Brønnøysundregistrene

ÅRSREGNSKAPET FOR REGNSKAPSÅRET 2021 - GENERELL INFORMASJON

Enheten

Organisasjonsnummer:	994 584 634
Organisasjonsform:	Aksjeselskap
Foretaksnavn:	REFORM FASADE AS
Forretningsadresse:	Sandstuveien 68 0680 OSLO

Regnskapsår

Årsregnskapets periode:	01.01.2021 - 31.12.2021

Konsern

Morselskap i konsern:	Nei

Regnskapsregler

Regler for små foretak benyttet:	Ja
Benyttet ved utarbeidelsen av årsregnskapet til selskapet:	Regnskapslovens alminnelige regler

Årsregnskapet fastsatt av kompetent organ

Bekreftet av representant for selskapet:	Sven E Lier
Dato for fastsettelse av årsregnskapet:	20.06.2022

Grunnlag for avgivelse

År 2021: Årsregnskapet er elektronisk innlevert
År 2020: Tall er hentet fra elektronisk innlevert årsregnskap fra 2021

Det er ikke krav til at årsregnskapet m.v. som sendes til Regnskapsregisteret er undertegnet. Kontrollen på at dette er utført ligger hos revisor/enhetens øverste organ. Sikkerheten ivaretas ved at innsender har rolle/rettighet for innsending av årsregnskapet via Altinn, og ved at det bekreftes at årsregnskapet er fastsatt av kompetent organ.

Brønnøysundregistrene, 10.07.2022

Resultatregnskap

Beløp i: NOK	Note	2021	2020
RESULTATREGNSKAP			
Inntekter			
Salgsinntekt		1 202 555	4 653 388
Sum inntekter		**1 202 555**	**4 653 388**
Kostnader			
Lønnskostnad	2, 9	3 617 421	3 050 803
Avskrivning av driftsmidler og immaterielle eiendeler	3	1 021 621	984 775
Annen driftskostnad	2, 9	6 620 942	12 805 070
Sum kostnader		**11 259 985**	**16 840 648**
Driftsresultat		**-10 057 430**	**-12 187 260**
Finansinntekter og finanskostnader			
Annen renteinntekt			2 164
Annen finansinntekt		-272	-96 106
Sum finansinntekter		**-272**	**-93 942**
Rentekostnad til foretak i samme konsern		118 435	78 110
Annen finanskostnad		29 627	12 642
Sum finanskostnader		**148 062**	**90 752**
Netto finans		**-148 333**	**-184 694**
Ordinært resultat før skattekostnad		**-10 205 763**	**-12 371 954**
Skattekostnad på ordinært resultat	7	-2 274 354	-2 840 789
Ordinært resultat etter skattekostnad		**-7 931 409**	**-9 531 165**
Årsresultat		**-7 931 409**	**-9 531 165**
Årsresultat etter minoritetsinteresser		**-7 931 409**	**-9 531 165**
Totalresultat		**-7 931 409**	**-9 531 165**
Overføringer og disponeringer			
Overført fra annen innskutt egenkapital	5		-9 531 165

Resultatregnskap

Beløp i: NOK	Note	2021	2020
Overført fra annen egenkapital		-7 931 409	
Sum overføringer og disponeringer		**-7 931 409**	**-9 531 165**

Balanse

Beløp i: NOK	Note	2021	2020
BALANSE - EIENDELER			
Anleggsmidler			
Immaterielle eiendeler			
Forskning og utvikling		5 462 422	6 145 228
Utsatt skattefordel		81 796	80 992
Sum immaterielle eiendeler		**5 544 218**	**6 226 220**
Varige driftsmidler			
Driftsløsøre, inventar o.a. utstyr	3	6 996 415	2 115 509
Sum varige driftsmidler		**6 996 415**	**2 115 509**
Sum anleggsmidler		**12 540 633**	**8 341 729**
Omløpsmidler			
Varer			
Sum varer		**637 574**	**796 375**
Fordringer			
Kundefordringer	6	855 549	143 550
Andre kortsiktige fordringer	6	11 117 494	12 981 526
Sum fordringer		**11 973 043**	**13 125 076**
Sum omløpsmidler		**12 610 617**	**13 921 451**
SUM EIENDELER		**25 151 250**	**22 263 180**
BALANSE - EGENKAPITAL OG GJELD			
Egenkapital			
Innskutt egenkapital			
Aksjekapital	4, 5	5 000 000	5 000 000
Annen innskutt egenkapital	5	1 198 934	1 062 514
Sum innskutt egenkapital		**6 198 934**	**6 062 514**
Annen egenkapital	5		

Balanse

Beløp i: NOK	Note	2021	2020
Udisponert resultat			
Sum egenkapital		**6 198 934**	**6 062 513**
Gjeld			
Langsiktig gjeld			
Utsatt skatt	7		
Annen langsiktig gjeld			
Langsiktig konserngjeld		12 016 526	8 000 000
Øvrig langsiktig gjeld	6		
Sum annen langsiktig gjeld		**12 016 526**	**8 000 000**
Sum langsiktig gjeld		**12 016 526**	**8 000 000**
Kortsiktig gjeld			
Leverandørgjeld	6	5 555 486	3 029 168
Betalbar skatt		1 991	
Skyldig offentlige avgifter		265 654	337 850
Annen kortsiktig gjeld	6, 8	1 112 658	4 833 649
Sum kortsiktig gjeld		**6 935 789**	**8 200 666**
Sum gjeld		**18 952 316**	**16 200 666**
SUM EGENKAPITAL OG GJELD		**25 151 250**	**22 263 180**

Brønnøysundregistrene

ÅRSREGNSKAP FOR REGNSKAPSÅRET 2021 - GENERELL INFORMASJON

Journalnummer:	2022 602731

Enheten

Organisasjonsnummer:	994 584 634
Organisasjonsform:	Aksjeselskap
Foretaksnavn:	REFORM FASADE AS
Forretningsadresse:	Sandstuveien 68 0680 OSLO

Regnskapsår

Årsregnskapets periode:	01.01.2021 - 31.12.2021

Konsern

Morselskap i konsern:	Nei

Regnskapsregler

Regler for små foretak benyttet:	Ja
Benyttet ved utarbeidelsen av årsregnskapet til selskapet:	Regnskapslovens alminnelige regler

Årsregnskapet fastsatt av kompetent organ

Bekreftet av representant for selskapet:	Sven E Lier
Dato for fastsettelse av årsregnskapet:	20.06.2022

Grunnlag for avgivelse

År 2021: Årsregnskap er elektronisk innlevert.
År 2020: Tall er hentet fra elektronisk innlevert årsregnskap fra 2021.

