liabilities	
Non-current liabilities	
Loans and borrowings	14,998
Lease liabilities	23,285
Deferred tax liabilities	4,357
Other liabilities	9,823
Current liabilities	
Loans and borrowings	5,279
Lease liabilities	2,519
Trade payables	4,000
Other liabilities	224
Total liabilities	**64,485**
Total identifiable assets fair value	**80,517**
Attributable to Borealis	40,266
Fair value of interests previously held	24,766
Consideration transferred	15,500
Percentage acquired	22.59%

The recognized assets and liabilities relate to Renasci and its fully owned subsidiaries Renasci Oostende Holding N.V., Renasci Oostende Recycling N.V. and Renasci Oostende SCP N.V. The consideration transferred for 22.59% of the share capital of Renasci comprised a cash payment of EUR 10,500 thousand for the purchase of 35,719 shares and a capital contribution for newly issued shares of EUR 5,000 thousand, both in January 2023. The cash acquired with this acquisition amounted to EUR 7,037 thousand, resulting in a net cash outflow on the acquisition of EUR 8,463 thousand. The transaction costs amounted to EUR 212 thousand in total, of which EUR 107 thousand were expensed in 2023 and are included in administrative costs in the income statement. They are also part of operating cash flows in the statement of cash flows for the year 2023.

The fair value of the trade receivables acquired through the business combination amounted to EUR 2,222 thousand and have been collected in full. From the date of the acquisition until the reporting date, Renasci contributed EUR 1,187 thousand in revenue and EUR -79,854 thousand to the net result of the Group.

The fair value re-measurement of the interests previously held led to an expense of EUR 20,433 thousand which has been considered in the line item "Financial expenses" in the consolidated income statement. For more details see note 18.

Following the acquisition of the majority stake in the first half of the year 2023, Borealis via Borealis Circular Solutions Holding GmbH, Vienna, Austria, acquired an additional stake of 48.55% of the shares in Renasci on November 30, 2023. The additional shareholding was acquired from the previous shareholders Ouroboros Invest NV, Vlaamse Energieholding BV, Carlo Vermeersch, VCA Invest BV and VNI Invest BV, all based in Belgium. Together with this acquisition, Borealis has a total shareholding of 98.56% as per year end. As the agreed price per share was below the purchase price of the acquisition back in January 2023, an impairment trigger was identified. For more details, see note 7.

8.4. Business Combination Rialti

On October 31, 2023, Borealis via Borealis AG, Vienna, Austria, acquired 100% of the shares of Rialti S.p.A., Taino, Italy (Rialti) from the Sagittarius Holding S.r.l. (the seller).

Rialti is one of the European market leaders specializing in the production of sustainable polypropylene (PP) compounds with a focus on mechanically recycled PP feedstock from post-industrial and post-consumer waste. With over thirty years' experience, Rialti utilizes its annual capacity of 50,000 metric tons to make injection molding and extrusion PP compounds with applications in different industries, including automotive, appliances and construction.

The acquisition will bring significant expertise and capacity to Borealis, expanding its PP compounding business and, in particular, increasing its volume of PP compounds based on mechanical recyclates. The improved capacity will strengthen Borealis' specialty and circular portfolios, enabling the company to meet customer demand for an ever-wider range of sustainable, high-performance solutions.

The acquisition has been accounted for using the acquisition method. The acquisition date fair value of the acquired assets and liabilities is preliminary in the items tangible and intangible assets as well as loans and borrowings, linked to that also deferred tax assets, and may be adjusted as additional information is obtained. The consolidated financial statements include the results of Rialti for the two-month period from the acquisition date.

Assets acquired and liabilities assumed

The fair value of the identifiable assets and liabilities of Rialti as at the date of acquisition were:

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EUR thousand	Fair value recognized on acquisition
Assets	
Non-current assets	
Tangible assets	15,161
Intangible assets	8,759
Right-of-use assets	843
Other receivables and other assets	122
Deferred tax assets	52
Current assets	
Inventories	7,296
Trade receivables	13,765
Other receivables and other assets	491
Cash and cash equivalents	10,963
Total assets acquired	**57,452**
Liabilities	
Non-current liabilities	
Loans and borrowings	1,792
Lease liabilities	852
Employee benefits	1,143
Current liabilities	
Loans and borrowings	1,528
Trade payables	5,845
Income taxes	1,104
Other liabilities	1,212
Total liabilities	**13,476**
Total identifiable assets fair value	**43,976**
Total purchase price consideration	64,663
Goodwill arising on acquisition	20,687
Percentage acquired	100%

The total acquisition costs of 100% of the share capital of Rialti comprised an initial cash payment in October 2023 of EUR 56,663 thousand, contingent considerations of EUR 8,000 thousand and costs of EUR 1,194 thousand directly attributable to the acquisition (thereof EUR 813 thousand in 2023). The cash acquired with this acquisition amounted to EUR 10,963 thousand, resulting in net cash outflow on the acquisition of EUR 45,485 thousand in 2023. The transaction costs have been expensed and are included in administrative expenses in the income statement and are part of operating cash flows in the statement of cash flows.

Borealis agreed with the seller to transfer two additional considerations up to a total maximum amount of EUR 8,000 thousand to the seller if the agreed requirements are met. Borealis has recognized the full amount as part of the purchase price at closing, since the management was certain that the requirements will be met. As of December 31, 2023, the aforementioned assumption remained unchanged.

As of December 31, 2023, EUR 8,146 thousand has been collected from the trade receivables acquired through the business combination, which had a fair value of EUR 13,765 thousand. From the date of the acquisition until the year end, Rialti contributed EUR 4,662 thousand in revenue and EUR 5 thousand to the net result of the Group. If the combination had taken place at the beginning of the year, the revenue contribution from Rialti would have been EUR 54,711 thousand and the contribution to the net result would have been EUR 5,117 thousand.

The goodwill of EUR 20,687 thousand comprises the value of the expected synergies and other benefits from combining the assets and activities of Rialti with those of Borealis and has been allocated to the cash generating unit Polypropylene. None of the recognized goodwill is deductible for income tax purposes.

8.5. Other Changes

Residual changes of subsidiaries in 2023 are summarized below.

Following the acquisition of 0.25% of the shares in DYM SOLUTION CO., in 2023, Borealis has a 100% shareholding at the reporting date.

For a full list of all subsidiaries, please refer to note 33.

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9. Investments in Associated Companies and Joint Ventures

	Shares in associated companies and joint ventures	
EUR thousand	**2023**	**2022**
Carrying amount as of January 1	2,796,851	2,526,406
Exchange adjustments	-97,499	165,067
Changes in consolidation scope - additions	52,500	0
Changes in consolidation scope - disposal	-24,766	0
Investments and aquisitions	93,956	433,044
Disposals	-1,250	-166,229
Dividends received	-454,887	-565,892
Impairments	-43,724	0
Net results of associated companies and joint ventures	160,456	397,113
Changes in equity reserves	-2,379	7,342
Carrying amount as of December 31	**2,479,258**	**2,796,851**

Borealis acquired additional stakes in Renasci N.V. (Renasci) in 2023. Borealis now has control and Renasci is no longer classified as an associated company. Part of the identified assets of Renasci are shares in associated companies: 21.25% share in BlueAlp Holding B.V., based in Groot-Ammers (the Netherlands) and a 25% share in Petrogas International B.V. based in Eindhoven (the Netherlands). For further information on the business combination for Renasci, please refer to note 8.3.

The impairments have been considered in the line item "Financial expenses" in the consolidated income statement. For further information, please refer to notes 7, 8.3 and 18.

The Group presents the investments in associated companies and joint ventures as follows:

EUR thousand	2023	2022
Non-material associated companies	33,506	48,407
Material joint ventures		
Borouge PLC	1,475,432	1,651,574
Bayport Polymers LLC (Baystar)	585,641	673,916
Non-material joint ventures	384,679	422,954
Carrying amount as of December 31	**2,479,258**	**2,796,851**

Due to revised control assessment as part of the financial restructuring for the preparation of the initial public offering of Borouge PLC, all Borouge entities are shown under "Joint ventures" from 2022 onwards. Borouge 4 LLC (Borouge 4) with a carrying amount of EUR 360,759 thousand is considered as a non-material joint venture as Borouge 4 is a growth project and does not contribute any material results to the Group yet.

The investment in Kilpilahden Voimalaitos Oy is part of the Base Chemicals segment. The shares in Bayport Polymers LLC (Baystar) and BlueAlp Holding B.V. are included in the Polyolefins segment. All other investments in associated companies and joint ventures are part of the non-allocated segment.

Associated Companies
The Group has the following investments in associated companies:

		Ownership in %	
Associated companies	**Country**	**2023**	**2022**
AZOLOR S.A.S. [1) 2)]	France	–	34.00
BlueAlp Holding B.V.	The Netherlands	21.25	–
Chemiepark Linz Betriebsfeuerwehr GmbH [1) 2)]	Austria	–	47.50
Franclade Agrifluides S.A.S. (FASA) [1) 2)]	France	–	49.98
Industrins Räddningstjänst i Stenungsund AB [1)]	Sweden	25.00	25.00
Kilpilahden Voimalaitos Oy	Finland	20.00	20.00
Neochim AD [2)]	Bulgaria	–	20.30
Petrogas International B.V.	The Netherlands	25.00	–
Renasci N.V. [3)]	Belgium	–	27.42
Société d'Intérêt Collectif Agricole Laignes Agrifluides (SICA Laignes Agrifluides) [1) 2)]	France	–	49.90
Société d'Intérêt Collectif Agricole par Actions Simplifiée de Gouaix (SICA de Gouaix) [1) 2)]	France	–	25.00

1) Excluded from consolidation at equity due to immateriality // 2) Divestment of Borealis NITRO companies in 2023 // 3) Subsidiary since January 11, 2023

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Summary of financial information for non-material associated companies, adjusted for ownership by the Group:

EUR thousand	2023	2022
Net profit for the year	1,088	-2,763
Other comprehensive income	0	0
Total comprehensive income	**1,088**	**-2,763**

Joint Ventures

The Group has the following investments in joint ventures:

		Ownership in %	
Joint ventures	**Country**	**2023**	**2022**
Borouge Pte. Ltd.	Singapore	45.76	45.76
Borouge PLC	United Arab Emirates	36.00	36.00
Borouge 4 LLC	United Arab Emirates	40.00	40.00
Bayport Polymers LLC (Baystar)	US	50.00	50.00
BTF Industriepark Schwechat GmbH [1]	Austria	50.00	50.00
Recelerate GmbH [1]	Germany	50.00	50.00
C2PAT GmbH [1]	Austria	25.00	25.00
C2PAT GmbH & Co KG [1] [2]	Austria	–	25.00
PetroPort Holding AB	Sweden	50.00	50.00

1) Excluded from consolidation at equity due to immateriality // 2) C2PAT GmbH & Co KG has been merged into C2PAT GmbH as of December 31, 2023.

Material Joint Venture Borouge PLC

Borouge investments are a leading provider of innovative, value-creating plastic solutions for energy, infrastructure, automotive, healthcare and agriculture industries as well as advanced packaging applications, and are also responsible for marketing and sales of the products produced.

Shares of Abu Dhabi Polymers Company Limited, United Arab Emirates were transferred into Borouge PLC before the ADX listing of Borouge PLC in 2022. The following tables illustrate the full summarized financial information for Borouge PLC in 2023, for 2022, the table illustrates the required financial information for Abu Dhabi Polymers Company Limited until May 31, 2022, and for Borouge PLC starting from June 1, 2022:

	Abu Dhabi Polymers Company Limited	
EUR thousand	**2023**	**2022**
Net sales	0	2,141,639
Depreciation, amortization, impairments and write-ups	0	-193,554
Interest income	0	295
Interest expenses	0	-19,980
Taxes on income and profit	0	-250,003
Net profit for the year	0	489,098
Other comprehensive income	0	0
Total comprehensive income	**0**	**489,098**
Dividends received by Borealis from Borouge	0	411,397

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	Borouge PLC	
EUR thousand	**2023**	**2022**
Non-current assets	6,270,961	6,842,022
Current assets	1,823,062	2,757,735
thereof cash and cash equivalents	320,290	1,072,417
Non-current liabilities	-3,165,188	-4,069,809
thereof non-current financial liabilties (excl. other liabilities and provisions)	-2,988,327	-3,884,196
Current liabilities	-814,956	-964,413
thereof current financial liabilities (excl. trade payables, other liabilities and provisions)	-7,535	-4,213
Equity	**4,113,879**	**4,565,535**
Borealis share	36%	36%
Share of net assets	1,480,997	1,643,593
Adjustments	-5,565	7,981
Carrying amount as of December 31	**1,475,432**	**1,651,574**
Net sales	5,355,909	3,795,965
Depreciation, amortization, impairments and write-ups	-529,150	-324,168
Interest income	24,799	18,750
Interest expenses	-204,299	-91,017
Taxes on income and profit	-370,233	-270,499
Net profit for the year	918,343	707,922
Other comprehensive income	-6,075	19,618
Total comprehensive income	**912,268**	**727,541**
Dividends received by Borealis from Borouge	438,610	118,346
Market capitalization as of December 31	18,294,835	19,413,842

Material Joint Venture Baystar

Baystar passed a most significant milestone in October 2023 with the start-up of the new 625,000 metric ton/year Borstar® polyethylene (PE) unit at our production site in Pasadena, Texas, US with the target to deliver a broad range of products to meet the growing global demand for sustainable and high energy efficient plastic products.

Baystar also started its operation of the new one million metric ton/year ethane cracker at Port Arthur, Texas, US in 2022. This cracker is processing ethane, which is abundantly available and competitively priced in the US and will supply our Baystar PE units.

The following table illustrates the full summarized financial information for Baystar:

EUR thousand	2023	2022 [1]
Non-current assets	3,893,727	4,002,027
Current assets	351,703	188,084
thereof cash and cash equivalents	41,273	30,326
Non-current liabilities	-2,683,318	-2,442,668
thereof non-current financial liabilties (excl. other liabilities and provisions)	-2,681,093	-2,441,217
Current liabilities	-342,711	-351,791
thereof current financial liabilities (excl. trade payables, other liabilities and provisions)	-194,597	-205,523
Equity	**1,219,401**	**1,395,652**
Borealis share	50%	50%
Share of net assets	609,700	697,826
Adjustments	-24,059	-23,910
Carrying amount as of December 31	**585,641**	**673,916**
Net sales	576,947	600,718
Depreciation, amortization, impairments and write-ups	-134,585	-62,217
Interest income	2,405	991
Interest expenses	-107,024	-22,824
Taxes on income and profit	-176	-1,070
Net profit for the year	-316,654	-116,492
Other comprehensive income	0	0
Total comprehensive income	**-316,654**	**-116,492**
Dividends received by Borealis from Baystar	0	0

1) The 2022 balance sheet figures for Baystar have been updated as the figures reported in 2022 were preliminary.

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Summary of financial information for non-material joint ventures, adjusted for ownership by the Group:

EUR thousand	2023	2022
Net profit for the year	-12,908	7,631
Other comprehensive income	-191	280
Total comprehensive income	**-13,099**	**7,910**

Please refer to note 30 for information related to transactions with the associated companies and joint ventures.

10. Other Investments, Other Receivables and Other Assets and Loans Granted

Other investments include interests in infrastructure companies in Germany and the participation in Bockatech Limited, a UK-based company. Bockatech Limited commercializes Bockatech EcoCore, which is a patented manufacturing technology for foamed articles, using Borealis HMS (high melt strength) polypropylene. Other investments also include subsidiaries that are not consolidated on a materiality basis and which are mainly distribution and blending entities (see note 28).

The non-current other receivables and other assets mainly consist of marketable securities and bonds (long-term deposits for statutory, regulatory and tax requirements), financial guarantee receivables, a prepayment to an associated company, contract assets and government grant receivables in Belgium. The loans granted include shareholder loans with Bayport Polymers LLC amounting to EUR 697,633 thousand (EUR 653,994 thousand), with Borouge 4 LLC amounting to EUR 150,790 thousand (EUR 0 thousand) and with Kilpilahden Voimalaitos Oy amounting to EUR 52,470 thousand (EUR 40,022 thousand). For further details, please refer to note 30.

As part of its chemical recycling strategy, Borealis has made payments of EUR 11,500 thousand to its associated company BlueAlp Holding B.V. (BlueAlp) as pre-payment for license fees in connection with future plants. Borealis initiated a project to develop a plant based on BlueAlp technology at its site in Stenungsund, Sweden. The project was not transitioned into the next engineering phase, as the feasibility study revealed insufficient project economics and high risks at this stage. As a consequence, the timeline for building of future plants envisaged by the agreement will not be met. Therefore the payments of EUR 11,500 thousand to BlueAlp have been written off.

Other current receivables also include receivables related to the sale of Borealis NITRO amounting to EUR 58,743 thousand (see note 8.1).

11. Taxation

EUR thousand	2023	2022
Taxes		
Income tax payable	-22,078	-186,171
Change in deferred tax	14,342	-3,281
Adjustment to prior year's tax charge	2,874	-3,042
Taxes on income	**-4,862**	**-192,494**

Out of the total income tax payable of EUR 22,078 thousand (EUR 186,171 thousand), an amount of EUR 1,141 thousand (EUR 166,454 thousand) relates to income tax payable accrued by members of the Austrian tax group headed by OMV Aktiengesellschaft.

Calculation of tax expenses at statutory rates for tax expense accounting at the effective group tax rate:

EUR thousand	2023		2022	
Tax expenses at statutory rates (weighted average tax rate of the Group)	**24%**	**53,823**	**25%**	**452,151**
Tax effect of result in associated companies	-33%	-72,059	-7%	-117,530
Tax effect of gain from disposal of equity accounted investments	0%	0	-8%	-151,043
Tax effect of permanent differences	-2%	-3,531	0%	6,440
Adjustment of valuation allowance/reassessment of unrecognized tax assets	17%	37,392	0%	2,944
Prior year's adjustments and other effects	-5%	-10,763	0%	-468
Taxes on income	**2%**	**4,862**	**11%**	**192,494**

The effective tax rate for 2023 was impacted by impairments of deferred tax assets on tax losses carried forward and tax losses in the year for which no deferred tax asset was recognized.

	Balance sheet		Income statement	
EUR thousand	2023	2022	2023	2022
Deferred tax assets				
Property, plant and equipment	6,819	4,182	2,643	-175
Intangible assets	1,479	318	1,173	-692
Adjusted depreciation for tax purposes	**8,298**	**4,500**		
Revaluation of cash flow hedges	4,295	0	945	-2,168
Net gain on hedge of a net investment	11,033	12,348	0	0
Valuation of inventories for tax purposes	9,970	8,456	1,587	15,260
Fair values compared to tax values	**25,298**	**20,804**		
Interest-bearing liabilities	150,765	140,915	9,846	99,764
Employee benefits	47,199	51,142	-7,633	2,485
Other provisions	7,639	5,548	2,058	-3,199
Financial assets	3,445	3,677	-232	-290
Tax impairments according to Section 12 (3)(2) of the Austrian Corporate Income Tax Act (KStG)	13,218	882	12,336	-329
Other assets and liabilities	16,072	4,491	11,647	2,272
Other timing differences	**225,770**	**206,655**		
Losses available for offsetting against future taxable income	**324,673**	**313,548**	-8,294	198,522
Netting with deferred tax liabilities	**-484,300**	**-521,713**		
Deferred tax assets	**112,307**	**23,794**	**26,076**	**311,450**

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EUR thousand	Balance sheet 2023	Balance sheet 2022	Income statement 2023	Income statement 2022
Deferred tax liabilities				
Property, plant and equipment	-370,340	-342,061	-28,078	-98,710
Intangible assets	-71,279	-54,618	-16,661	1,653
Accelerated/adjusted depreciation for tax purposes	**-441,619**	**-396,679**		
Revaluation of cash flow hedges	0	-74,964	13,968	2,185
Valuation of inventories for tax purposes	-16,030	-14,224	-1,806	-3,644
Fair values compared to tax values	**-16,030**	**-89,188**		
Interest-bearing liabilities	-11,160	-12,348	1,188	-3,105
Employee benefits	-9,950	-11,559	1,609	-5,983
Other provisions	0	-71	71	464
Financial assets	-168,316	-187,984	13,432	-187,816
Other assets and liabilities	-30,158	-38,618	4,543	-19,775
Other timing differences	**-219,584**	**-250,580**		
Tax effect on outside basis difference	**0**	**-49,980**	0	0
Netting with deferred tax assets	**484,300**	**521,713**		
Deferred tax liabilities	**-192,933**	**-264,714**	**-11,734**	**-314,731**
Net tax asset/liability	**-80,626**	**-240,920**	**14,342**	**-3,281**

Out of the deferred tax assets recognized for losses available for offsetting against future taxable income, an amount of EUR 5,942 thousand (EUR 0 thousand) relates to a carry forward of negative tax results of a member of the Austrian tax group headed by OMV Aktiengesellschaft.

Deferred tax assets of EUR 129,965 thousand (EUR 110,546 thousand) on the expected liquidation loss of a French entity which owned the French companies have been recognized as losses available for offsetting against future taxable income. As this liquidation loss is related to the Borealis NITRO disposal, the resulting gain has been recognized in the Consolidated Income Statement in the line item Profit (loss) from discontinued operation, net of tax.

In 2022, deferred tax liabilities on outside basis differences of EUR 49,980 thousand arising from the sale of Austrian companies in the course of the Borealis NITRO disposal have been recognized. As the sale materialized in 2023, this deferred tax liability has been reverted. The resulting tax burden from the sale of those companies has been expensed via the line item "Income tax payable" in the Consolidated Income Statement in 2023.

In addition to capitalized tax assets, the Group has unrecognized tax losses amounting to EUR 771,373 thousand (EUR 496,458 thousand) and unrecognized temporary differences of EUR 29,292 thousand (EUR 0 thousand), where current forecasts indicate insufficient future profits in the foreseeable future, thus resulting in unrecognized tax assets of EUR 199,329 thousand (EUR 137,295 thousand). The losses carried forward have no expiry date.

EUR thousand	2023	2022
Deductible temporary differences	7,323	0
Tax losses carried forward	192,006	137,295
Total unrecognized net tax assets	**199,329**	**137,295**

The recognized deferred tax assets are expected to be utilized against future profits based on internal projections in the relevant jurisdictions. Deferred tax expenses as a result of changes in estimates of deferred tax assets due to forecasts indicating insufficient future profits amount to EUR 17,325 thousand (EUR 257 thousand). Dividend payments to Borealis AG, to Borealis France S.A.S. and Borealis Middle East Holding GmbH by their subsidiaries have no tax effect for the Borealis Group. The temporary differences relating to subsidiaries amount to EUR 0 thousand (EUR 0 thousand), for which no deferred tax liability has been recognized in accordance with IAS 12.39 Income Taxes.

Pillar Two legislation has been enacted or substantively enacted in certain jurisdictions in which Borealis operates. Under the legislation, the parent company will be required to pay a top-up tax on profits of its subsidiaries that are taxed at an effective tax rate of less than 15%. The legislation will be effective for Borealis' financial year beginning on January 1, 2024. The Group is within the scope of the enacted or substantively enacted legislation and has performed an assessment of the potential exposure to Pillar Two income taxes.

The assessment of the potential exposure to Pillar Two income taxes is based on the most recent tax filings, country-by-country reporting and financial statements of the constituent entities as well as on the mid-term planning data. Based on the assessment, the Pillar Two effective tax rates in most of the jurisdictions in which the Group operates are above 15% and no material exposure to Pillar Two income taxes is expected.

Tax Contingencies

Some Borealis Group companies have appealed against certain tax audit reassessments and it is uncertain whether those appeals will be successful. Management's opinion is that the Company is in compliance with all applicable regulations.

12. Inventories

EUR thousand	2023	2022
Finished products	887,421	1,008,200
Raw materials and consumables	415,885	471,316
Total	**1,303,306**	**1,479,516**

The costs for the consumption of inventories recognized during the period in the income statement amounted to EUR 5,769,929 thousand (EUR 8,715,664 thousand), including impairment costs of EUR 30,969 thousand (EUR 67,986 thousand).

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13. Equity

Share Capital and Contributions by Shareholders

EUR thousand	Share capital 2023	Share capital 2022	Contributions by shareholders 2023	Contributions by shareholders 2022
Balance as of January 1	300	300	1,599,097	1,599,097
Capital increase (decrease)	0	0	0	0
Balance as of December 31	**300**	**300**	**1,599,097**	**1,599,097**

The share capital of Borealis AG (parent company) amounts to EUR 300,000.00 (EUR 300,000.00) and is divided into 300,000 (300,000) fully paid shares with a par value of EUR 1.00, none of which have special voting rights.

The contributions by shareholders amounted to EUR 1,599,097 thousand (EUR 1,599,097 thousand).

Borealis AG is owned:
- 39.00% by OMV Borealis Holding GmbH, Trabrennstrasse 6–8, 1020 Vienna, Austria,
- 32.67% by OMV Downstream GmbH, Trabrennstrasse 6–8, 1020 Vienna, Austria,
- 3.33% by OMV Aktiengesellschaft, Trabrennstrasse 6–8, 1020 Vienna, Austria, and
- 25.00% by MPP Holdings GmbH, Trabrennstrasse 6–8, 1020 Vienna, Austria.

A 3.33% share in Borealis AG was transferred from Abu Dhabi National Oil Company (ADNOC) P.J.S.C., P.O. Box 898, Abu Dhabi, United Arab Emirates to MPP Holdings GmbH, Trabrennstrasse 6-8, 1020 Vienna, Austria on December 26, 2023.

The ultimate controlling party is OMV Aktiengesellschaft, Vienna, Austria. Distribution of dividends to its shareholders does not have any tax effect for Borealis AG.

The Group's objectives are to safeguard the entity's ability to continue as a going concern and to provide an adequate return to its shareholders. The Group monitors capital on the basis of the gearing ratio. This gearing ratio is calculated as net interest-bearing debt divided by total equity. The Group's target is to keep the gearing ratio within a range of 35%–65% to meet the business needs of the Group. As of year end, the gearing ratio stands at -2% (-1%), significantly below the target range. This gearing reflects a very strong balance sheet.

Other
The effect from changes in the consolidation scope for 2023 in the Consolidated Statement of Changes in Equity relates to the sale of Rosier S.A., the sale of Borealis NITRO and the acquisition of Renasci N.V. For further details, please refer to note 8.

A resolution was passed to distribute EUR 400,000 thousand in 2023 from the 2022 result; EUR 13,333 thousand thereof has not yet been paid to the shareholders (ADNOC) and is included in the balance sheet item Other liabilities.

As of December 31, 2022, the cumulative amount recognized in other comprehensive income from the disposal group was EUR -20,636 thousand, thereof EUR -877 thousand related to items that may be reclassified subsequently to the income statement. In 2023, the disposals are included in the line Changes in the consolidation scope.

14. Personnel and Share Based Payments

EUR thousand	[illegible] 2023	2022
Personnel expenses		
Salaries and wages	504,998	475,818
Costs of defined contribution plans	29,618	28,859
Costs of defined benefit plans and other long-term employee benefits	30,899	26,828
Social security costs	116,083	110,594
Other personnel expenses	28,484	28,073
Total	**710,082**	**670,172**

Costs of defined benefit plans and other long-term employee benefits are recognized in the production costs at EUR 26,747 thousand (EUR 23,904 thousand), sales and distribution costs at EUR 2,918 thousand (EUR 2,177 thousand), administration costs at EUR 1,178 thousand (EUR 719 thousand) and research and development costs at EUR 56 thousand (EUR 28 thousand).

Number of employees (headcount) by country as of December 31	[illegible] 2023	2022 continuing operations	2022 Total
Austria	1,492	1,432	2,274
Belgium	1,311	1,235	1,343
Finland	953	938	938
France	0	0	876
Sweden	1,002	979	979
Other Europe	698	607	799
Non-Europe	487	440	440
Total	**5,943**	**5,631**	**7,649**

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The remuneration of former and current management is shown in the table below:

EUR thousand	2023	2022
Salaries management (Executive Board)	8,194	6,461
Pension and severance costs management (Executive Board)	613	580
Salaries other key management	2,412	1,951
Pension and severance costs other key management	126	131
Total	**11,345**	**9,123**

From the salaries of the Executive Board of EUR 8,194 thousand (EUR 6,461 thousand), EUR 1,696 thousand (EUR 265 thousand) were paid to former members of the Executive Board.

From the pension and severance costs of the Executive Board of EUR 613 thousand (EUR 580 thousand), EUR 42 thousand (EUR 0 thousand) were paid to former members of the Executive Board.

No loans were granted to current or former members of the Executive Board. The remuneration paid to members of the Supervisory Board amounted to EUR 856 thousand (EUR 856 thousand).

Long Term Incentive (LTI) Plans
LTI plans with similar conditions have been granted to the Executive Board and selected employees. All LTI plans are classified as cash-settled share-based payment transactions. At vesting date, shares of the ultimate parent (OMV Aktiengesellschaft) will be transferred to the management and share equivalents to selected employees. The number of shares or share equivalents is determined depending on the achievement of defined performance criteria. The Performance Criteria and their corresponding weightings for the Executive Board Members and selected Senior Managers are defined in the Remuneration Policy and are as follows: Relative Total Shareholder Return (30%), Organic Free Cash Flow (35%) and company specific targets including ESG (35%); and are updated for the yearly plan ahead. Based on predefined criteria (e.g., fatalities, TRIR, process safety – also in comparison to industry benchmarks), a Health & Safety Malus of between 0.8 and 1.0 is applied to the overall target achievement for Executive Board Members. In case of severe incidents, the Remuneration Committee may reduce the payout to zero. The defined performance criteria may not be amended during the performance period of the LTI plans. However, in order to maintain the incentivizing character of the program, the Remuneration Committee will have discretion to adjust the threshold/target/maximum levels in case of material changes in external factors such as oil and gas prices. The adjustment is possible in both directions and will be determined by the Remuneration Committee. Disbursement is made in cash or shares of the ultimate parent.

Executive Board members as active participants of the plans are required to build up an appropriate volume of shares of the ultimate parent and to hold those shares until retirement or departure from the Company. The shareholding requirement is defined as a percentage of the respective Target Long Term Incentive. Until fulfillment of the shareholding requirement, disbursement is in the form of shares, whilst thereafter the plan participants can decide between cash or share settlement. As long as the shareholding requirements are not fulfilled, the shares granted net of taxes are transferred to a trustee deposit, managed by OMV Aktiengesellschaft.