Det er ikke krav til at årsregnskapet m.v. som sendes til Regnskapsregisteret er undertegnet. Kontrollen på at dette er utført ligger hos revisor/enhetens øverste organ. Sikkerheten ivaretas ved at innsender har rolle/rettighet for innsending av årsregnskapet via Altinn, og ved at det bekreftes at årsregnskapet er fastsatt av kompetent organ.

Brønnøysundregistrene, 09.07.2022

Brønnøysundregistrene
Postadresse: Postboks 900, 8910 Brønnøysund
Telefon: 75 00 75 00
E-post: firmapost@brreg.no Internett: www.brreg.no
Organisasjonsnummer: 974 760 673

Organisasjonsnr: 994 584 634
REFORM FASADE AS

RESULTATREGNSKAP

Beløp i: NOK	Note	2021	2020
RESULTATREGNSKAP			
Inntekter			
Salgsinntekt		1 202 555	4 653 388
Sum inntekter		**1 202 555**	**4 653 388**
Kostnader			
Lønnskostnad	2, 9	3 617 421	3 050 803
Avskrivning av driftsmidler og immaterielle eiendeler	3	1 021 621	984 775
Annen driftskostnad	2, 9	6 620 942	12 805 070
Sum kostnader		**11 259 985**	**16 840 648**
Driftsresultat		**-10 057 430**	**-12 187 260**
Finansinntekter og finanskostnader			
Annen renteinntekt			2 164
Annen finansinntekt		-272	-96 106
Sum finansinntekter		**-272**	**-93 942**
Rentekostnad til foretak i samme konsern		118 435	78 110
Annen finanskostnad		29 627	12 642
Sum finanskostnader		**148 062**	**90 752**
Netto finans		**-148 333**	**-184 694**
Ordinært resultat før skattekostnad		**-10 205 763**	**-12 371 954**
Skattekostnad på ordinært resultat	7	-2 274 354	-2 840 789
Ordinært resultat etter skattekostnad		**-7 931 409**	**-9 531 165**
Årsresultat		**-7 931 409**	**-9 531 165**
Årsresultat etter minoritetsinteresser		**-7 931 409**	**-9 531 165**
Totalresultat		**-7 931 409**	**-9 531 165**
Overføringer og disponeringer			
Overført fra annen innskutt egenkapital	5		-9 531 165
Overført fra annen egenkapital		-7 931 409	
Sum overføringer og disponeringer		**-7 931 409**	**-9 531 165**

Organisasjonsnr: 994 584 634
REFORM FASADE AS

BALANSE

Beløp i: NOK	Note	2021	2020
BALANSE - EIENDELER			
Anleggsmidler			
Immaterielle eiendeler			
Forskning og utvikling		5 462 422	6 145 228
Utsatt skattefordel		81 796	80 992
Sum immaterielle eiendeler		**5 544 218**	**6 226 220**
Varige driftsmidler			
Driftsløsøre, inventar o. a. utstyr	3	6 996 415	2 115 509
Sum varige driftsmidler		**6 996 415**	**2 115 509**
Sum anleggsmidler		**12 540 633**	**8 341 729**
Omløpsmidler			
Varer			
Sum varer		**637 574**	**796 375**
Fordringer			
Kundefordringer	6	855 549	143 550
Andre kortsiktige fordringer	6	11 117 494	12 981 526
Sum fordringer		**11 973 043**	**13 125 076**
Sum omløpsmidler		**12 610 617**	**13 921 451**
SUM EIENDELER		**25 151 250**	**22 263 180**
BALANSE - EGENKAPITAL OG GJELD			
Egenkapital			
Innskutt egenkapital			
Aksjekapital	4, 5	5 000 000	5 000 000
Annen innskutt egenkapital	5	1 198 934	1 062 514
Sum innskutt egenkapital		**6 198 934**	**6 062 514**
Annen egenkapital	5		
Udisponert resultat			
Sum egenkapital		**6 198 934**	**6 062 513**
Gjeld			
Langsiktig gjeld			
Utsatt skatt	7		
Annen langsiktig gjeld			
Langsiktig konserngjeld		12 016 526	8 000 000
Øvrig langsiktig gjeld	6		
Sum annen langsiktig gjeld		**12 016 526**	**8 000 000**

Sum langsiktig gjeld		**12 016 526**	**8 000 000**
Kortsiktig gjeld			
Leverandørgjeld	6	5 555 486	3 029 168
Betalbar skatt		1 991	
Skyldig offentlige avgifter		265 654	337 850
Annen kortsiktig gjeld	6, 8	1 112 658	4 833 649
Sum kortsiktig gjeld		**6 935 789**	**8 200 666**
Sum gjeld		**18 952 316**	**16 200 666**
SUM EGENKAPITAL OG GJELD		**25 151 250**	**22 263 180**

Organisasjonsnr: 994 584 634
REFORM FASADE AS

NOTEOPPLYSNINGER - SELSKAP

- alle poster oppgitt i hele tall

Note

Antall aksjer og aksjeeiere

Note

Antall årsverk i regnskapsåret

Virksomheten har hatt følgende antall årsverk:
4.00

Omløpsmidler	Startdato	Sluttdato	Endring

Skattemessig fremf.undersk.	Startdato	Sluttdato	Endring

Kortsiktig gjeld	Startdato	Sluttdato	Endring

Årsregnskap 2021
Reform Fasade

Resultatregnskap
Balanse
Noter

Org.nr.: 994 584 634

RESULTATREGNSKAP

REFORM FASADE

DRIFTSINNTEKTER OG DRIFTSKOSTNADER	Note	2021	2020
Salgsinntekt		1 202 555	4 653 388
Sum driftsinntekter		**1 202 555**	**4 653 388**
Lønnskostnad	2, 9	3 617 421	3 050 803
Avskrivning av driftsmidler og immaterielle eiendeler	3	1 021 621	984 775
Annen driftskostnad	2, 9	6 620 942	12 805 070
Sum driftskostnader		**11 259 985**	**16 840 648**
Driftsresultat		**-10 057 430**	**-12 187 260**
FINANSINNTEKTER OG FINANSKOSTNADER			
Annen renteinntekt		0	2 164
Annen finansinntekt		-272	-96 106
Rentekostnad til foretak i samme konsern		118 435	78 110
Annen finanskostnad		29 627	12 642
Resultat av finansposter		**-148 333**	**-184 694**
Resultat før skattekostnad		**-10 205 763**	**-12 371 954**
Skattekostnad på ordinært resultat	7	-2 274 354	-2 840 789
Årsresultat		**-7 931 409**	**-9 531 165**
OVERFØRINGER			
Overført fra annen innskutt egenkapital	5	0	-9 531 165
Overført fra annen egenkapital		-7 931 409	0
Sum overføringer		**-7 931 409**	**-9 531 165**