The fair value of the liability for the LTI plans is measured at each reporting date and at the settlement date and is recognized over the vesting period. Total expenses relating to share-based payment transactions amounted to EUR 3,178 thousand (EUR 7,874 thousand).

15. Employee Benefits

Most Group companies operate post-employment and other long-term benefit plans. The forms and benefits vary in terms of conditions and practices in the countries concerned. The plans include both defined contribution plans and plans that provide defined benefits based on employees' years of service and the estimated salary on retirement. A summary is shown below.

EUR thousand	2023	2022
Pensions and other post-employment benefit plans		
Present value of funded defined benefit pension plans	283,276	270,801
Fair value of plan assets	-214,293	-184,528
Deficit of funded defined benefit pension	68,983	86,273
Present value of unfunded defined benefit pension plans	141,214	130,617
Total deficit of defined benefit pension plans	210,197	216,890
Severance and medical plans	36,104	35,080
Pensions and other post-employment benefit plans	**246,301**	**251,970**
Other long-term employee benefits	25,396	24,542
Net liability recognized in the balance sheet	**271,697**	**276,512**

The Group operates defined post-employment benefit plans in the EU, Norway, South Korea and the United Arab Emirates under broadly similar regulatory frameworks. These comprise pension plans, severance plans as well as post-retirement medical plans.

Defined Benefit Pension Plans

The pension plans are typically final salary pension plans which provide benefits to members in the form of a guaranteed level of pension payable for life. The level of benefits provided depends on members' length of service and their salary in the final years leading up to retirement. The pension payments are generally updated in line with the retail price or a similar index. The benefit payments related to funded plans are from insurance funds, however, there are also a number of unfunded plans where the Company meets the benefit payment obligation as it falls due. The movement in the benefit pension obligation and the plan assets over the year is as follows:

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EUR thousand	2023	2022
Defined benefit obligation as of January 1	**401,418**	**521,861**
Net current service cost	17,711	20,782
Interest cost on defined benefit obligation	15,816	6,644
Total amount recognized in the income statement	33,527	27,426
Gains (-)/losses (+) due to changes in demographic assumptions	4	-415
Gains (-)/losses (+) due to changes in financial assumptions	5,200	-146,843
Experience gains (-)/losses (+)	8,159	33,969
Exchange rate gains (-)/losses (+)	530	-3,294
Total amount recognized in other comprehensive income (actuarial gains and losses)	13,893	-116,583
Actual benefits (and taxes) paid directly from the plan assets	-20,000	-18,237
Actual benefits paid directly by employer	-5,760	-7,966
Actual plan participants' contributions	1,577	1,437
Exchange rate gains (-)/losses (+)	-165	-6,520
Defined benefit obligation as of December 31	**424,490**	**401,418**
Fair value of plan assets as of January 1	**184,528**	**180,312**
Interest income on plan assets less administrative expenses	7,309	1,558
Total amount recognized in the income statement	7,309	1,558
Return on plan assets excluding amounts included in interest income	-5,286	1,573
Total amount recognized in other comprehensive income (actuarial gains and losses)	-5,286	1,573
Actual benefits (and taxes) paid directly from the plan assets	-20,000	-18,237
Actual plan participants' contributions	1,577	1,437
Actual employer contributions	46,362	17,988
Exchange rate gains (-)/losses (+)	-197	-103
Fair value of plan assets as of December 31	**214,293**	**184,528**

The majority of pension commitments are attributable to plans in Austria and Belgium and were transferred to external pension funds managed by APK Pensionskasse AG in Austria as well as Vivium, Towers Watson Lifesight and KBC Asset Management in Belgium. The investment of plan assets in Austria is governed by Section 25 of the Austrian Pension Fund Act and the Investment Fund Act. In addition to these regulations, the investment guidelines of APK Pensionskasse AG regulate the spread of asset allocation, the use of umbrella funds and the selection of fund managers. The investment plans in Belgium follow the investment strategy of the respective insurance company as well as local legal regulations.

The plan assets in 2023 and 2022 mainly consist of insurance contracts.

Severance and Medical Plans
Severance plans are operated in the Austrian Group companies and cover employees who started their service before January 1, 2003. Furthermore, the Group operates severance plans in Austria, Italy and the United Arab Emirates. Medical plans reimburse certain medical costs for retired employees, mainly in Belgium. The movement in the severance and medical obligation over the year is as follows:

EUR thousand	2023	2022
Defined benefit obligation as of January 1	**35,080**	**47,075**
Net current service cost	539	1,139
Interest cost on defined benefit obligation	1,266	464
Past service cost	0	23
Total amount recognized in the income statement	1,805	1,626
Gains (-)/losses (+) due to changes in demographic assumptions	0	692
Gains (-)/losses (+) due to changes in financial assumptions	-2,226	-7,083
Experience gains (-)/losses (+)	2,874	-4,347
Total amount recognized in other comprehensive income (actuarial gains and losses)	648	-10,738
Actual benefits paid directly by employer	-2,742	-2,932
Changes in the consolidation scope and other changes	1,333	0
Exchange rate gains (-)/losses (+)	-20	49
Defined benefit obligation as of December 31	**36,104**	**35,080**

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Other Long-term Employee Benefits

Other long-term employee benefits provided by the Group companies include mainly items such as jubilee payments and pre-pension benefits. The movement in the other long-term benefit obligation over the year is as follows:

EUR thousand	2023	2022
Defined benefit obligation as of January 1	**24,542**	**27,215**
Net current service cost	1,435	1,726
Past service cost	1,200	0
Interest cost on defined benefit obligation	846	233
Gains (-)/losses (+) due to changes in demographic assumptions	140	24
Gains (-)/losses (+) due to changes in financial assumptions	-1,403	-3,986
Experience gains (-)/losses (+)	658	1,338
Total amount recognized in the income statement	2,876	-665
Actual benefits paid directly by employer	-2,110	-2,008
Other changes	88	0
Defined benefit obligation as of December 31	**25,396**	**24,542**

Additional disclosures for post-employment benefit plans

Discount rates, projected future salary, pension increases and expected rates of return on plan assets vary for the different defined benefit plans, as they are determined in light of local conditions. Assumptions regarding future mortality are based on published statistics and mortality tables. The principal assumptions used were as follows (expressed as weighted averages):

Percent	2023		2022	
	Pensions	Severance and medical plans	Pensions	Severance and medical plans
Discount rate	3.4%	3.8%	4.1%	3.7%
Projected future salary growth	3.1%	3.1%	3.6%	4.0%
Expected pension increase	0.7%	–	0.8%	–

The sensitivity of the defined benefit obligation for pensions and other post-employment benefit plans to changes in the principal assumptions is:

		Impact on defined benefit obligation			
		Pension		Severance and medical plans	
	Change in assumption	Increase in assumption	Decrease in assumption	Increase in assumption	Decrease in assumption
Discount rate	1.0%	Decrease by 10.5%	Increase by 13.0%	Decrease by 9.2%	Increase by 10.8%
Projected future salary growth	0.5%	Increase by 4.2%	Decrease by 4.0%	Increase by 3.2%	Decrease by 3.0%
Expected pension increase	0.5%	Increase by 7.1%	Decrease by 6.9%	–	–

The above sensitivity analyses are based on a change in an assumption while maintaining all other assumptions constant. In practice, this is unlikely to occur and changes in some of the assumptions may be correlated. When calculating the sensitivity of the defined benefit obligation to significant actuarial assumptions, the same method (present value of the defined benefit obligation calculated using the projected unit credit method at the end of the reporting period) has been applied when calculating the defined benefit obligation recognized in the balance sheet.

Expected contributions to post-employment benefit plans for the year 2024 are EUR 30,247 thousand (EUR 25,752 thousand). The weighted average duration of the defined benefit obligation is 11.0 years (11.4 years). The defined benefit plans expose the Group to actuarial risks, mainly the longevity risk, interest rate and market (investment) risk.

16. Provisions

EUR thousand	2023					
	Restructuring	Decommissioning	Legal	Environmental	Other	Total
As of January 1	70	24,481	3,726	1,220	80,302	**109,799**
Additions	3,049	9,108	1,530	22,885	42,437	**79,009**
Reclassification	0	0	-1,633	0	1,633	**0**
Utilized	-65	0	-467	-45	-55,152	**-55,729**
Reversed	369	-1	-290	-50	-11,901	**-11,873**
Interest expense (+)/income (-)	0	656	0	0	0	**656**
Exchange adjustments	-3	-10	70	0	-39	**18**
Balance as of December 31	**3,420**	**34,234**	**2,936**	**24,010**	**57,280**	**121,880**
Other provisions current	3,420	0	1,592	0	47,534	**52,546**
Other provisions non-current	0	34,234	1,344	24,010	9,746	**69,334**
Balance as of December 31	**3,420**	**34,234**	**2,936**	**24,010**	**57,280**	**121,880**

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Provisions are generally based on past events and commitments arising thereon. The timing of cash outflows cannot be determined with certainty for all provisions.

Restructuring
Provisions for restructuring cover estimated costs for the ongoing restructuring programs.

Decommissioning
Provisions for decommissioning cover mainly the expected clean-up and dismantling costs for plants situated on rented land in Germany, Austria and Belgium. It is expected that EUR 5,245 thousand will be used by 2027, EUR 21,800 thousand by 2052 and EUR 7,189 thousand by 2072.

Legal
Legal provisions represent litigation provisions in various business areas.

Environmental
Environmental provisions cover several environmental exposures in the Group. In 2023, an environmental provision was recognized to cover future transport and removal costs of contaminated soil on the Kallo site in the amount of EUR 22,435 thousand. It is estimated that the provision will be used in 2031.

Other
Other provisions cover numerous types of obligations, including short-term and long-term incentive plans. EUR 13,597 thousand (EUR 12,271 thousand) of these provisions relates to the new LTI plan implemented in 2021, which is share-based. Note 14 provides additional information regarding share-based payments.

17. Financial Risk Management

The Group is exposed through its operations to the following financial risks:
– Liquidity risk (note 21)
– Foreign currency risk (note 23)
– Interest rate risk (note 24)
– Commodity price risk (note 25)
– Credit risk (note 27)

The objective of financial risk management is to support the core businesses of Borealis. Financial risk management is centralized in the Treasury and Funding department and operates within policies approved by the Executive Board. The Group provides written principles for overall risk management, as well as policies covering specific areas, such as foreign exchange risk, interest rate risk, credit risk, commodity price risk or the use of derivative financial instruments. Borealis aims to minimize effects related to foreign exchange, interest rate, liquidity, credit, commodity price and refinancing risks.

The use of any financial instrument is based on actual or forecasted underlying commercial or financial cash flows or identified risks as defined in the policy. When certain conditions are met, hedge accounting is applied to remove the accounting mismatch between the hedging instrument and the hedged item.

Note 22 provides an overview of the financial instruments used by Borealis to manage risk. For further details on hedging instruments, see note 22. Derivative financial instruments, note 23. Foreign currency risk, note 24. Interest rate risk and note 25. Commodity price risk. The risk management process in general is described in the Group Management Report.

18. Financial Income/Expenses

EUR thousand	2023	2022
Interest income from		
Cash and loans granted	140,556	51,785
Derivatives	6,618	3,164
Interest expenses to		
Finance institutions	-38,703	-32,038
Derivatives	-5,325	-3,962
Capitalized interest	15,973	13,978
Net foreign exchange gains/losses	-15,264	85,943
Interest expenses for lease liabilities	-11,732	-8,310
Other financial income	14,113	10,180
Other financial expenses	-63,678	-19,570
Financial income/expenses	**42,558**	**101,170**

The other financial expenses include the effect of fair value re-measurement of previously held interest in the equity investment Renasci N.V. (Renasci) which led to an expense of EUR 20,433 thousand. On November 30, 2023, Borealis acquired an additional stake of 48.55% in Renasci which has led to an impairment of the assets in Renasci and a re-measurement of the shares in BlueAlp Holding B.V. (BlueAlp) which led to an expense of EUR 23,291 thousand for the shares in BlueAlp. For further details, see note 7, 8.3 and 9.

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19. Gains and Losses from Financial Instruments

EUR thousand	2023	2022
Recognized in the income statement		
Change in fair value of commodity derivative contracts	2,418	4,412
Change in fair value of cross-currency interest rate swaps	-1,666	-5,017
Change in fair value of foreign exchange swaps	4,832	2,982
Change in fair value of other investments and marketable securities and bonds	4,574	-3,819
Realized result on commodity derivative contracts	-6,584	6,495
Realized result on cross-currency interest rate swaps	-2,722	-1,256
Realized result on foreign exchange swaps	-2,982	-1,615
Realized result on other investments and marketable securities and bonds	1,387	1,641
Financial assets and liabilities at fair value through profit or loss	**-743**	**3,823**
Amounts recognized in the income statement for realized cash flow hedges		
Commodity derivative contracts	57,688	412,302
Interest rate swaps	4,015	458
Foreign exchange forwards	-971	-27,646
Foreign exchange effects on loans designated as hedge of investments in foreign operations	0	-3,009
Hedging Instruments	**60,732**	**382,105**
Interest income on cash and loans granted	142,703	54,978
Expenses for factoring of trade receivables	-12,709	-4,095
Impairment losses on trade receivables	-1,758	-3,420
Impairment losses on loans granted	-1,458	-3,311
Impairment losses on deposits and other receivables	-1,111	-943
Financial assets at amortized cost	**125,666**	**43,210**
Interest expenses and other expenses on financial liabilities	-41,448	-37,879
Interest expenses for lease liabilities	-11,732	-8,310
Financial liabilities at amortized cost	**-53,180**	**-46,189**
Net gain on financial guarantee receivables/liabilities	4,539	3,785
Financial guarantee	**4,539**	**3,785**

The amounts recognized in the income statement for commodity derivatives and foreign exchange forwards are booked as a correction to the net sales or to production costs that are being hedged. The amounts that are recognized in the income statement for interest rate derivatives and foreign exchange swaps are reported as part of financial income and expenses. Impairment losses on trade receivables are reported in sales and distribution costs, impairment losses on loans granted as well as impairment losses on deposits and other receivables are included in financial expenses.

EUR thousand	2023	2022
Recognized in other comprehensive income		
Commodity derivative contracts designated as cash flow hedge	-329,503	357,590
Interest rate swaps outstanding designated as cash flow hedge	985	7,191
Foreign exchange forwards designated as cash flow hedge	5,496	-16,317
Foreign exchange effects on long-term loans part of net investments in foreign operations	209	-7,645
Foreign exchange effects on loans designated as hedge of investments in foreign operations	5,510	-12,208
Amounts reclassified to the income statement		
Commodity derivative contracts	-57,688	-412,302
Interest rate swaps	-4,015	-458
Foreign exchange forwards	971	27,646
Foreign exchange effects on loans designated as hedge of investments in foreign operations	0	3,009
Total recognized in other comprehensive income	**-378,035**	**-53,494**

Net foreign exchange gains/losses in the income statement as follows:

EUR thousand	2023	2022
Foreign exchange gains from operating acitivities included in other operating income	50,276	98,077
Foreign exchange losses from operating acitivities included in production costs	-43,229	-98,819
Net foreign exchange gains/losses included in financial income/expenses	-15,264	85,943
Total	**-8,217**	**85,201**

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20. Loans and Borrowings and Lease Liabilities

The composition of interest-bearing loans and borrowings and lease liabilities (current and non-current debt) as of December 31, 2023, was as follows:

EUR thousand		2023						
Due		Term loans	Bond	Utilized uncommitted facilities	Export credits	**Total loans and borrowings**	Unutilized committed facilities	**Lease liabilities**
After	5 years	206,178	0	0	0	**206,178**	0	**480,255**
Within	5 years	156,023	0	0	0	**156,023**	0	**25,501**
	4 years	124,098	0	0	0	**124,098**	0	**34,644**
	3 years	87,627	0	0	0	**87,627**	1,000,000	**43,261**
	2 years	333,474	298,973	0	0	**632,447**	0	**46,769**
Total non-current debt		**907,400**	**298,973**	**0**	**0**	**1,206,373**	**1,000,000**	**630,430**
Total current debt		310,041	0	4	0	**310,045**	130,811 [1)]	**48,420**
Total debt		**1,217,441**	**298,973**	**4**	**0**	**1,516,418**	**1,130,811**	**678,850**

1) Borealis maintains EUR 130,811 thousand in export credit facilities (these were undrawn on December 31, 2023). These facilities are economically evergreen in nature but include one year's notice for cancellation.

The composition of interest-bearing loans and borrowings (current and non-current debt) as of December 31, 2022, was as follows:

EUR thousand		2022						
Due		Term loans	Bond	Utilized uncommitted facilities	Export credits	**Total loans and borrowings**	Unutilized committed facilities	**Lease liabilities**
After	5 years	360,166	0	0	0	**360,166**	0	**436,299**
Within	5 years	121,328	0	0	0	**121,328**	0	**22,650**
	4 years	84,748	0	0	0	**84,748**	1,000,000	**30,599**
	3 years	330,492	298,460	0	0	**628,952**	0	**35,343**
	2 years	317,007	0	0	0	**317,007**	0	**38,348**
Total non-current debt		**1,213,741**	**298,460**	**0**	**0**	**1,512,201**	**1,000,000**	**563,239**
Total current debt		40,599	0	1,330	0	**41,929**	166,011 [1)]	**42,635**
Total debt		**1,254,340**	**298,460**	**1,330**	**0**	**1,554,130**	**1,166,011**	**605,874**

1) In 2022, Borealis maintained EUR 166,011 thousand in export credit facilities (these were undrawn on December 31, 2022). The EUR 166,011 thousand figure includes a EUR 35,200 thousand export credit line that was terminated following the Borealis NITRO divestment in 2023. These facilities are economically evergreen in nature but include one year's notice for cancellation.

The carrying amounts of loans and borrowings and lease liabilities developed as follows:

EUR thousand	2023					
	Term loans	Bond	Utilized uncommitted facilities	Export credits	**Total loans and borrowings**	**Lease liabilities**
As of January 1	1,254,340	298,460	1,330	0	**1,554,130**	**605,874**
Proceeds from loans and borrowings	57	0	4	0	**61**	**0**
Repayment of loans and borrowings	-42,761	0	-1,330	0	**-44,091**	**0**
New lease liabilities	0	0	0	0	**0**	**99,903**
Changes in consolidation scope	23,597	0	0	0	**23,597**	**26,656**
Principal elements of lease payments	0	0	0	0	**0**	**-50,938**
Exchange adjustments non-cash	-18,490	0	0	0	**-18,490**	**-1,131**
Other	698	513	0	0	**1,211**	**-1,514**
Balance as of December 31	**1,217,441**	**298,973**	**4**	**0**	**1,516,418**	**678,850**

EUR thousand	2022					
	Term loans	Bond	Utilized uncommitted facilities	Export credits	**Total loans and borrowings**	**Lease liabilities**
As of January 1	1,301,834	297,955	122	0	**1,599,911**	**164,766**
Proceeds from loans and borrowings	420	0	1,330	0	**1,750**	**0**
Repayment of loans and borrowings	-76,490	0	-122	0	**-76,612**	**0**
New lease liabilities	0	0	0	0	**0**	**494,762**
Principal elements of lease payments	0	0	0	0	**0**	**-47,125**
Reclassification to liabilities directly related to the disposal group	0	0	0	0	**0**	**-1,191**
Exchange adjustments non-cash	27,981	0	0	0	**27,981**	**2,099**
Other	595	505	0	0	**1,100**	**-7,437**
Balance as of December 31	**1,254,340**	**298,460**	**1,330**	**0**	**1,554,130**	**605,874**

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The Group's financing mainly comprises committed credit lines (largely syndicated), term loans, bonds, private placements and export credits. The loans and borrowings are all measured at amortized cost.

Borealis continues to maintain a strong diversified liquidity position through its EUR 1 billion fully committed Syndicated Revolving Credit Facility (RCF), of which EUR 1 billion remained undrawn as of year end, and by terming out its debt through diverse funding channels. The RCF was refinanced in December 2019 with a five-year tenor with two one-year extension options at lenders' discretion. The second and final RCF extension option was utilized in December 2021 and the new maturity date is now December 19, 2026.

As of December 31, 2023, the Group had total committed credit facilities of EUR 1,130,811 thousand (EUR 1,166,011 thousand). Besides the above-mentioned undrawn EUR 1 billion RCF, Borealis had OeKB Export Credit Facilities in the amount of EUR 130,811 thousand (EUR 166,011 thousand). The reduction in the Export Credit Facilities by EUR 35,200 thousand compared to 2022 relates to the Borealis NITRO divestment in July 2023. The committed credit lines were undrawn at year end.

In 2023, Borealis increased its debt position by EUR 35,264 thousand, mainly driven by an increase in long-term lease liabilities, partially offset with loan repayments. The net debt position, which decreased by EUR 86,160 thousand, resulted in a gearing ratio of -2%.

In November 2018, S&P Global Ratings issued a BBB+ rating with a stable outlook for Borealis. This constitutes the first public rating for the Company, which has been successfully active in a wide range of financing markets and instruments over the last ten years and has built up a robust and well-diversified funding portfolio. While Borealis' long-term banking partners and investors have always appreciated the strong credit quality of the Company, the public rating provides a very good additional evaluation basis for all external stakeholders. On February 16, 2024, S&P Global Ratings affirmed Borealis' BBB+ rating with a stable outlook.

Under Borealis' funding strategy, a strongly diversified financing portfolio has been implemented in past years with the aim of maintaining a balanced maturity profile. In addition, Borealis is pursuing a long-term relationship approach with a larger group of international financing institutions that support the Company in funding and risk management transactions.

Based on this, combined with a resilient balance sheet and the strong public rating, Borealis has access to a wide variety of attractive funding instruments (such as bonds, the German Schuldschein, US Private Placement, foreign investment financing, bank loans and other). In order to meet the financing needs in 2023 and beyond, Borealis will continue to explore several suitable financial instruments fitting its strategy.

The total outstanding amount of interest-bearing loans and borrowings as of December 31, 2023, was EUR 1,516,418 thousand. The vast majority of the underlying loan agreements have financial covenants. Borealis uses two types of covenants, which are based on maintaining gearing and solvency ratios. As of December 31, 2023, Borealis was in compliance with all financial covenants and had significant headroom compared to the thresholds stipulated by the loan agreements.

Currency Mix EUR thousand	2023	%	2022	%
EUR	1,686,954	77%	1,615,184	75%
USD	472,925	22%	505,362	23%
JPY	31,949	2%	35,466	2%
GBP	212	0%	359	0%
Other	3,228	0%	3,633	0%
Interest bearing total	**2,195,268**	**100%**	**2,160,004**	**100%**

21. Liquidity Risk

Liquidity risk is the risk of the Group encountering difficulty in meeting the obligations associated with its financial liabilities. Liquidity is managed on a daily basis to ensure the Group's liquidity requirement and is covered at all times with the lowest possible level of working capital. For further details on loans and borrowings and lease liabilities, see note 6, note 20 and for derivatives, note 22.

The Group has short-term deposits in order to fulfill the collateral requirements for the derivatives contracts amounting to EUR 19,548 thousand (EUR 41,815 thousand) and paid EUR 9,000 thousand (EUR 0 thousand) margin calls to cover the negative value of the outstanding swaps. The counterparties have an obligation to return the securities to the Group. The Group does not hold a deposit in respect of derivative contracts (EUR 7,460 thousand).

The following are the contractual maturities of non-derivative financial liabilities, including forecasted interest payments, derivative financial liabilities and off-balance sheet liabilities. All carrying amounts exclude outstanding interest accruals at year end. Cash outflows are reported with a minus sign.

EUR thousand	2023						
Non-derivative financial liabilities	Carrying amount	**Contractual cash flows**	6 months or less	6–12 months	1–2 years	2–5 years	More than 5 years
EUR floating rate loans	-50,422	**-53,540**	-24,692	-588	-857	-27,403	0
EUR fixed rate loans	-1,018,472	**-1,084,309**	-63,492	-18,540	-625,668	-315,091	-61,518
USD floating rate loans	-183,125	**-195,599**	-16,587	-163,484	-711	-14,817	0
USD fixed rate loans	-232,449	**-289,872**	-39,314	-4,090	-35,489	-41,997	-168,982
JPY floating rate loans	-31,949	**-32,165**	-72	-32,093	0	0	0
Lease liabilities	-678,851	**-847,666**	-36,830	-29,969	-65,017	-135,469	-580,381
Trade payables	-849,548	**-849,548**	-849,548	0	0	0	0
Financial guarantee liabilities	-24,304	**-1,234,400**	-1,234,400	0	0	0	0
Total	**-3,069,120**	**-4,587,099**	**-2,264,935**	**-248,764**	**-727,742**	**-534,777**	**-810,881**

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EUR thousand			2022				
Non-derivative financial liabilities	Carrying amount	**Contractual cash flows**	6 months or less	6–12 months	1–2 years	2–5 years	More than 5 years
EUR floating rate loans	-50,396	**-55,690**	-1,240	-1,130	-24,706	-28,614	0
EUR fixed rate loans	-1,000,453	**-1,047,063**	-6,576	-9,436	-60,788	-758,410	-211,853
USD floating rate loans	-189,552	**-211,989**	-5,255	-6,313	-184,381	-16,040	0
USD fixed rate loans	-278,263	**-349,627**	-6,575	-42,744	-44,965	-74,244	-181,099
JPY floating rate loans	-35,466	**-36,022**	-78	-110	-35,834	0	0
Lease liabilities	-605,874	**-721,585**	-28,660	-22,457	-46,092	-109,080	-515,296
Trade payables	-862,826	**-862,826**	-862,826	0	0	0	0
Financial guarantee liabilities	-27,799	**-623,300**	-623,300	0	0	0	0
Total	**-3,050,629**	**-3,908,102**	**-1,534,510**	**-82,190**	**-396,766**	**-986,388**	**-908,248**

EUR thousand		2023				
Derivative financial liabilities/outflow	Carrying amount	**Contractual cash flows**	6 months or less	6–12 months	1–2 years	2–5 years
Cross-currency interest rate swaps	-10,499	**-44,973**	-1,484	-43,489	0	0
Foreign exchange contracts	-185	**-70,357**	-64,022	-6,335	0	0
Feedstock derivatives	-4,694	**-33,353**	-23,443	-2,937	-112	-6,861
Electricity derivatives	-58,804	**-89,429**	-27,097	-26,928	-26,234	-9,170
Total	**-74,182**	**-238,112**	**-116,046**	**-79,689**	**-26,346**	**-16,031**

EUR thousand		2022				
Derivative financial liabilities/outflow	Carrying amount	**Contractual cash flows**	6 months or less	6–12 months	1–2 years	2–5 years
Cross-currency interest rate swaps	-8,834	**-48,938**	-1,258	-1,514	-46,166	0
Foreign exchange contracts	-4,037	**-188,713**	-94,278	-94,435	0	0
Feedstock derivatives	-19,642	**-46,981**	-37,432	-2,845	-6,704	0
Electricity derivatives	-2,471	**-62,695**	-15,086	-22,405	-25,011	-193
Natural gas derivatives	-3,385	**-3,390**	-3,390	0	0	0
Total	**-38,369**	**-350,717**	**-151,444**	**-121,199**	**-77,881**	**-193**

EUR thousand	2023					
Off balance sheet liabilities	**Contractual cash flows**	6 months or less	6–12 months	1–2 years	2–5 years	More than 5 years
Short-term and low-value lease payments	**-2,208**	-1,124	-923	-124	-37	0
Capital commitments – property, plant and equipment	**-205,977**	-139,288	-22,289	-38,296	-6,104	0
Commitments in associated companies	**0**	0	0	0	0	0
Commitments in joint ventures	**-818,100**	0	-818,100	0	0	0

EUR thousand	2022					
Off balance sheet liabilities	**Contractual cash flows**	6 months or less	6–12 months	1–2 years	2–5 years	More than 5 years
Short-term and low-value lease payments	**-1,747**	-962	-598	-156	-31	0
Capital commitments – property, plant and equipment	**-165,294**	-140,649	-15,388	-9,256	-1	0
Commitments in associated companies	**-10,000**	0	-10,000	0	0	0
Commitments in joint ventures	**-46,050**	0	0	0	-46,050	0

For details in respect of off-balance sheet liabilities, please see note 5, note 30 and note 31.

22. Derivative Financial Instruments

The Group is exposed to certain risks relating to its ongoing business operations. The primary risks managed using derivative instruments are foreign currency risk, interest rate risk and commodity price risk.

The Group's risk management strategy and how it is applied to manage risk is explained in note 17 and in the Group Management Report in general and in this note, notes 23, 24 and 25 in detail for the risks mentioned in the preceding paragraph.

Hedge Accounting Policies of the Group

Hedges are generally placed in the legal entities where the underlying exposure exists. When certain conditions are met, Borealis applies IFRS 9 hedge accounting principles in order to recognize the offsetting effects on profit or loss of changes in the fair value of the hedging instrument and the hedged items. Borealis has the following hedge accounting relationships:

- Cash flow hedging – foreign exchange (see this note and note 23)
- Cash flow hedging – interest rate (see this note and note 24)
- Cash flow hedging – commodity (feedstock, electricity, natural gas – see this note and note 25)
- Net investment hedging in a foreign operation (see note 23)

Derivatives are only used for economic hedging purposes and not as speculative investments. However, where derivatives are not designated as hedging instruments, they are measured at fair value through profit or loss (FVPL) for accounting purposes.