BALANSE

REFORM FASADE

EIENDELER	Note	31.12.2021	31.12.2020
ANLEGGSMIDLER			
IMMATERIELLE EIENDELER			
Forskning og utvikling		5 462 422	6 145 228
Utsatt skattefordel		81 796	80 992
Sum immaterielle eiendeler		**5 544 218**	**6 226 220**
VARIGE DRIFTSMIDLER			
Driftsløsøre, inventar o.a. utstyr	3	6 996 415	2 115 509
Sum varige driftsmidler		**6 996 415**	**2 115 509**
Sum anleggsmidler		**12 540 633**	**8 341 729**
OMLØPSMIDLER			
Lager av varer og annen beholdning		637 574	796 375
FORDRINGER			
Kundefordringer	6	855 549	143 550
Andre kortsiktige fordringer	6	11 117 494	12 981 526
Sum fordringer		**11 973 043**	**13 125 076**
Sum omløpsmidler		**12 610 617**	**13 921 451**
Sum eiendeler		**25 151 250**	**22 263 180**

BALANSE

REFORM FASADE

EGENKAPITAL OG GJELD	Note	31.12.2021	31.12.2020
EGENKAPITAL			
INNSKUTT EGENKAPITAL			
Aksjekapital	4, 5	5 000 000	5 000 000
Annen innskutt egenkapital	5	1 198 934	1 062 514
Sum innskutt egenkapital		**6 198 934**	**6 062 514**
OPPTJENT EGENKAPITAL			
Sum egenkapital		**6 198 934**	**6 062 513**
GJELD			
AVSETNING FOR FORPLIKTELSER			
ANNEN LANGSIKTIG GJELD			
Langsiktig konserngjeld		12 016 526	8 000 000
Sum annen langsiktig gjeld		**12 016 526**	**8 000 000**
KORTSIKTIG GJELD			
Leverandørgjeld	6	5 555 486	3 029 168
Betalbar skatt		1 991	0
Skyldig offentlige avgifter		265 654	337 850
Annen kortsiktig gjeld	6, 8	1 112 658	4 833 649
Sum kortsiktig gjeld		**6 935 789**	**8 200 666**
Sum gjeld		**18 952 316**	**16 200 666**
Sum egenkapital og gjeld		**25 151 250**	**22 263 180**

20.06.2022
Styret i Reform Fasade

Per Christian Haugen daglig leder	Anders Hoel styreleder
Tom Hopland Tegnander styremedlem	Peik Næsje styremedlem

Reform Fasade AS

Noter til regnskapet 2021

Note 1 Regnskapsprinsipper

Selskapet endret 5. november 2021 navn fra Glavatech AS til Reform Fasade AS.

Årsregnskapet er satt opp i samsvar med regnskapsloven av 1998 og god regnskapsskikk for små foretak i Norge.

Hovedregel for vurdering og klassifisering av eiendeler og gjeld
Eiendeler bestemt til varig eie eller bruk er klassifisert som anleggsmidler. Andre eiendeler er klassifisert som omløpsmidler. Fordringer som skal tilbakebetales innen et år er klassifisert som omløpsmidler. Ved klassifisering av kortsiktig og langsiktig gjeld er tilsvarende kriterier lagt til grunn.

Omløpsmidler vurderes til laveste av anskaffelseskost og virkelig verdi.

Varige driftsmidler
Varige driftsmidler føres i balansen til anskaffelseskost, fratrukket akkumulerte av- og nedskrivninger. Ordinære avskrivninger er beregnet lineært over driftsmidlenes økonomiske levetid med utgangspunkt i historisk kostpris fratrukket estimert utrangeringsverdi. Det foretas løpende revurdering av avskrivningsplaner. Avskrivningene er klassifisert som ordinære driftskostnader.
Dersom det foreligger indikasjoner på verdifall knyttet til anleggsmidler, skal det undersøkes om gjenvinnbart beløp er lavere enn bokført verdi. Gjenvinnbart beløp er det høyeste av netto salgsverdi eller bruksverdi.

Immaterielle eiendeler
Utgifter til egne utviklingsaktiviteter kostnadsføres løpende. Utgifter til andre immaterielle eiendeler balanseføres i den grad det kan identifiseres en fremtidig økonomisk fordel knyttet til utvikling av en identifiserbar immateriell eiendel og utgiftene kan måles pålitelig. I motsatt fall kostnadsføres slike utgifter løpende. Balanseført utvikling avskrives lineært over økonomisk levetid.

Varelager
Lager av innkjøpte varer verdsettes til det laveste av anskaffelseskost etter FIFO-prinsippet, og netto salgsverdi. Egentilvirkede ferdigvarer og varer under tilvirkning vurderes til variabel tilvirkningskost.

Fordringer
Kundefordringer og andre fordringer er oppført til pålydende etter fradrag for avsetning til forventet tap. Avsetning til tap gjøres på grunnlag av en individuell vurdering av de enkelte fordringer.

Pensjoner
Innskuddsplaner periodiseres etter sammenstillingsprinsippet. Årets innskudd til pensjonsordningen kostnadsføres.

Kostnader
Kostnader regnskapsføres som hovedregel i samme periode som tilhørende inntekt. I de tilfeller det ikke er en klar sammenheng mellom utgifter og inntekter fastsettes fordelingen etter skjønnsmessige kriterier. Øvrige unntak fra sammenstillingsprinsippet er angitt der det er aktuelt.

Skatter
Skattekostnaden sammenstilles med regnskapsmessig resultat før skatt. Skatt knyttet til egenkapitaltransaksjoner, for eksempel konsernbidrag, føres mot egenkapitalen.

Skattekostnaden består av betalbar skatt (skatt på årets direkte skattepliktige inntekt) og endring i netto utsatt skatt. Skattekostnaden fordeles på ordinært resultat og resultat av ekstraordinære poster i henhold til skattegrunnlaget. Utsatt skatt og utsatt skattefordel er presentert netto i balansen.