The Group holds the following derivative financial instruments:

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EUR thousand	2023	2022
Current assets		
Foreign exchange swaps – FVPL	4,949	2,994
Foreign exchange forwards – cash flow hedges	9,917	7,405
Interest rate swaps – cash flow hedges	2,911	0
Feedstock derivatives – FVPL	1,260	0
Feedstock derivatives – cash flow hedges	23,641	25,137
Electricity derivatives – FVPL	5,435	0
Electricity derivatives – cash flow hedges	10,008	210,475
Total current derivative financial instrument assets (Other receivables and other assets)	**58,121**	**246,011**

EUR thousand	2023	2022
Non-current assets		
Interest rate swaps – cash flow hedges	0	5,941
Electricity derivatives – cash flow hedges	2,523	105,335
Total non-current derivative financial instrument assets (Other receivables and other assets)	**2,523**	**111,276**

EUR thousand	2023	2022
Current liabilities		
Cross-currency interest rate swaps – FVPL	10,499	0
Foreign exchange swaps – FVPL	116	12
Foreign exchange forwards – cash flow hedges	68	4,025
Feedstock derivatives – FVPL	0	1,158
Feedstock derivatives – cash flow hedges	4,583	18,484
Electricity derivatives – cash flow hedges	24,503	2,267
Natural gas derivatives – cash flow hedges	0	3,385
Total current derivative financial instrument liabilities (Other liabilities)	**39,769**	**29,331**

EUR thousand	2023	2022
Non-current liabilities		
Cross-currency interest rate swaps – FVPL	0	8,834
Interest rate swaps – cash flow hedges	112	0
Electricity derivatives – cash flow hedges	34,302	205
Total non-current derivative financial instrument liabilities (Other liabilities)	**34,414**	**9,039**

Impact of Hedge Accounting on Equity

The Group's hedging reserve disclosed in the Consolidated Statement of Changes in Equity relates to the following hedging instruments:

Hedging Reserve EUR thousand	2023					
	Cash flow hedge – foreign currency	Cash flow hedge – interest rate	Cash flow hedge – feedstock	Cash flow hedge – electricity	Cash flow hedge – natural gas	Hedging reserve total
As of January 1	2,603	4,575	5,125	241,269	-2,606	**250,966**
Change in fair value of hedging instrument recognized in OCI	5,496	985	-30,965	-297,222	-1,316	**-323,022**
Reclassifications from OCI to the income statement	971	-4,015	0	-62,389	4,701	**-60,732**
Reclassifications to the cost of non-financial items	0	0	43,258	0	0	**43,258**
Deferred tax	-1,487	697	-2,827	82,710	-779	**78,314**
Share of other comprehensive income of joint ventures accounted for using the equity method	0	-4,109	0	0	0	**-4,109**
As of December 31	**7,583**	**-1,867**	**14,591**	**-35,632**	**0**	**-15,324**

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Hedging Reserve EUR thousand	2022					
	Cash flow hedge – foreign currency	Cash flow hedge – interest rate	Cash flow hedge – feedstock	Cash flow hedge – electricity	Cash flow hedge – natural gas	Hedging reserve total
As of January 1	-5,961	-593	5,682	272,286	-44,391	**227,023**
Change in fair value of hedging instrument recognized in OCI	-16,317	7,191	-60,804	356,324	62,070	**348,464**
Reclassifications from OCI to the income statement	27,646	-458	0	-406,036	-6,266	**-385,114**
Reclassifications to the cost of non-financial items	0	0	59,883	0	0	**59,883**
Deferred tax	-2,765	-1,565	364	18,695	-14,019	**710**
As of December 31	**2,603**	**4,575**	**5,125**	**241,269**	**-2,606**	**250,966**

Reserve for unrealized exchange gains/losses EUR thousand	2023	2022
As of January 1	305,927	232,321
Foreign currency revaluation of USD loans, designated as net investment hedge	5,510	-12,208
Reclassifications to the income statement during the period	0	3,009
Foreign currency revaluation of financial statements of foreign operations	-97,297	133,664
Reclassifications to the income statement during the period	0	-42,744
Foreign currency revaluation of long-term loans to foreign operations	209	-7,645
Share of other comprehensive income of joint venturees accounted for using the equity method	-710	-2,769
Changes in consolidation scope	868	0
Foreign currency revaluation of financial statements of foreign operations – Non-controlling interests	-434	-803
Deferred tax	-1,315	3,102
As of December 31	**212,758**	**305,927**

As of December 31, 2023, and December 31, 2022, the Group had the following cash flow and net investment hedging relationships. The table shows the profile of the timing (maturity) of the nominal amount of the hedging instruments.

	Unit	Total	3 months or less	3–6 months	6–12 months	1–2 years	2–3 years	3–4 years	4–5 years	More than 5 years
Foreign exchange forwards	EUR thousand	**282,109**	69,104	53,773	159,232	0	0	0	0	0
USD loans, designated as net investment hedge	USD thousand	**120,000**	0	0	49,000	30,000	21,000	20,000	0	0
Interest rate swaps	EUR thousand	**99,548**	0	0	99,548	0	0	0	0	0
Feedstock derivatives	metric tons	**596,323**	75,448	318,505	198,770	3,600	0	0	0	0
Electricity derivatives	GWh	**4,027**	503	494	981	1,340	710	0	0	0

2022

	Unit	Total	3 months or less	3–6 months	6–12 months	1–2 years	2–3 years	3–4 years	4–5 years	More than 5 years
Foreign exchange forwards	EUR thousand	**423,357**	75,613	113,770	233,974	0	0	0	0	0
USD loans, designated as net investment hedge	USD thousand	**160,000**	0	0	40,000	49,000	30,000	21,000	20,000	0
Interest rate swaps	EUR thousand	**103,131**	0	0	0	103,131	0	0	0	0
Feedstock derivatives	metric tons	**1,102,121**	462,560	324,561	315,000	0	0	0	0	0
Electricity derivatives	GWh	**3,956**	542	520	998	1,563	333	0	0	0
Natural gas derivatives	GWh	**86**	86	0	0	0	0	0	0	0

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As of December 31, 2023, and December 31, 2022, no fair value hedges existed.

Offsetting
Financial assets and financial liabilities are offset only when the Group has a current and legally enforceable right to offset the recognized amounts and when there is an intention to settle on a net basis or realize the asset and settle the liability simultaneously. In the normal course of business, the Group enters into derivative transactions under International Swaps and Derivatives Association (ISDA) master netting agreements.

The following table presents the recognized financial instruments (derivatives) that are offset, or subject to enforceable master netting arrangements, but are not offset. The "Net amount" column shows the impact on the Group's balance sheet if all offsetting rights were exercised.

EUR thousand	2023				
	Gross amounts	Related amounts offset in the balance sheet	Amounts presented in the balance sheet	Related amounts not offset in the balance sheet	Net amount
Financial assets					
Derivative financial instruments	115,374	-54,730	60,644	-185	60,459
Financial liabilities					
Derivative financial instruments	128,915	-54,730	74,185	-185	74,000

EUR thousand	2022				
	Gross amounts	Related amounts offset in the balance sheet	Amounts presented in the balance sheet	Related amounts not offset in the balance sheet	Net amount
Financial assets					
Derivative financial instruments	463,633	-106,346	357,287	-2,246	355,041
Financial liabilities					
Derivative financial instruments	144,716	-106,346	38,370	-2,246	36,124

There is no further netting potential for non-derivative financial instruments.

23. Foreign Currency Risk

Foreign exchange risk is the risk that the fair value or future cash flows of an exposure will fluctuate because of changes in foreign exchange rates.

Borealis incurs foreign currency risk on sales, purchases and borrowings that are denominated in currencies other than EUR. The most significant currencies in terms of hedged amounts are USD and SEK.

The foreign exchange risk related to short-term commercial cash flows is hedged and limits for long-term foreign exchange exposures are established. Based on regular cash flow forecasts, Borealis hedges its foreign exchange exposure coming from forecasted sales and purchases and from committed investment projects.

Borealis hedges forecasted positions denominated in foreign currencies. At any time, Borealis may also hedge its long-term commercial exposures up to a predefined level and duration. Borealis normally hedges the currency positions using foreign exchange forward contracts. Borealis classifies its foreign exchange forward contracts, which hedge a forecasted currency position, as cash flow hedges and states them at fair value.

Changes in the fair value of foreign exchange forward contracts that hedge monetary assets and liabilities in foreign currencies and the forward legs of foreign exchange swaps used in liquidity management, for which no hedge accounting is applied, are recognized in the income statement. Both changes in the fair value of the forward contracts and the foreign exchange gains and losses relating to the monetary items are recognized as financial expenses.

There is an economic relationship between the hedged items and the hedging instruments as the critical terms of the foreign exchange forward contracts match the terms of the expected highly probable forecast transactions (i.e. nominal amount, exchange rate and expected payment date). Hence, the Group has established a hedge ratio of 1:1. To test the hedge effectiveness, the Group uses the Dollar Offset method and compares the changes in the fair value of the hedging instruments against the changes in fair value of the hedged items attributable to the hedged risks.

Hedge ineffectiveness may arise from:

- differences in the timing of the cash flows of the hedged items and the hedging instruments,
- different indexes (and accordingly different curves) linked to the hedged risk of the hedged items and hedging instruments,
- the counterparties' credit risk differently impacting the fair value movements of the hedging instruments and hedged items,
- changes to the forecasted amount of cash flows of hedged items,
- change in fair value of the cross-currency basis spread element of the foreign exchange forward contracts ("ccbs").

Borealis does not recognize any ineffectiveness in the income statement due to immateriality.

Net Investment Hedges in Foreign Operations

A foreign currency exposure arises from the Group's long-term net investment in its subsidiaries, associated companies and joint ventures in foreign currencies. Foreign exchange translation differences relating to these net investments are recognized in other comprehensive income. Borealis has hedged part of its investment in a joint venture, which has USD as its functional currency, by designating certain external loans in USD as hedges of the Group's investments in its foreign operations. The hedged risk in the net investment hedge is the risk of a weakening USD against the EUR that will result in a reduction in the carrying amount of the Group's net investment in the joint venture in USD. The EUR/USD impact on the measurement of the loan is recognized in other comprehensive income.

To assess hedge effectiveness, the Group determines the economic relationship between the hedging instrument and the hedged item by comparing changes in the carrying amount of the debt that is attributable to a change in the spot rate with changes in the investment in the foreign operation due to movements in the spot rate (the Dollar Offset method). The Group's policy is to hedge the net investment only to the extent of the debt principal.

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There is an economic relationship between the hedged item and the hedging instrument as the net investment creates a translation risk that will match the foreign exchange risk on the USD borrowing. The Group has established a hedge ratio of 1:1 as the underlying risk of the hedging instrument is identical to the hedged risk component. Hedge ineffectiveness will arise when the amount of the investment in the foreign joint venture becomes lower than the amount of the borrowing.

Effects of Hedge Accounting on the Financial Position and Performance

The effects of the foreign currency-related hedging instruments on the Group's financial position and performance are as follows:

Foreign exchange forwards EUR thousand	**2023**	**2022**
Carrying amount (asset – current)	9,917	7,405
Carrying amount (liability – current)	68	4,025
Line item in the balance sheet where the hedging instrument is included	Other receivables and other assets/ Other liabilities	Other receivables and other assets/ Other liabilities
Total nominal amount	kEUR 282,109	kEUR 423,357
Hedge ratio	1:1	1:1
Hedged rate for the year	EUR/USD 1.06–1.13 EUR/SEK 11.35–12.01	EUR/USD 1.01–1.10 EUR/SEK 10.67–11.11
Change in fair value of the hedging instrument used for measuring ineffectiveness for the period	5,496	-16,317
Change in value of the hedged item used for measuring ineffectiveness for the period	-5,496	16,317
Hedging reserve (net of deferred taxes)	7,583	2,603
Total hedging gain (+) or loss (-) recognized in OCI	5,496	-16,317
Hedge ineffectiveness recognized in the income statement	0	0
Amount reclassified from hedging reserve to the income statement	971	27,646
Line item in the income statement affected by the reclassification	Net sales and production costs	Net sales and production costs

Net investment hedges in foreign operations EUR thousand	2023	2022
Carrying amount (liability)	108,597	150,009
Line item in the balance sheet where the hedging instrument is included	Loans and borrowings	Loans and borrowings
Total nominal amount	kUSD 120,000	kUSD 160,000
Hedge ratio	1:1	1:1
Change in fair value of the hedging instrument used for measuring ineffectiveness for the period	5,510	-12,208
Change in value of the hedged item used for measuring ineffectiveness for the period	-5,510	12,208
Reserve for unrealized exchange gains/losses (net of deferred taxes)	-18,727	-22,970
Balances remaining in the reserve for unrealized exchange gains/losses from hedging relationships for which hedge accounting is no longer applied	-21,453	-15,358
Total hedging gain (+) or loss (-) recognized in OCI	5,510	-12,208
Hedge ineffectiveness recognized in the income statement	0	0
Amount reclassified from reserve for unrealized exchange gains/losses to the income statement	0	3,009

Sensitivity Analysis

The Group's exposure to the risk of changes in foreign exchange rates primarily relates to the Group's operating activities, mainly invoicing in EUR and mainly purchasing raw materials in USD and the Group's net investments in associated companies and joint ventures mainly denominated in USD. The sensitivity analysis has been prepared on the basis that the financial instruments in foreign currencies and all other parameters, apart from changes in foreign exchange rates themselves (foreign exchange rate against EUR), are constant, and on the basis of hedge designations in place as of December 31, 2023. The Group assumes that the prevailing polyolefin market pricing mechanisms reduce the foreign exchange risk in practice. As of December 31, 2023, the Group showed a net payable (prior year: net payable) position in USD and a net receivable (prior year: net payable) position in SEK.

Effect in EUR thousand	Profit before taxation		Other comprehensive income	
	Strengthening +10%	Weakening -10%	Strengthening +10%	Weakening -10%
December 31, 2023				
USD	-4,280	3,502	-29,573	24,196
SEK	2,553	-2,089	14,430	-11,806
USD – including net investment	-4,280	3,502	259,524	-212,338
SEK – including net investment	2,553	-2,089	70,280	-57,502
December 31, 2022				
USD	-12,363	10,115	-35,190	28,792
SEK	-143	117	14,856	-12,155
USD – including net investment	-12,363	10,115	284,930	-233,124
SEK – including net investment	-143	117	72,280	-59,138

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The key foreign exchange rates used for the Group were as follows:

	2023		2022	
	Closing rate	Average rate	Closing rate	Average rate
USD	1.1050	1.0813	1.0666	1.0530
SEK	11.0960	11.4788	11.1218	10.6296

24. Interest Rate Risk

Interest rate risk is the risk of the fair value or future cash flows of a financial instrument fluctuating because of changes in market interest rates.

Borealis adopts a policy of managing its interest rate risk through the modified duration of its loan portfolio. The average modified duration is allowed to deviate within a predefined range. Overall, Borealis' risk management strategy according to its financial procedures is to protect itself against adverse interest rate movements and to obtain predictable interest costs. As of December 31, 2023, Borealis had two outstanding interest rate swaps. Borealis classifies these interest rate swaps as cash flow hedges and states them at fair value. The purpose of these hedges is to fix the cash outflows related to the floating rate loans.

The Group enters into interest rate swaps that have matching critical terms with the hedged item, such as reference rate, reset dates, payment dates, maturities and nominal amount.

The hedge ratios are based on interest rate swaps with a nominal amount in EUR and USD and a receive leg of a rate index. This results in 1:1 hedge ratios (100%). Since loans and hedging instruments are fully aligned and cannot be changed unless terminated, the hedge ratios will not change and hence, do not result in any imbalances that would create hedge ineffectiveness.

Hedge effectiveness will be assessed by comparing changes in the fair values of the hedging instruments to changes in the fair values of the respective hypothetical derivatives. The terms of the hypothetical derivative are such that its fair value changes offset exactly the changes in the fair value of the hedged item. The terms are identical to the hedging instrument but assume no counterparty risk. Hence, the hedge is expected to be highly effective.

A significant change in the credit risk of either Borealis or the counterparty is identified as a potential source of ineffectiveness. The Group treasury monitors the Company and the bank's credit risk for significant adverse changes.

Hedge ineffectiveness may arise from:
- differences in the timing of the cash flows of the hedged items and the hedging instruments,
- the counterparties' credit risk impacting the fair value movements of the hedging instruments and hedged items differently.