Reform Fasade AS

Noter til regnskapet 2021

Note 2 Lønnskostnad, antall ansatte, godtgjørelser, lån til ansatte mm

Antall årsverk sysselsatt i regnskapsåret: 2,2

Det er ikke gitt noen lån eller sikkerhetsstillelse til ansatte.

Ytelser til ledende personer

	Lønn	Pensjons-kostnader	Andre godtgj.
Daglig leder	1 688 167	85 581	157 789

Revisor

Godtgjørelse til revisor og samarbeidende selskaper utgjør ekskl. mva.

	2 021	2 020
Revisjonshonorar	183 848	71 335
Regnskapsteknisk bistand	-	-
Skatterådgivning	-	-
Andre attestasjonstjenester	-	59 900
Samlet honorar	**183 848**	**131 235**

Lønnskostnad	**2021**	**2020**
Lønn	3 451 615	3 956 600
Folketrygdavgift	467 530	555 213
Pensjonskostnader	229 980	244 415
Tilskudd fra Innovasjon Norge (se note 8)	-694 960	-1 745 285
Aktivert kostnader F&U	0	0
Andre ytelser	163 256	39 860
Sum	**3 617 421**	**3 050 803**

Reform Fasade AS

Noter til regnskapet 2021

Note 3 Varige driftsmidler

	Forskning og utvikling	Dirftsløsøre, inventar, verktøy
Anskaffelseskost 01.01.21	7 668 545	2 705 391
Tilgang kjøpte driftsmidler	-	5 327 167
Tilgang ved fusjon	-	-
Avgang	-	203 351
Anskaffelseskost 31.12.21	7 668 545	7 829 207
Akk. avskrivninger 31.12.21	-1 365 606	-832 792
Akk. nedskrivninger 31.12.21	-840 514	-
Bokført verdi pr. 31.12.21	**5 462 425**	**6 996 415**
Årets avskrivninger	-682 803	-338 818
Årets nedskrivninger	-	-

Selskapet har under utvikling et enhetlig produktelement for isolasjon, lufting og kledning til bygninger. Fra tidspunktet for besluting av kommersialisering av produktet har selskapet aktivert de påløpne kostnadene.

Note 4 Aksjekapital og aksjonærinformasjon

Aksjekapitalen i selskapet pr 31.12. består av følgende aksjeklasser:

	Antall	Pålydende verdi	Bokført verdi
Aksjer	1 000	5 000	5 000 000
Sum	**1 000**		**5 000 000**

Eierstruktur
100% av aksjene er eid av Glava AS.

Note 5 Egenkapital

	Aksje-kapital	Annen innskutt egenkapital	Annen egenkapital	Sum egenkapital
Egenkapital 01.01.	5 000 000	1 062 514		6 062 514
Årets endring i egenkapital:				
Mottatt konsernbidrag (etter skatt)		8 067 830		8 067 830
Årets resultat			-7 931 409	-
Reklassifisering		-7 931 409	7 931 409	
Egenkapital 31.12.	**5 000 000**	**1 198 935**	**-**	**6 198 935**

Reform Fasade AS

Noter til regnskapet 2021

Note 6 Mellomværende med selskap i samme konsern m.v. Per 31.12.

	Kundefordringer		Andre fordringer	
	2021	2020	2021	2020
Foretak i samme konsern	-	-	10 343 372	12 071 479
Sum	**-**	**-**	**10 343 372**	**12 071 479**

	Leverandørgjeld		Øvrig gjeld	
	2021	2020	2021	2020
Foretak i samme konsern	-	2 044 188	12 558 086	12 155 431
Sum	**-**	**2 044 188**	**12 558 086**	**12 155 431**

Selskapet mottok i 2021 kr 10.343.372,- i konsernbidrag fra morselskapet Glava AS.

Note 7 Skattekostnad

Årets skattekostnad fremkommer slik:	**2021**	**2020**
Betalbar skatt	1 991	-
Skatteeffekt av konsernbidrag	-2 275 542	-2 655 725
Endring i utsatt skatt	-803	-185 064
Skattekostnad	**-2 274 353**	**-2 840 790**

Betalbar skatt i balansen fremkommer som følger:

	2021	**2020**
Betalbar skatt	1 991	-
Til gode SkatteFUNN-tilskudd	-137 609	-543 378
Netto fordring mot Skatteetaten	**-135 618**	**-543 378**

Selskapet vil motta kr. 137.609,- I SkatteFUNN-tilskudd. Dette er inkludert under regnskapslinjen Andre kortsiktige fordringer. Betalbar skatte og til gode SkatteFUNN-tilskudd er bruttoført i balansen

Avstemming fra nominell til faktisk skattesats:

	2021	**2020**
Årsresultat før skatt	-10 205 763	-12 371 953
Forventet inntektsskatt etter nominell skattesats (22%)	-2 245 268	-2 721 830
Skatteeffekten av følgende poster:		
Skatteeffekt av permanente forskjeller	-29 086	-118 961
Skattekostnad	**-2 274 354**	**-2 840 791**
Effektiv skattesats	22,3 %	23,0 %

Reform Fasade AS

Noter til regnskapet 2021

Midlertidige forskjeller som inngår i grunnlaget for utsatt skatt/skattefordel		
Netto midlertidige forskjeller	533 975	537 625
Underskudd og godtgjørelse til fremføring	-905 774	-905 772
Grunnlag for utsatt skatt/skattefordel i balansen	-371 799	-368 147
Utsatt skattefordel/utsatt skatt	-81 796	-80 992
Ikke oppført utsatt skattefordel	0	0
Utsatt skatt/ skattefordel i regnskapet	**-81 796**	**-80 992**

Note 8 Skattetrekksgaranti

Morselskapet Glava AS har stillet løpende skattetrekksgaranti for Reform Fasade AS.
Garantien dekker skyldig skattetrekk ved årsskiftet.

Note 9 Offentlige tilskudd

Selskapet har mottatt tilskudd fra Enova i løpet av 2021 med kr 694.960
Tilskuddet er forholdsmessig ført som reduksjon av lønn og andre driftskostnader og knytter seg til utvikling av front- og fasadesystem.

Note 10 Konserkontoordning

Selskapet inngår i konsernkontoordning som eies av Sain-Gobain Byggevarer AS
Pr 31.12.2021 er selskapet skyldig kr. 541.560,-

Securely signed with Brevio

Årsregnskap

Signers:

Name	*Method*	*Date*
Næsje, Peik	BANKID_MOBILE	2022-06-20 13:45
Hoel, Anders	BANKID	2022-06-20 15:57
Haugen, Per Christian	BANKID	2022-06-20 16:06
Tegnander, Tom Hopland	BANKID_MOBILE	2022-06-22 14:30

This document package contains:

- Closing page (this page)
-The original document(s)
-The electronic signatures. These are not visible in the document, but are electronically integrated.

This file is sealed with a digital signature. The seal is a guarantee for the authenticity of the document.

Til generalforsamlingen i Reform Fasade AS

Uavhengig revisors beretning

Konklusjon

Vi har revidert årsregnskapet til Reform Fasade AS som består av balanse per 31. desember 2021, resultatregnskap for regnskapsåret avsluttet per denne datoen og noter til regnskapet, herunder et sammendrag av viktige regnskapsprinsipper.

Etter vår mening

- oppfyller årsregnskapet gjeldende lovkrav, og
- gir årsregnskapet et rettvisende bilde av selskapets finansielle stilling per 31. desember 2021, og av dets resultater for regnskapsåret avsluttet per denne datoen i samsvar med regnskapslovens regler og god regnskapsskikk i Norge.

Grunnlag for konklusjonen

Vi har gjennomført revisjonen i samsvar med de internasjonale revisjonsstandardene International Standards on Auditing (ISA-ene). Våre oppgaver og plikter i henhold til disse standardene er beskrevet nedenfor under *Revisors oppgaver og plikter ved revisjonen av årsregnskapet*. Vi er uavhengige av selskapet slik det kreves i lov, forskrift og International Code of Ethics for Professional Accountants (inkludert internasjonale uavhengighetsstandarder) utstedt av the International Ethics Standards Board for Accountants (IESBA-reglene), og vi har overholdt våre øvrige etiske forpliktelser i samsvar med disse kravene. Innhentet revisjonsbevis er etter vår vurdering tilstrekkelig og hensiktsmessig som grunnlag for vår konklusjon.

Styrets og daglig leders ansvar for årsregnskapet

Styret og daglig leder (ledelsen) er ansvarlige for å utarbeide årsregnskapet og for at det gir et rettvisende bilde i samsvar med regnskapslovens regler og god regnskapsskikk i Norge. Ledelsen er også ansvarlig for slik internkontroll som den finner nødvendig for å kunne utarbeide et årsregnskap som ikke inneholder vesentlig feilinformasjon, verken som følge av misligheter eller utilsiktede feil.

Ved utarbeidelsen av årsregnskapet må ledelsen ta standpunkt til selskapets evne til fortsatt drift og opplyse om forhold av betydning for fortsatt drift. Forutsetningen om fortsatt drift skal legges til grunn for årsregnskapet så lenge det ikke er sannsynlig at virksomheten vil bli avviklet.

Revisors oppgaver og plikter ved revisjonen av årsregnskapet

Vårt mål er å oppnå betryggende sikkerhet for at årsregnskapet som helhet ikke inneholder vesentlig feilinformasjon, verken som følge av misligheter eller utilsiktede feil, og å avgi en revisjonsberetning som inneholder vår konklusjon. Betryggende sikkerhet er en høy grad av sikkerhet, men ingen garanti for at en revisjon utført i samsvar med ISA-ene, alltid vil avdekke vesentlig feilinformasjon som eksisterer. Feilinformasjon kan oppstå som følge av misligheter eller utilsiktede feil. Feilinformasjon blir vurdert som vesentlig dersom den enkeltvis eller samlet med rimelighet kan forventes å påvirke økonomiske beslutninger som brukerne foretar basert på årsregnskapet.

PricewaterhouseCoopers AS, Dronning Eufemias gate 71, Postboks 748 Sentrum, NO-0106 Oslo
T: 02316, org. no.: 987 009 713 MVA, www.pwc.no
Statsautoriserte revisorer, medlemmer av Den norske Revisorforening og autorisert regnskapsførerselskap

For videre beskrivelse av revisors oppgaver og plikter vises det til:
https://revisorforeningen.no/revisjonsberetninger

Oslo, 27. juni 2022
PricewaterhouseCoopers AS

Anders Ellefsen
Statsautorisert revisor
(elektronisk signert)

Securely signed with Brevio

Revisjonsberetning

Signers:

Name	***Method***	***Date***
Ellefsen, Anders	BANKID	2022-06-29 13:21

This document package contains:

- *Closing page (this page)*
- *The original document(s)*
- *The electronic signatures. These are not visible in the document, but are electronically integrated.*

This file is sealed with a digital signature. The seal is a guarantee for the authenticity of the document.

SAINT-GOBAIN

CONSOLIDATED FINANCIAL STATEMENTS

DECEMBER 31, 2021

GROUP CONSOLIDATION REPORTING DEPARTMENT

COMPAGNIE DE SAINT-GOBAIN

STATUTORY AUDITORS' REPORT
ON THE CONSOLIDATED FINANCIAL STATEMENTS

For the year ended December 31, 2021

The Statutory Auditors

PricewaterhouseCoopers Audit
Crystal Park
63, rue de Villiers
92208 Neuilly-sur-Seine Cedex, France

KPMG Audit
Tour Eqho
2, avenue Gambetta
CS 60055
92066 Paris La Défense Cedex, France

PricewaterhouseCoopers Audit
Crystal Park
63, rue de Villiers
92208 Neuilly-sur-Seine Cedex, France

KPMG Audit
Tour Eqho
2, avenue Gambetta
CS 60055
92066 Paris La Défense Cedex, France

STATUTORY AUDITORS' REPORT ON THE CONSOLIDATED FINANCIAL STATEMENTS

For the year ended December 31, 2021

This is a translation into English of the statutory auditors' report on the consolidated financial statements of the Company issued in French and it is provided solely for the convenience of English speaking users.
This statutory auditors' report includes information required by European regulation and French law, such as information about the appointment of the statutory auditors or verification of the information concerning the Group presented in the management report and other documents provided to shareholders.
This report should be read in conjunction with, and construed in accordance with, French law and professional auditing standards applicable in France.

COMPAGNIE DE SAINT-GOBAIN
Tour Saint-Gobain
12, place de l'Iris
92400 Courbevoie cedex

To the Shareholders,

Opinion

In compliance with the engagement entrusted to us by your Shareholders' Meeting, we have audited the accompanying consolidated financial statements of Compagnie de Saint-Gobain ("the Group") for the year ended December 31, 2021.