Borealis has one cross-currency interest rate swap that is measured at fair value through profit or loss (FVPL).

Of loans and borrowings, approximately 82% (82%) have a fixed interest rate and 18% (18%) are based on a floating interest rate before applying interest rate swaps. After applying interest rate swaps, approximately 89% (89%)

have a fixed interest rate and 11% (11%) are based on a floating interest rate. The floating interest rates are set by adding a spread to the reference rates (mainly EURIBOR and SOFR).

Effects of Hedge Accounting on the Financial Position and Performance

The effects of the interest rate related to hedging instruments on the Group's financial position and performance are as follows:

Interest rate swaps EUR thousand	12/31/2023	2022
Carrying amount (asset – current)	2,911	0
Carrying amount (asset – non-current)	0	5,941
Line item in the balance sheet where the hedging instrument is included	Other receivables and other assets/ Other liabilities	Other receivables and other assets/ Other liabilities
Total nominal amount	kEUR 99,548	kEUR 103,131
Hedge ratio	1:1	1:1
Weighted average hedged rate for the year	2.36%	2.36%
Change in fair value of the hedging instrument used for measuring ineffectiveness for the period	985	7,191
Change in value of the hedged item used for measuring ineffectiveness for the period	-985	-7,191
Hedging reserve (net of deferred taxes)	2,242	4,575
Total hedging gain (+) or loss (-) recognized in OCI	985	7,191
Hedge ineffectiveness recognized in the income statement	0	0
Amount reclassified from hedging reserve to the income statement	-4,015	-458
Line item in the income statement affected by the reclassification	Financial expenses	Financial expenses

Interest Rate Benchmark Reform

All transitions from interest rate benchmarks affected by IBOR reform to alternative benchmark rates have been completed at the reporting date.

Sensitivity Analysis

In managing interest rate risks, Borealis aims to reduce the impact of short-term fluctuations on its earnings. Over the long term, permanent changes in interest rates will have an impact on consolidated earnings. The sensitivity analysis has been prepared on the basis of the amount of net debt, floating interest rates of the debt and the derivatives as of December 31, 2023.

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Effect in EUR thousand	Profit before taxation		Other comprehensive income	
	Strengthening +1%	Weakening -1%	Strengthening +1%	Weakening -1%
December 31, 2023				
Interest rate	-437	442	705	-708
December 31, 2022				
Interest rate	-1,907	1,919	757	-761

25. Commodity Price Risk

Commodity price risk is the risk of future cash flows or the fair value of inventories fluctuating because of changes in commodity prices. Borealis states its inventories at the lower of cost and net realizable value, taking into account future price developments. Commodity price risk is managed by the feedstock and energy traders and monitored by Trade Support and Risk Management. The commodity price risk exposure is calculated by a trading software program. Trade Support and Risk Management take a snapshot of all data in the trading system on a daily basis and retrieve the daily position from the system. The position is analyzed and compared with the trading limits. Traders use financial derivatives (i.e. financial swaps) in order to stay within the limits.

Feedstock Derivatives

Borealis hedges some of its forecasted feedstock purchases and finished product sales through feedstock swaps. Cash flow hedge accounting is applied to those derivatives, except for the derivatives that are used to limit the price risk on the inventory held for immediate consumption. Some of the derivatives have been designated as cash flow hedges for future sales and purchases. Derivatives not designated as cash flow hedges are measured at fair value through profit or loss (FVPL).

Electricity Derivatives

Borealis hedges its forecasted electricity purchases using electricity swaps. Cash flow hedge accounting has been applied for these derivatives.

Additionally, Borealis has contracted several long-term power purchase agreements which were entered into and continue to be held for own use. Therefore, they are accounted for as executory contracts.

Natural Gas Derivatives

Borealis hedges part of its forecasted natural gas purchases and exposure in commercial contracts to changes in natural gas prices using natural gas swaps. Cash flow hedge accounting has been applied for these derivatives.

There is an economic relationship between the hedged items and the hedging instruments as the terms of the commodity forward contracts match the terms of the expected highly probable forecast transactions (i.e., nominal quantity and expected payment date). The Group has established a hedge ratio of 1:1 for the hedging relationships as the underlying risk of the commodity forward contracts are identical to the hedged risk components. To test the hedge effectiveness, the Group compares the changes in the fair value of the hedging instruments against the changes in fair value of the hedged items attributable to the hedged risks.

The hedge ineffectiveness can arise from:
– differences in the timing of the cash flows of the hedged items and the hedging instruments, and
– changes to the forecasted amount of cash flows of hedged items and hedging instruments.

Effects of Hedge Accounting on the Financial Position and Performance

The effects of the commodity-related hedging instruments on the Group's financial position and performance are as follows:

Feedstock derivatives EUR thousand	2023	2022
Carrying amount (asset – current)	23,641	25,137
Carrying amount (liability – current)	4,583	18,484
Carrying amount (liability – non-current)	112	0
Line item in the balance sheet where the hedging instrument is included	Other receivables and other assets/ Other liabilities	Other receivables and other assets/ Other liabilities
Total nominal amount	596,323 metric tons	1,102,121 metric tons
Hedge ratio	1:1	1:1
Change in fair value of the hedging instrument used for measuring ineffectiveness for the period	-30,965	-60,804
Change in value of the hedged item used for measuring ineffectiveness for the period	30,965	60,804
Hedging reserve (net of deferred taxes)	14,591	5,125
Balances remaining in the hedging reserve for hedging instruments that have expired but forecast transaction still has to occur	0	0
Total hedging gain (+) or loss (-) recognized in OCI	-30,965	-60,804
Hedge ineffectiveness recognized in the income statement	0	0
Amount reclassified from hedging reserve to the cost of non-financial items	43,258	59,883

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Electricity derivatives EUR thousand	2023	2022
Carrying amount (asset – current)	10,008	210,475
Carrying amount (asset – non-current)	2,523	105,335
Carrying amount (liability – current)	24,503	2,267
Carrying amount (liability – non-current)	34,302	205
Line item in the balance sheet where the hedging instrument is included	Other receivables and other assets/ Other liabilities	Other receivables and other assets/ Other liabilities
Total nominal amount	4,027 GWh	3,956 GWh
Hedge ratio	1:1	1:1
Change in fair value of the hedging instrument used for measuring ineffectiveness for the period	-297,231	356,324
Change in value of the hedged item used for measuring ineffectiveness for the period	297,231	-356,324
Hedging reserve (net of deferred taxes)	-35,631	241,269
Total hedging gain (+) or loss (-) recognized in OCI	-297,231	356,324
Hedge ineffectiveness recognized in the income statement	0	0
Amount reclassified from hedging reserve to the income statement	-62,380	-406,036
Line item in the income statement affected by the reclassification	Production costs	Production costs

Natural gas derivatives EUR thousand	2023	2022
Carrying amount (liability – current)	0	3,385
Line item in the balance sheet where the hedging instrument is included	Other receivables and other assets/ Other liabilities	Other receivables and other assets/ Other liabilities
Total nominal amount	0 GWh	86 GWh
Hedge ratio	1:1	1:1
Change in fair value of the hedging instrument used for measuring ineffectiveness for the period	-1,316	62,070
Change in value of the hedged item used for measuring ineffectiveness for the period	1,316	-62,070
Hedging reserve (net of deferred taxes)	0	-2,606
Total hedging gain (+) or loss (-) recognized in OCI	-1,316	62,070
Hedge ineffectiveness recognized in the income statement	0	0
Amount reclassified from hedging reserve to the income statement	4,701	-6,266
Line item in the income statement affected by the reclassification	Production costs	Production costs

Sensitivity Analysis
The sensitivity analysis has been prepared for all derivative financial instruments on the basis that the amount of the feedstock held and all other parameters besides commodity prices (in particular sales prices) are constant and on the basis of the hedge designations in place on December 31, 2023. The Group assumes that the prevailing market pricing mechanisms reduce the commodity price risk in practice.

Effect in EUR thousand	Profit before taxation		Other comprehensive income	
	Strengthening +1%	Weakening -1%	Strengthening +1%	Weakening -1%
December 31, 2023				
Feedstock – Naphtha	-45	45	-2,068	2,068
Feedstock – Other	-37	37	-636	636
Electricity	0	0	3,624	-3,624
Natural gas	0	0	240	-240
December 31, 2022				
Feedstock – Naphtha	-480	480	-2,734	2,734
Feedstock – Other	65	-65	1,281	-1,281
Electricity	0	0	5,717	-5,717
Natural gas	0	0	530	-530

26. Factoring
Borealis has a factoring program under which the Company sells certain trade receivables to external parties. The Group does not retain any major interest in the trade receivables and thus derecognizes the receivables sold accordingly. Several reserves are deducted from the nominal value of the sold receivables and will be released upon transfer of the respective collected receivables to Aurora Asset Purchaser DAC (Purchaser), a special purpose entity established in Ireland. The Purchaser is not consolidated under IFRS 10, since Borealis has neither decision-making power nor has any influence on how the special purpose entity finances the program and there is no link between decision-making power and the variability of returns from the Purchaser. Borealis continues to administer the relationship with debtors and has to transfer all receivables collected and previously sold to the Purchaser under this program.

The total nominal value sold to the Purchaser under the factoring program in the current year amounted to EUR 4,287,494 thousand (EUR 3,683,635 thousand). As of December 31, 2023, receivables worth EUR 432,522 thousand (EUR 382,258 thousand) were sold to the Purchaser under the factoring program. The reserves deducted from the nominal value of the sold receivables amounted to EUR 93,054 thousand (EUR 33,861 thousand) as of December 31, 2023, and are included in other current receivables. During the year, expenses amounting to EUR 1,545 thousand (EUR 4,095 thousand) were recognized in the income statement for the factoring program.

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27. Credit Risk

Credit risk is the risk of financial loss to the Group if a customer or counterparty to a financial instrument fails to meet its contractual obligations. The Group is exposed to credit risk from its operating activities (primarily trade receivables) and from its financing activities, including deposits with banks and financial institutions and other financial instruments.

The Group has three types of financial assets that are subject to the expected credit loss model:
- trade receivables (excluding trade receivables at FVPL) and contract assets,
- cash and cash equivalents,
- debt investments carried at amortized cost.

On each reporting date, the Group assesses whether financial assets carried at amortized cost are credit-impaired. For trade receivables, the Group applies the IFRS simplified approach to measure expected credit losses, which uses a lifetime expected loss allowance.

Trade Receivables Credit Risk

A credit control procedure is in place. Credit risk is monitored on an ongoing basis. Credit risk for a specific counterparty is the sum of all outstanding trade receivables and is compared to the individual credit limit allocated to that counterparty. Credit limit evaluations are performed on a daily basis and all customers are reviewed annually at least. Approval and escalation limits are used to authorize the available credit limits to customers. For some trade receivables, the Group may obtain security in the form of guarantees (bank and parental guarantees), letters of credit or credit insurance, which can be called upon if the counterparty is in default under the terms of the agreement. As of the reporting date, Borealis has no large concentrations of credit risks for trade receivables from external parties representing more than 10% of the total outstanding trade receivables. For details on trade receivables from related parties, see note 30. No credit risk is retained in trade receivables sold under the factoring program (note 26).

The maximum exposure to credit risk for trade receivables as of the reporting date by geographic region was:

EUR thousand	2023	2022
EU countries	270,209	357,809
Non-EU in Europe	86,719	128,510
US	37,485	51,580
Middle East and Asia	116,127	164,762
Other regions	89,726	85,779
Total	**600,266**	**788,440**

The maximum exposure to credit risk for trade receivables as of the reporting date by type of segment and group of customers was:

EUR thousand	2023	2022
Polyolefins	405,228	580,023
Base Chemicals	7,767	17,034
Non-Allocated	187,271	191,383
Total	**600,266**	**788,440**

All customers are classified in risk categories based on external and internal ratings with associated probabilities of default in order to measure the lifetime expected losses.

The table below shows the maximum exposure (gross carrying amount) for each risk class based on which loss allowance was determined for trade receivables (excluding trade receivables at FVPL).

EUR thousand	December 31, 2023				
	Equivalent to external rating	Probability of default	Gross carrying amount	Loss allowance	Credit-impaired
Risk category 1	AAA, AA+, AA, AA-, A+, A, A-	0.13%	34,088	-1	No
Risk category 2	BBB+, BBB, BBB-	0.44%	116,194	-28	No
Risk category 3	BB+, BB, BB-	1.18%	201,390	-123	No
Risk category 4	B+, B, B-	8.52%	140,422	-655	No
Risk category 5	CCC/CC	29.54%	91,646	-965	No
Risk category 6	SD/D	100.00%	12,173	-12,173	Yes
Total			**595,913**	**-13,946**	

EUR thousand	December 31, 2022				
	Equivalent to external rating	Probability of default	Gross carrying amount	Loss allowance	Credit-impaired
Risk category 1	AAA, AA+, AA, AA-, A+, A, A-	0.13%	51,143	-16	No
Risk category 2	BBB+, BBB, BBB-	0.44%	135,893	-33	No
Risk category 3	BB+, BB, BB-	1.18%	241,872	-158	No
Risk category 4	B+, B, B-	8.52%	150,299	-702	No
Risk category 5	CCC/CC	29.54%	86,270	-1,800	No
Risk category 6	SD/D	100.00%	9,721	-9,721	Yes
Total			**675,198**	**-12,431**	

The identified impairment loss for contract assets was immaterial.

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The movement in the loss allowance in respect of trade receivables during the year was as follows:

EUR thousand	2023		2022	
	Lifetime ECL – not credit-impaired	Lifetime ECL – credit-impaired	Lifetime ECL – not credit-impaired	Lifetime ECL – credit-impaired
Balance as of January 1	2,709	9,721	3,756	9,938
Impairment loss recognized		4,154		4,557
Written off		-233		
Reversal of impairment	-937	-1,459	-1,047	-90
Reclassification to assets directly related to the disposal group		0		-4,597
Exchange adjustments		-10		-86
Balance as of December 31	**1,772**	**12,173**	**2,709**	**9,721**

In 2023, the Group did not renegotiate the terms of trade receivables. Generally, trade receivables written off during 2023 are not subject to enforcement activity.

The total guarantees received (bank guarantees and parental guarantees) in respect of the trade receivables amounted to EUR 295,976 thousand (EUR 233,765 thousand). The Group does not require collateral in respect of trade receivables. The Group does not have trade receivables for which no loss allowance is recognized because of collateral or guarantees received.

Other Credit Risk

The Group is also exposed to credit risk relating to other financial assets. The maximum exposure to credit risk as of the reporting date is the carrying amount of each class of financial assets disclosed in note 28.

The table below shows the maximum exposure to credit risk (gross carrying amount) for financial assets that are measured at amortized cost and subject to a 12-month expected credit loss.

	Credit risk (Gross carrying amount)		Loss allowance recognized	
EUR thousand	2023	2022	2023	2022
Cash and cash equivalents	2,347,631	2,226,207	0	0
Debt investments carried at amortized cost				
Loans granted	905,683	697,327	-4,768	-3,310
Deposits and other receivables	171,942	158,362	-2,054	-943

Borealis' cash balances are deposited with relationship banks or are invested in liquid securities with counterparties that fulfill a certain predefined credit rating threshold. Counterparty credit risks for long-term financial treasury transactions are managed by mandatory credit limits and external credit rating requirements or have undergone a special approval process. A real time treasury system is used to monitor exposures and risk limits. Borealis' management does not expect any counterparty to fail to meet any of its current obligations.

While cash and cash equivalents are also subject to the impairment requirements of IFRS 9, the identified impairment loss was immaterial. All of the entities' other debt investments at amortized cost are considered in general to have low credit risk and the loss allowance recognized during the period is therefore limited to 12-month expected losses.

For the financial guarantee liability, no loss allowance was recognized in the reporting period as the fair value less the cumulative amount of income recognized in accordance with the principles of IFRS 15 was higher than the amount of the loss allowance determined in accordance with the impairment requirements of IFRS 9. For further details on financial guarantee contracts, please refer to note 30.

28. Fair Values

The following table shows the carrying amounts and fair values of financial assets and financial liabilities, including their levels in the fair value hierarchy. It does not include fair value information for financial assets and financial liabilities not measured at fair value, if the carrying amount is a reasonable approximation of fair value.

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EUR thousand	31.12.2023			31.12.2022		
Assets	**Carrying amount**	**Fair value**	**Fair value hierachy level**	**Carrying amount**	**Fair value**	**Fair value hierachy level**
Other investments						
Other investments	23,621	23,621	3	18,459	18,459	3
thereof at fair value through profit or loss	**18,250**			**15,391**		
thereof at fair value through other comprehensive income	**5,371**			**3,068**		
Trade receivables						
Trade receivables	600,266			788,440		
thereof at amortized cost	**581,967**			**662,767**		
thereof at fair value through profit or loss	**18,299**			**125,673**		
Cash and cash equivalents						
Cash	403,163			221,260		
Other current deposits	1,944,468			2,004,947		
at amortized cost	**2,347,631**			**2,226,207**		
Loans granted (current and non-currrent)						
Loans granted	900,915	910,336	2	694,016	691,607	2
at amortized cost	**900,915**			**694,016**		
Other receivables and other assets (current and non-current)						
Marketable securities and bonds	28,012	28,012	1	26,431	26,431	1
at fair value through profit or loss	**28,012**			**26,431**		
Derivative financial instruments for which hedge accounting is applied	49,001	49,001	2	354,293	354,293	2
Hedging instruments	**49,001**			**354,293**		
Derivative financial instruments for which hedge accounting is not applied	11,643	11,643	2	2,994	2,994	2
at fair value through profit or loss	**11,643**			**2,994**		
Deposits and other receivables	169,888			157,419		
thereof at amortized cost	**168,111**			**157,419**		
thereof at fair value through profit or loss	**1,777**			**0**		
Other non-financial assets	314,798	n/a	n/a	197,469	n/a	n/a
Total other receivables and other assets (current and non-current)	**573,343**			**738,606**		

EUR thousand	31.12.2023			31.12.2022		
Liabilities	**Carrying amount**	**Fair value**	**Fair value hierachy level**	**Carrying amount**	**Fair value**	**Fair value hierachy level**
Loans and borrowings (current and non-current)						
Bond	298,973	290,505	1	298,460	289,884	1
Floating rate loans and borrowings	265,496	266,779	2	275,414	274,738	2
Fixed rate loans and borrowings	951,949	877,763	2	980,256	872,649	2
at amortized cost	**1,516,418**			**1,554,130**		
Trade payables						
Trade payables	849,547			862,826		
at amortized cost	**849,547**			**862,826**		
Other liabilities (current and non-current)						
Derivative financial instruments for which hedge accounting is applied	63,568	63,568	2	28,364	28,364	2
Hedging instruments	**63,568**			**28,364**		
Derivative financial instruments for which hedge accounting is not applied	10,615	10,615	2	10,004	10,004	2
at fair value through profit or loss	**10,615**			**10,004**		
Contingent consideration	8,000	8,000	3	0		
Interest accruals on loans and borrowings	6,690			7,021		
Other financial liabilities	151,955			97,414		
at amortized cost	**166,645**			**104,435**		
Financial guarantee liabilities	24,305	24,305	2	27,799	27,799	2
Other non-financial liabilities	216,970	n/a	n/a	252,832	n/a	n/a
Total other liabilities (current and non-current)	**482,103**			**423,434**		

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The Group measures fair values using the following fair value hierarchy that reflects the significance of the inputs used in making the measurements:

Level 1: Quoted market price (unadjusted) in an active market for an identical instrument.

Level 2: Valuation techniques based on observable inputs, either directly or indirectly. This category includes instruments valued using quoted market prices in active markets for similar instruments, quoted prices for identical or similar instruments in less active markets or other valuation techniques where all significant inputs are directly or indirectly observable from market data.

Level 3: Valuation techniques using significant unobservable inputs. This category includes all instruments where the valuation technique includes inputs not based on observable data and the unobservable inputs have a significant effect on the instruments' valuation. This category includes instruments that are valued based on quoted prices for similar instruments where significant unobservable adjustments or assumptions are required to reflect differences between the instruments.

In 2023 and 2022, no transfers between the different levels of the fair value hierarchy took place.

Other Investments
For details on other investments, see note 10. The equity value of the other investments is assumed to equal other investments' fair value. If the equity decreases (increases), the fair value decreases (increases) accordingly.

The following table presents the changes in other investments (level 3 items):

EUR thousand	2023	2022
Balance as of January 1	18,459	18,355
Investments and acquisitions	2,303	56
Fair value changes recognized in income statement (financial income/expenses)	2,857	115
Exchange adjustments	2	-67
Balance as of the reporting date	**23,621**	**18,459**

Trade and Other Receivables and Other Assets
The fair value of trade and other receivables and assets is estimated to equal the nominal values less impairments (= carrying amount).

The carrying amount of deposits and other receivables is not materially different from their fair value.

Loans granted
The fair value of loans granted is calculated based on the present value of future principal and interest cash flows discounted at the market rate of interest adjusted for the respective counterparty credit risk as of the reporting date.

Derivatives
The fair value of foreign exchange derivatives is estimated by discounting the difference between the contractual forward price and the current forward price for the residual maturity of the derivative using market rates as of the reporting date.

The fair value of interest rate swaps is estimated by discounting estimated future cash flows based on the terms and maturity of each derivative and using market rates for a hypothetical instrument as of the reporting date. The credit quality of counterparties did not lead to a significant change in the fair values.

The fair value of commodity derivatives is estimated by discounting the difference between current forward price and contractual forward price.

Other Non-financial Assets and Liabilities
Other non-financial assets and liabilities are shown solely for reconciliation purposes.

Non-derivative Financial Liabilities
Fair value for non-current and current loans and borrowings is calculated based on the present value of future principal and interest cash flows discounted at the market rate of interest adjusted for Borealis' credit risk as of the reporting date. All fair values are excluding the outstanding interest accruals as of the reporting date.

The fair value of trade and other payables is estimated to equal the carrying amount.

Contingent Consideration
For the acquisition of the remaining 50% of Novealis in 2020, a contingent consideration up to EUR 10,150 thousand was agreed based on an earnings target for 2022. According to Borealis' assessment, the earnings target was not met. As a result, the contingent consideration was derecognized.

For the acquisition of the additional 48.55% stake in Renasci on November 30, 2023, a contingent consideration up to EUR 1,693 thousand was agreed based on an earnings target for 2024, 2025 and 2026. According to Borealis' assessment, the earnings target will not be met. Thus, the contingent consideration has been valued at a fair value of EUR 0 thousand.

The fair value of the contingent consideration for the acquisition of Rialti amounts to EUR 8,000 thousand as of December 31, 2023. It has been estimated at the maximum amount based on the management forecast, considering two key factors. Firstly, the net financial position from the closing statement is finalized and the operating working capital falls within the target band. Secondly, there are no anticipated future claims-related warranties. An underrun of the net financial position from the closing statement and of the operating working capital would result in a lower fair value of the contingent consideration liability. Conversely, an overrun would lead to an increase in the fair value of the liability. Furthermore, the forecasted claims in relation to warranties are another significant valuation input for determining the contingent consideration liability.

29. Other Operating Income
In 2023, other operating income consisted mainly of intangible assets received by way of government grants as allowances for emissions (EU Emissions Trading System) of EUR 117,375 thousand (EUR 150,530 thousand). Furthermore, gains from foreign currency translation effects related to working capital amount to EUR 50,276 thousand (EUR 98,077 thousand). Moreover, insurance compensation of EUR 6,699 thousand (EUR 4,000 thousand) is recognized here. The remainder of other operating income is mainly related to various small grants and subsidies.

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30. Transactions with Related Parties

	Transaction values		Balance outstanding	
EUR thousand	**2023**	**2022**	**31.12.2023**	**31.12.2022**
Sales of goods and services to				
Associated companies	7,991	51,450	11,288	21,801
Joint ventures	530,666	646,400	119,181	161,834
Companies with significant influence	0	13,181	0	0
Other related parties	70,014	119,013	9,095	15,532
Purchases of goods and services from				
Associated companies	105,913	133,964	194	150
Joint ventures	380,636	411,273	91,289	88,745
Companies with significant influence	4	45,033	0	0
Other related parties	1,275,613	2,111,463	117,198	182,788
Others				
Loans granted and related interest – Associated companies	2,500	1,009	52,492	40,022
Loans granted and related interest – Joint ventures	59,095	19,188	856,122	656,973
Financial guarantee receivables – Joint ventures	1,303	1,057	24,191	28,712
Financial guarantee liabilities – Joint ventures	3,236	2,728	24,304	27,799
Other financial liabilities – Joint ventures	0	0	67,873	0
Lease liability and related interest – Parent company	20	23	6,430	8,556
Lease liabilities and related interest – Other related parties	223	265	10,164	12,348
Income taxes receivable and related expense – Parent company	13,217	0	41,912	0
Income taxes liability and related expense – Parent company	0	221,981	0	111,127

Due to the sale of Borealis NITRO at the beginning of July 2023, only transaction values for the first six months from discontinued operation are included in 2023. For 2022, the amounts include transaction values and the balance outstanding from discontinued operation.

Due to the ownership change in Borealis on November 8, 2022, the transactions with Mubadala group entities are shown under "Companies with significant influence" until the end of October 2022, whereas, starting with November 2022, the transactions and outstanding balances with Abu Dhabi National Oil Company (ADNOC) and its group entities are shown under "Companies with significant influence".

The sales to associated companies and joint ventures mainly include sales of finished goods and services. Transactions with joint ventures further include the granting of licenses for the use of Group technologies. Contract assets with Borouge PLC amounting to EUR 7,856 thousand (EUR 8,139 thousand with Abu Dhabi Polymers Company Limited) are included in the balance outstanding. For details on contract assets, please see note 2. Also included in the balance outstanding from associated companies are prepayments to Kilpilahden Voimalaitos Oy (KPP) of EUR 10,585 thousand (EUR 11,465 thousand). Purchases from joint ventures mainly include purchases of finished goods produced in Borouge and sold in Europe. Purchases from other related parties mainly relate to purchases of feedstock and utilities from OMV group companies. Receivables from and payables to related parties are included in trade receivables/payables. Other financial liabilities towards joint ventures relate to the outstanding payment of USD 75,000 thousand from the total of USD 100,000 thousand capital contribution in Bayport Polymers LLC (Baystar) which was settled on January 10, 2024.

Lease liabilities and related interest from the parent company represent rental of office facilities in Vienna from OMV Aktiengesellschaft. Lease liabilities and related interest from other related parties relate to rented land and infrastructure from OMV Deutschland Operations GmbH & Co KG and OMV Deutschland GmbH. Loans granted, including interest receivables, to joint ventures amounting to EUR 856,122 thousand (EUR 656,973 thousand) were outstanding from Baystar and Borouge 4 LLC (Borouge 4). For further details on loans granted, see note 10.

All transactions with related parties were conducted on an arm's length basis.

As of December 31, 2023, undrawn commitments to Borouge 4 totaling EUR 818,100 thousand originated from a shareholder loan agreement (SHL) entered into on February 3, 2023, with Borealis AG as the lender and Borouge 4 as the borrower to part finance the Borouge 4 CAPEX requirements to Borouge 4. EUR 148,416 thousand out of the total EUR 966,516 thousand commitment has been drawn to date. The SHL is structured as a facility with a five-year tenor. Borealis retains the right to accelerate the prepayment of the outstanding amounts at the point of reintegration into Borouge PLC. Furthermore, Borealis AG granted a guarantee for the funding of Borouge 4 under the Italian Export Credit Agency agreement. The total guarantee amounts to EUR 1,154,751 thousand plus interest. On December 31, 2023, the financing agreement had been drawn in the amount of EUR 1,399,636 thousand by Borouge 4 (of which EUR 535,747 plus interest was guaranteed by Borealis).

Borealis granted a guarantee for a Revolving Credit Facility (RCF) used by Baystar as a liquidity instrument to conduct its ordinary course of business. The maximum amount of the credit facility is USD 200,000 thousand, of which 50% (USD 100,000 thousand) is guaranteed by Borealis, while the remaining USD 100,000 thousand is guaranteed by joint venture partner TotalEnergies. At year end, Baystar's RCF was fully utilized at USD 200,000 thousand (of which USD 100,000 thousand was guaranteed by Borealis).

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On April 19, 2022, a loan in the amount of EUR 601,685 thousand was repaid by Baystar to Borealis. The repayment was financed from the two tranches of senior notes issued in USD in the amount of EUR 323,984 thousand and EUR 277,701 thousand, which mature in 2027 and 2032, respectively. Borealis provided a parental guarantee of USD 650,000 thousand for the full amount of the senior notes which is recognized as a financial liability of EUR 21,690 thousand (EUR 26,371 thousand). Additionally, in 2022 Borealis provided a parental guarantee for a lease of railcars with maximum exposure of USD 22,010 thousand (USD 16,619 thousand) and recognized a financial liability of EUR 1,626 thousand (EUR 1,452 thousand).

Due to additional loan drawings, no undrawn funding commitment to Baystar was reported as of December 31, 2023 (EUR 46,050 thousand). Also, on the reporting date, the Group had no financing commitments to KPP (EUR 10,000 thousand).

As of January 1, 2021, selected Austrian entities of the Borealis Group belong to the OMV tax group and reimburse income tax payments directly to OMV Aktiengesellschaft with income tax liability to the parent company shown under Other current liabilities.

Austria has an indirect relationship with Borealis via OMV and Österreichische Beteiligungs AG (ÖBAG) and is therefore, together with companies under the control of the Republic of Austria, considered a related party. Borealis has transactions at arm's length in the normal course of business mainly with OMV AG and its subsidiaries (shown under "Other related parties") and VERBUND AG and its subsidiaries.

Via Mubadala Petroleum and Petrochemicals Holding Company L.L.C. (MPPH) Abu Dhabi and OMV, Borealis has an indirect relationship with the Emirate of Abu Dhabi, which is, together with the companies under control of Abu Dhabi also considered a related party. In 2023, there were transactions at arm's length in the normal course of business mainly with Compañía Española Distribuidora de Petróleos, S.A. (CEPSA), NOVA Chemicals Corporation and Abu Dhabi National Oil Company (ADNOC) and their subsidiaries.

For further information in respect of dividends received from associated companies and joint ventures, please refer to note 9. For further information in respect of dividends outstanding to shareholders, please refer to note 13. For further information regarding commitments to joint ventures and associated companies, see note 21. For information regarding dividends paid, please refer to the statement of changes in equity. For details regarding the remuneration of key management personnel, please see note 14.