In our opinion, the consolidated financial statements give a true and fair view of the assets and liabilities and of the financial position of the Group as at December 31, 2021 and of the results of its operations for the year then ended in accordance with International Financial Reporting Standards (IFRS) as adopted by the European Union.

The audit opinion expressed above is consistent with our report to the Audit and Risk Committee.

Basis for Opinion

Audit Framework

We conducted our audit in accordance with professional standards applicable in France. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Our responsibilities under those standards are further described in the *Statutory Auditors' Responsibilities for the Audit of the Consolidated Financial Statements* section of our report.

Independence

We conducted our audit engagement in compliance with independence requirements of the French Commercial Code (code de commerce) and the French Code of Ethics (code de déontologie) for statutory auditors, for the period from January 1, 2021 to the date of our report and specifically we did not provide any prohibited non-audit services referred to in Article 5(1) of Regulation (EU) No 537/2014.

Justification of Assessments - Key Audit Matters

Due to the global crisis related to the Covid-19 pandemic, the financial statements of this period have been prepared and audited under specific conditions. Indeed, this crisis and the exceptional measures taken in the context of the state of sanitary emergency have had numerous consequences for companies, particularly on their operations and their financing, and have led to greater uncertainties on their future prospects. Those measures, such as travel restrictions and remote working, have also had an impact on the companies' internal organization and the performance of the audits.

It is in this complex and evolving context that, in accordance with the requirements of Articles L.823-9 and R.823-7 of the French Commercial Code (code de commerce) relating to the justification of our assessments, we inform you of the key audit matters relating to risks of material misstatement that, in our professional judgment, were of most significance in our audit of the consolidated financial statements of the current period, as well as how we addressed those risks.

These matters were addressed in the context of our audit of the consolidated financial statements as a whole and in forming our opinion thereon, and we do not provide a separate opinion on specific items of the consolidated financial statements.

Measurement of goodwill, intangible assets and property, plant & equipment

Description of risk
The carrying amounts of goodwill, intangible assets and property, plant & equipment were significant at December 31, 2021, representing €11,181 million, €2,705 million and €11,663 million, respectively. These assets may be impaired due to internal or external factors, including decisions to change the Group's strategy in certain markets, a decline in Group performance, the Group's commitments to carbon neutrality, changes in competition, unfavorable market conditions particularly in the context of the Covid-19 pandemic and changes in legislation or regulations. These changes are likely to have an impact on the Group's forecast cash flow and, consequently, the assets' recoverable amounts.

The impairment tests performed by Management using the method described in Note 7.5 to the consolidated financial statements led to the recognition of impairment losses of €213 million in the year ended December 31, 2021 (including impairment on assets held for sale), as indicated in Note 5 to the consolidated financial statements.

Determining the assets' recoverable amounts is a key audit matter given the potentially significant nature of any impairment and the high degree of estimation and judgment required by Management in assessing impairment losses. Management exercises judgment when making assumptions regarding future changes in sales (in both volume and value terms), profitability, investments and the other cash flows required to operate the assets, and when determining an appropriate discount rate to apply to future cash flows.

How our audit addressed this risk
We familiarized ourselves with the procedures implemented within the Group for impairment testing purposes particularly with regard to take into account the impacts of the Group's commitments to carbon neutrality, and tested the effectiveness of the controls implemented by the Group to ensure the quality and reliability of the aforementioned procedures and their consistency with data from the budget and the medium-term business plan prepared by Management.

We also assessed the consistency and relevance of Management's approach to determine the cash-generating units for asset impairment testing. We adapted our audit approach to the risk of impairment, which varies depending on the cash-generating unit.

Our valuation specialists performed an independent analysis of certain key assumptions used by Management for impairment testing purposes, in particular the discount rate, by referring to both external market data and comparable company analyses.

For a selection of cash-generating units, we analyzed the consistency of future cash flow projections with regard to past performance and our knowledge of the business, confirmed by interviews with the Heads of the relevant Segments and Businesses and qualitative and quantitative parameters relating to the depth and potential duration of the health crisis triggered by Covid-19.
We carefully examined the calculation of the normalized amount of the terminal cash flows projected to perpetuity. We performed our own sensitivity analyses of certain key variables of the measurement model, particularly with regard to take into account the impacts of the Group's commitments to carbon neutrality, to assess the materiality of their potential impact on the recoverable amounts of the most high-risk assets.

We verified that the disclosures provided in the notes to the consolidated financial statements on the measurement of goodwill, intangible assets and property, plant & equipment, the underlying assumptions and sensitivity analyses were appropriate and in particular that, given the context related to Covid-19, the sensitivity ranges communicated have remained extended.

Measurement of provisions for liabilities and litigation related to asbestos

Description of risk

The Group is exposed to various legal risks, including asbestos-related litigation in the United States.

As indicated in Note 9 to the consolidated financial statements, provisions amounting to €1,349 million were recognized at December 31, 2021 for contingent liabilities and litigation. Significant contingent liabilities, whose amount or timing cannot be estimated with sufficient reliability, are disclosed in the notes to the consolidated financial statements.

With regard to asbestos-related risks in the United States, determining and measuring the provisions recognized for contingent liabilities and litigation and assessing the appropriateness of the related disclosures in the notes to the consolidated financial statements are a key audit matter given the amounts involved and the high degree of estimation and judgment required by Management in determining those provisions. Judgment is required, in particular, to assess the status and resolution of the ongoing legal proceedings (in particular the voluntary petition for relief under Chapter 11 in the United States): duration, cost, estimation of the number of current and future cases covered, definition of the damages by the judicial authority, etc.

How our audit addressed this risk

To obtain an understanding of contingent liabilities and litigation regarding asbestos in the United States and the related judgments made, we held discussions with Management and lawyers chosen by Management, at the Group and country level as well as at the main subsidiaries concerned. We also contacted certain law firms and external experts chosen by Management to assist them with the monitoring of these risks.
We:

- examined the minutes of the Board of Directors' meetings and the Group's risk mapping prepared by Management and presented to the Audit and Risk Committee;
- familiarized ourselves with the procedures implemented by Management when measuring the provisions for asbestos-related risks in the United States and determining the disclosures thereon in the notes to the consolidated financial statements;
- assessed the permanence of methods and performed a critical review of internal analyses relating to the probability and possible impact of these contingent liabilities and new items of litigation by examining the available information relating to the proceedings (correspondence, judgments, notifications, etc.). We also reviewed the responses to the confirmation letters of the law firms chosen by Management, particularly in terms of their experience at resolving comparable situations in the past. We also used our professional judgment to assess the positions adopted by Management, to see where they fell within risk assessment ranges and the consistency of those positions over time;
- verified the arithmetical accuracy of the calculations of changes in provisions and the consistency of the main items of change in relation to the underlying data, in particular the payments made during the year in respect of these risks.