31. Commitments and Contingent Liabilities

Legal Claim Contingencies

While the Group has certain lawsuits pending, it is the *Executive Board's opinion that these proceedings will not* materially affect the Group's financial position.

Financial Guarantees

The Group is subject to numerous national and local tax laws and regulations concerning its sales and environmental activities. These laws and regulations may require the Group to issue guarantees to respective authorities for the Group's payment obligations. These guarantees have been provided to the extent the authorities have requested them.

The Group has committed to several rental guarantees mainly for its own rental agreements. The Group will be responsible if the tenant or Borealis itself fails to pay rent or causes any damage to property. No material losses are expected to arise from such contingent liabilities.

In addition to the contractual commitments for property, plant and equipment (see note 5), contractual obligations for additional capital contributions (see note 9 and note 30) and financial guarantee contracts (see note 30), no further significant risks and uncertainties have been identified compared to year end 2022.

32. Subsequent Events

Borealis has had no significant events after the reporting date.

33. Subsidiaries Included in the Consolidated Accounts

Company name	Country	City	Percentage of shares owned	
			2023	2022
Borealis AG				
■ Borealis Agrolinz Melamine GmbH [2]	Austria	Linz	0.00	100.00
■ Borealis Agrolinz Melamine Deutschland GmbH [2]	Germany	Wittenberg	0.00	100.00
■ Borealis Antwerpen N.V.	Belgium	Zwijndrecht	100.00	100.00
■ Borealis Argentina SRL [1]	Argentina	Buenos Aires	100.00	100.00
■ BOREALIS ASIA LIMITED [1]	Hong Kong	Hong Kong	100.00	100.00
■ Borealis Brasil S.A.	Brazil	Itatiba	80.00	80.00
■ BOREALIS CHEMICALS ZA (PTY) LTD [1]	South Africa	Germiston	100.00	100.00
■ Borealis Chile SpA [1]	Chile	Santiago	100.00	100.00
■ Borealis Chimie S.A.R.L. [1]	Morocco	Casablanca	100.00	100.00
■ Borealis Circular Solutions Holding GmbH	Austria	Vienna	100.00	100.00
■ Borealis Colombia S.A.S. [1]	Colombia	Bogota	100.00	100.00
■ Borealis Denmark ApS [1]	Denmark	Copenhagen	100.00	100.00
■ Borealis Digital Studio B.V. [1]	Belgium	Zaventem	100.00	100.00
■ Borealis Financial Services N.V.	Belgium	Mechelen	100.00	100.00
■ Borealis France S.A.S.	France	Courbevoie	100.00	100.00
■■ Borealis Chimie S.A.S. [2]	France	Courbevoie	0.00	100.00
■■■ AGRIPRODUITS S.A.S. [1] [2]	France	Courbevoie	0.00	100.00
■■■ STOCKAM G.I.E. [1] [2]	France	Grand-Quevilly	0.00	100.00
■■ Borealis L.A.T France S.A.S. [2]	France	Courbevoie	0.00	100.00
■■ Borealis Produits et Engrais Chimiques du Rhin S.A.S. [2]	France	Ottmarsheim	0.00	100.00
■■ Borealis Services S.A.S. [1]	France	Paris	100.00	100.00
■ Borealis Insurance A/S (captive insurance company)	Denmark	Copenhagen	100.00	100.00
■ BOREALIS ITALIA S.p.A.	Italy	Monza	100.00	100.00
■ Borealis Kallo N.V.	Belgium	Kallo	100.00	100.00
■ Borealis L.A.T GmbH [2]	Austria	Linz	0.00	100.00
■■ Borealis L.A.T Belgium B.V. [1] [2]	Belgium	Beringen	0.00	100.00
■■ Borealis L.A.T Bulgaria EOOD [1] [2]	Bulgaria	Sofia	0.00	100.00
■■ Borealis L.A.T Czech Republic s.r.o. [1] [2]	Czech Republic	Budweis	0.00	100.00
■■ Borealis L.A.T doo, Beograd [2]	Serbia	Belgrade	0.00	100.00
■■ Borealis L.A.T Greece Single Member P.C. [1] [2]	Greece	Athens	0.00	100.00
■■ Borealis L.A.T Hrvatska d.o.o. [1] [2]	Croatia	Klisa	0.00	100.00
■■ Borealis L.A.T Hungary Kft. [1] [2]	Hungary	Budapest	0.00	100.00

1) Excluded from the consolidation due to immateriality (individual and in total) // 2) Divestment of Borealis NITRO companies in 2023 // ■ Subsidiary of Borealis AG // ■■ Second-tier subsidiary of Borealis AG // ■■■ Third-tier subsidiary of Borealis AG

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	Company name	Country	City	Percentage of shares owned	
				2023	2022
■■	Borealis L.A.T Polska sp. z o.o. [1) 2)]	Poland	Warsaw	0.00	100.00
■■	Borealis L.A.T Romania s.r.l. [1) 2)]	Romania	Bucharest	0.00	100.00
■■	Borealis L.A.T Slovakia s.r.o. [1) 2)]	Slovakia	Chotin	0.00	100.00
■	Borealis L.A.T Italia s.r.l. [1) 2)]	Italy	Milan	0.00	100.00
■	Borealis México, S.A. de C.V. [1)]	Mexico	Mexico City	100.00	100.00
■	Borealis Middle East Holding GmbH	Austria	Vienna	100.00	100.00
■	Borealis Plasticos, S.A. de C.V. [1)]	Mexico	Mexico City	100.00	100.00
■	Borealis Plastik ve Kimyasal Maddeler Ticaret Limited Sirketi [1)]	Türkiye	Istanbul	100.00	100.00
■	Borealis Plastomers B.V.	The Netherlands	Geleen	100.00	100.00
■	Borealis Poliolefinas da América do Sul Ltda. [1)]	Brazil	Itatiba	100.00	100.00
■	Borealis Polyolefins d.o.o. [1)]	Croatia	Zagreb	100.00	100.00
■	Borealis Polyolefins S.R.L. [1)]	Romania	Bucharest	100.00	100.00
■	Borealis Polyolefins s.r.o. [1)]	Slovakia	Bratislava	100.00	100.00
■	Borealis Polska Sp. z o.o. [1)]	Poland	Warsaw	100.00	100.00
■	Borealis Polymere GmbH	Germany	Burghausen	100.00	100.00
■	Borealis Polymers N.V.	Belgium	Beringen	100.00	100.00
■	Borealis Polymers Oy	Finland	Porvoo	100.00	100.00
■	Borealis Polyolefine GmbH	Austria	Schwechat	100.00	100.00
■	Borealis Química España S.A.	Spain	Barcelona	100.00	100.00
■	Borealis RUS LLC [1)]	Russia	Moscow	100.00	100.00
■	Borealis s.r.o. [1)]	Czech Republic	Prague	100.00	100.00
■	Borealis Sverige AB	Sweden	Stenungsund	100.00	100.00
■■	Borealis AB	Sweden	Stenungsund	100.00	100.00
■■■	Borealis Group Services AS	Norway	Bamble	100.00	100.00
■■■	Etenförsörjning i Stenungsund AB	Sweden	Stenungsund	80.00	80.00
■■■	KB Munkeröd 1:72 [1)]	Sweden	Stenungsund	100.00	100.00
■	Borealis Technology Oy	Finland	Porvoo	100.00	100.00
■	BOREALIS UK LTD	UK	Manchester	100.00	100.00
■	Borealis USA Inc.	US	Houston	100.00	100.00
■■	Borealis BoNo Holdings LLC	US	Houston	100.00	100.00

1) Excluded from the consolidation due to immateriality (individual and in total) // 2) Divestment of Borealis NITRO companies in 2023 // ■ Subsidiary of Borealis AG // ■■ Second-tier subsidiary of Borealis AG // ■■■ Third-tier subsidiary of Borealis AG

	Company name	Country	City	Percentage of shares owned	
				2023	2022
■■	Borealis Compounds Inc.	US	Port Murray	100.00	100.00
■■	Star Bridge Holdings LLC	US	Houston	100.00	100.00
■■■	Novealis Holdings LLC	US	Houston	100.00	100.00
■	DYM SOLUTION CO., LTD	South Korea	Cheonan	100.00	99.75
■	Ecoplast Kunststoffrecycling GmbH	Austria	Wildon	100.00	100.00
■	Feboran EOOD [2]	Bulgaria	Sofia	0.00	100.00
■	mtm compact GmbH	Germany	Niedergebra	100.00	100.00
■	mtm plastics GmbH	Germany	Niedergebra	100.00	100.00
■	Renasci N.V.	Belgium	Ostend	98.56	27.42
■■	Renasci Oostende Holding N.V.	Belgium	Ostend	98.56	0.00
■■	Renasci Oostende SCP N.V.	Belgium	Ostend	98.56	0.00
■■	Renasci Oostende Recycling N.V.	Belgium	Ostend	98.56	0.00
■	Rialti S.p.A.	Italy	Taino	100.00	0.00
■	Rosier S.A.	Belgium	Moustier	0.00	98.09
■■	Rosier France S.A.S.	France	Arras	0.00	98.09
■■	Rosier Nederland B.V.	The Netherlands	Sas Van Gent	0.00	98.09

1) Excluded from the consolidation due to immateriality (individual and in total) // 2) Divestment of Borealis NITRO companies in 2023 // ■ Subsidiary of Borealis AG // ■■ Second-tier subsidiary of Borealis AG // ■■■ Third-tier subsidiary of Borealis AG

For further details relating to discontinued operation and other changes in the legal structure during the financial year 2023, please see note 8.

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34. Auditor's Fees

The following fee information relates to the auditors of the Group (including their related networking firms):

EUR thousand	2023	2022
Audit of Borealis AG's subsidiaries	911	1,273
Audit of consolidated and standalone financial statements of Borealis AG	404	415
Other assurance services	206	578
Tax consulting services	702	106
Other services	506	595
Total	**2,729**	**2,967**

The following fees for 2023 relate to the Group auditor, KPMG Austria GmbH, Wirtschaftsprüfungs- und Steuerberatungsgesellschaft, Vienna, Austria: audit of Borealis AG's subsidiaries amounting to EUR 154 thousand (EUR 239 thousand), audit of consolidated and standalone financial statements of Borealis AG amounting to EUR 404 thousand (EUR 415 thousand), and other assurance services amounting to EUR 193 thousand (EUR 441 thousand) and other services amounting to EUR 1 thousand (EUR 0 thousand). Last year's audit fees related to PwC Wirtschaftsprüfungs GmbH, Vienna, Austria.

35. Executive Board and Supervisory Board

Executive Board

Thomas Gangl (Chairperson), Mark Tonkens (Member until May 31, 2023), Daniel Turnheim (Member since June 1, 2023) Wolfram Krenn, Philippe Roodhooft, Lucrèce De Ridder (Member until December 31, 2023), Craig Arnold (Member since February 1, 2024)

Supervisory Board

Alfred Stern (Chairperson until April 18, 2023), Daniela Vlad (Chairperson since April 19, 2023), Khaled Salmeen (Vice Chairperson), Reinhard Florey, Martijn Arjen van Koten, Khaled Al Zaabi

Vienna, February 22, 2024
Executive Board:

Thomas Gangl m.p.
Chief Executive Officer

Daniel Turnheim m.p.
Chief Financial Officer

Wolfram Krenn m.p.
Executive Vice President
Base Chemicals & Operations

Philippe Roodhooft m.p.
Executive Vice President
Joint Ventures & Growth Projects

Craig Arnold m.p.
Executive Vice President
Polyolefins, Circular Economy Solutions
and Innovation & Technology

Statement of the Executive Board according to Section 124(1)(3) of the Vienna Stock Exchange Act

We confirm to the best of our knowledge that the consolidated financial statements give a true and fair view of the assets, liabilities, financial position and profit or loss of the Group as required by the applicable accounting standards and that the Group Management Report gives a true and fair view of the development and performance of the business and the position of the Group, together with a description of the principal risks and uncertainties the Company faces.

Vienna, February 22, 2024
Executive Board:

Thomas Gangl m.p.
Chief Executive Officer

Daniel Turnheim m.p.
Chief Financial Officer

Wolfram Krenn m.p.
Executive Vice President
Base Chemicals & Operations

Philippe Roodhooft m.p.
Executive Vice President
Joint Ventures & Growth Projects

Craig Arnold m.p.
Executive Vice President
Polyolefins, Circular Economy Solutions
and Innovation & Technology

Report of the Supervisory Board of Borealis AG

In the year under review, the Supervisory Board received a comprehensive overview of the activities of the Executive Board of Borealis AG and performed its duties and exercised its powers under the law and the articles of association in six plenary sessions.

The Executive Board informed the Supervisory Board regularly, in a timely fashion and comprehensively, both in writing and verbally, on all the relevant issues of business development as well as on the state and strategy of the Company and the important group companies, including risk conditions and risk management.

The Executive Board of Borealis AG submitted the financial statements as of December 31, 2023, including the management report, and the consolidated financial statements as of December 31, 2023, including the Group management report, and the consolidated non-financial report to the Supervisory Board and explained it thoroughly.

The financial statements of Borealis AG have been prepared in accordance with the applicable provisions of the Austrian Commercial Code ("Unternehmensgesetzbuch"), and KPMG Austria GmbH Wirtschaftsprüfungs- und Steuerberatungsgesellschaft issued the unqualified audit opinion ("uneingeschränkter Bestätigungsvermerk") on the financial statements.

Furthermore, the consolidated financial statements of Borealis AG have been prepared in accordance with the International Financial Reporting Standards (IFRS), and KPMG Austria GmbH Wirtschaftsprüfungs- und Steuerberatungsgesellschaft issued the unqualified audit opinion ("uneingeschränkter Bestätigungsvermerk") on the consolidated financial statements.

The (consolidated) financial statements documents, the consolidated non-financial report, and the audit reports were submitted to the Audit Committee and the Supervisory Board in due time. Following a thorough examination and discussion by the Audit Committee and the Supervisory Board with the auditors, the Supervisory Board reached the final agreement that no material objections would be raised, and the drawn up financial statements, the management report, the proposal for the appropriation of retained earnings, the proposal for the appointment of the auditor for the financial year 2024, the consolidated financial statements, the Group management report, and the consolidated non-financial report were approved/ acknowledged.

Vienna, February 28, 2024

Daniela Vlad m.p.
Chairperson of the Supervisory Board

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Annex

2023

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United Nations Global Compact

In 2021, Borealis joined the United Nations Global Compact (UNGC) and supports the ten universal principles of the UNGC.

Human Rights
Principle 1
Businesses should support and respect the protection of internationally proclaimed human rights; and

Principle 2
make sure that they are not complicit in human rights abuses.

Labour
Principle 3
Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining;

Principle 4
the elimination of all forms of forced and compulsory labour;

Principle 5
the effective abolition of child labour; and

Principle 6
the elimination of discrimination in respect of employment and occupation.

Environment
Principle 7
Businesses should support a precautionary approach to environmental challenges;

Principle 8
undertake initiatives to promote greater environmental responsibility; and

Principle 9
encourage the development and diffusion of environmentally friendly technologies.

Anti-Corruption
Principle 10
Businesses should work against corruption in all its forms, including extortion and bribery.

WE SUPPORT

UN GLOBAL COMPACT

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This report is available in English and German. The original version was written in English. Both documents are available online and can be downloaded from www.borealisgroup.com.

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OUR COMMITMENT TO SUSTAINABILITY

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