We assessed if the appropriateness of the disclosures provided in the notes to the consolidated financial statements regarding these items of litigation and contingent liabilities identified.

Specific verifications

We have also performed, in accordance with professional standards applicable in France, the specific verification required by laws and regulations of the Group's information given in the management report of the Board of Directors.

We have no matters to report as to their fair presentation and their consistency with the consolidated financial statements.

We attest that the consolidated non-financial statement required by Article L.225-102-1 of the French Commercial Code (code de commerce) is included in the Group's information given in the management report, it being specified that, in accordance with Article L.823-10 of this Code, we have verified neither the fair presentation nor the consistency with the consolidated financial statements of the information contained therein. This information should be reported by an independent third party.

Report on Other Legal and Regulatory Requirements

Format of the presentation of the consolidated financial statements intended to be included in the annual financial report

We have also verified, in accordance with the professional standard applicable in France relating to the procedures performed by the statutory auditor relating to the annual and consolidated financial statements presented in the European single electronic format, that the presentation of the consolidated financial statements intended to be included in the annual financial report mentioned in Article L.451-1-2, I of the French Monetary and Financial Code (code monétaire et financier), prepared unde the responsibility of the General Manager, complies with the single electronic format defined in the European Delegated Regulation N° 2019/815 of 17 Decembre 2018. As it relates to consolidated financial statements, our work includes verifying that the tagging of these consolidated financial statements complies with the format defined in the above delegated regulation.

Based on the work we have performed, we conclude that the presentation of the consolidated financial statements intended to be included in the annual financial report complies, in all material respects, with the European single electronic format.

We have no responsibility to verify that the consolidated financial statements that will ultimately be included by your company in the annual financial report filed with the AMF are in agreement with those on which we have performed our work.

Appointment of the Statutory Auditors

We were appointed Statutory Auditors of Compagnie de Saint-Gobain by the Shareholders' Meeting held on June 26, 1986 for Petiteau Scacchi and subsequently PricewaterhouseCoopers Audit and on June 10, 2004 for KPMG Audit.
At December 31, 2021 PricewaterhouseCoopers Audit and KPMG Audit were respectively in the thirty-sixth and eighteenth consecutive year of their engagement, respectively.

Responsibilities of Management and Those Charged with Governance for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with International Financial Reporting Standards as adopted by the European Union and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, management is responsible for assessing the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless it is expected to liquidate the Company or to cease operations.

The Audit and Risk Committee is responsible for monitoring the financial reporting process and the effectiveness of internal control and risks management systems and where applicable, its internal audit, regarding the accounting and financial reporting procedures.

The consolidated financial statements were approved by the Board of Directors.

Statutory Auditors' Responsibilities for the Audit of the Consolidated Financial Statements

Objectives and audit approach

Our role is to issue a report on the consolidated financial statements. Our objective is to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with professional standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As specified in Article L.823-10-1 of the French Commercial Code (code de commerce), our statutory audit does not include assurance on the viability of the Company or the quality of management of the affairs of the Company.

As part of an audit conducted in accordance with professional standards applicable in France, the statutory auditor exercises professional judgment throughout the audit and furthermore:

- Identifies and assesses the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, designs and performs audit procedures responsive to those risks, and obtains audit evidence considered to be sufficient and appropriate to provide a basis for his opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

- Obtains an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the internal control.

- Evaluates the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management in the consolidated financial statements.

- Assesses the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. This assessment is based on the audit evidence obtained up to the date of his audit report. However, future events or conditions may cause the Company to cease to continue as a going concern. If the statutory auditor concludes that a material uncertainty exists, there is a requirement to draw attention in the audit report to the related disclosures in the consolidated financial statements or, if such disclosures are not provided or inadequate, to modify the opinion expressed therein.

- Evaluates the overall presentation of the consolidated financial statements and assesses whether these statements represent the underlying transactions and events in a manner that achieves fair presentation.

- Obtains sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. The statutory auditor is responsible for the direction, supervision and performance of the audit of the consolidated financial statements and for the opinion expressed on these consolidated financial statements.

Report to the Audit and Risk Committee

We submit a report to the Audit and Risk Committee which includes in particular a description of the scope of the audit and the audit program implemented, as well as the results of our audit. We also report, if any, significant deficiencies in internal control regarding the accounting and financial reporting procedures that we have identified.

Our report to the Audit and Risk Committee includes the risks of material misstatement that, in our professional judgment, were of most significance in the audit of the consolidated financial statements of the current period and which are therefore the key audit matters that we are required to describe in this report.

We also provide the Audit and Risk Committee with the declaration provided for in Article 6 of Regulation (EU) N° 537/2014, confirming our independence within the meaning of the rules applicable in France such as they are set in particular by Articles L.822-10 to L.822-14 of the French Commercial Code (code de commerce) and in the French Code of Ethics *(code de déontologie)* for statutory auditors. Where appropriate, we discuss with the Audit and Risk Committee the risks that may reasonably be thought to bear on our independence, and the related safeguards.

Neuilly-sur-Seine and Paris La Défense, February 24, 2022

The Statutory Auditors

PricewaterhouseCoopers Audit	KPMG Audit *Department of KPMG SA*
Edouard Sattler	Pierre-Antoine Duffaud Bertrand Pruvost

CONTENTS

2021 CONSOLIDATED FINANCIAL STATEMENTS

CONSOLIDATED BALANCE SHEET

(in € millions)	Notes	Dec. 31, 2021	Dec. 31, 2020
ASSETS			
Goodwill	(7.1)	11,181	10,028
Other intangible assets	(7.2)	2,705	2,505
Property, plant and equipment	(7.3)	11,663	11,072
Right-of-use assets	(7.4)	2,959	2,902
Investments in equity-accounted companies	(8.1) (8.2)	536	462
Deferred tax assets	(12.2)	576	665
Other non-current assets	(8.3)	1,422	845
NON-CURRENT ASSETS		**31,042**	**28,479**
Inventories	(5.4)	6,598	5,362
Trade accounts receivable	(5.4)	5,104	4,597
Current tax receivable	(5.4) (12.1)	166	147
Other receivables	(5.4)	1,504	1,269
Assets held for sale	(4.3)	227	329
Cash and cash equivalents	(10.3)	6,943	8,443
CURRENT ASSETS		**20,542**	**20,147**
TOTAL ASSETS		**51,584**	**48,626**
EQUITY AND LIABILITIES			
Capital stock	(11.1)	20,715	17,892
Non-controlling interests		411	311
TOTAL EQUITY		**21,126**	**18,203**
Non-current portion of long-term debt	(10.3)	9,194	10,179
Non-current portion of long-term lease liabilities	(10.3)	2,474	2,442
Provisions for pensions and other employee benefits	(6.3)	2,014	2,629
Deferred tax liabilities	(12.2)	555	360
Other non-current liabilities and provisions	(9.1)	1,066	965
NON-CURRENT LIABILITIES		**15,303**	**16,575**
Current portion of long-term debt	(10.3)	1,336	1,846
Current portion of long-term lease liabilities	(10.3)	681	656
Current portion of other liabilities and provisions	(9.1)	479	361
Trade accounts payable	(5.4)	6,903	5,897
Current tax liabilities	(5.4) (12.1)	236	175
Other payables	(5.4)	4,808	3,911
Liabilities held for sale	(4.3)	167	501
Short-term debt and bank overdrafts	(10.3)	545	501
CURRENT LIABILITIES		**15,155**	**13,848**
TOTAL EQUITY AND LIABILITIES		**51,584**	**48,626**

The accompanying notes are an integral part of the consolidated financial statements.

CONSOLIDATED INCOME STATEMENT

(in € millions)	Notes	2021	2020
Sales	(5.1)	44,160	38,128
Cost of sales	(5.1)	(32,440)	(28,635)
General expenses including research	(5.1)	(7,265)	(6,651)
Share in net income of core business equity-accounted companies	(8.1)	52	13
OPERATING INCOME		**4,507**	**2,855**
Other business income	(5.1)	176	88
Other business expense	(5.1)	(747)	(1,511)
BUSINESS INCOME		**3,936**	**1,432**
Borrowing costs, gross		(240)	(274)
Income from cash and cash equivalents		7	6
Borrowing costs, net, excluding lease liabilities		(233)	(268)
Interest on lease liabilities		(54)	(58)
Other financial income and expense		(120)	(93)
NET FINANCIAL EXPENSE	**(10.2)**	**(407)**	**(419)**
Share in net income of non-core business equity-accounted companies	(8.1)	4	2
Income taxes	(12.1) (12.2) (12.3)	(919)	(526)
NET INCOME		**2,614**	**489**
GROUP SHARE OF NET INCOME		**2,521**	**456**
Non-controlling interests		93	33

	Notes	2021	2020
EARNINGS PER SHARE, GROUP SHARE *(in €)*	**(11.2)**	**4.79**	**0.85**
Weighted average number of shares in issue		526,244,506	536,452,195
DILUTED EARNINGS PER SHARE, GROUP SHARE *(in €)*	**(11.2)**	**4.76**	**0.85**
Weighted average number of shares assuming full dilution		529,905,261	539,325,415

The accompanying notes are an integral part of the consolidated financial statements.

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME AND EXPENSE

(in € millions)	Notes	2021	2020
NET INCOME		**2,614**	**489**
Items that may be subsequently reclassified to profit or loss			
Translation adjustments		910	(1,442)
Changes in fair value of financial instruments	(10.4)	21	(3)
Tax on items that may be subsequently reclassified to profit or loss		(8)	18
Items that will not be reclassified to profit or loss			
Changes in actuarial gains and losses	(6.3)	802	9
Tax on items that will not be reclassified to profit or loss	(12.1) (12.2)	(142)	20
Changes in assets at fair value through equity and other items	(8.3)	37	(157)
OTHER ITEMS OF COMPREHENSIVE INCOME (EXPENSE)		**1,620**	**(1,555)**
COMPREHENSIVE INCOME (EXPENSE)		**4,234**	**(1,066)**
Group share		4,139	(1,047)
Non-controlling interests		95	(19)

Translation adjustments in 2021 primarily concern the pound sterling and US dollar.

The accompanying notes are an integral part of the consolidated financial statements.

CONSOLIDATED STATEMENT OF CASH FLOWS

(in € millions)	Notes	2021	2020
GROUP SHARE OF NET INCOME		**2,614**	**489**
Share in net income (loss) of equity-accounted companies, net of dividends received	(8.1)	(23)	(1)
Depreciation, amortization and impairment of assets (including right-of-use assets)	(5.1) (7)	2,174	2,906
Gains (losses) on disposals of assets	(5.3)	7	28
Unrealized gains and losses arising from changes in fair value and share-based payments		33	46
Restatement for hyperinflation		13	9
Changes in inventory	(5.4)	(1,179)	410
Changes in trade accounts receivable and payable, and other accounts receivable and payable	(5.4)	912	685
Changes in tax receivable and payable	(5.4)	50	53
Changes in deferred taxes and provisions for other liabilities and charges	(6.3) (9.1) (12.2) (12.3)	(162)	86
NET CASH FROM OPERATING ACTIVITIES		**4,439**	**4,711**
Acquisitions of property, plant and equipment and intangible assets, and changes in amounts due to suppliers of fixed assets	(7.2) (7.3) (5.4)	(1,441)	(1,290)
Acquisitions of shares in controlled companies, net of cash acquired		(913)	(1,100)
Increase in investment-related liabilities	(9.1)	45	12
Decrease in investment-related liabilities	(9.1)	(5)	(20)
Acquisitions of other investments	(8.3)	(33)	(74)
Investments		**(2,347)**	**(2,472)**
Disposals of property, plant and equipment and intangible assets	(7.2) (7.3)	207	213
Disposals of shares in controlled companies, net of cash divested	(c)	(120)	(43)
Disposals of other investments	(8.3)	4	2,389
(Increase) decrease in amounts receivable on sales of fixed assets	(5.4)	(20)	10
Divestments		**71**	**2,569**
Increase in loans and deposits	(8.3)	(76)	(81)
Decrease in loans and deposits	(8.3)	153	178
NET CASH FROM (USED IN) INVESTMENT AND DIVESTMENT ACTIVITIES		**(2,199)**	**194**
Issues of capital stock	(a)	199	139
(Increase) decrease in treasury stock	(a)	(854)	(658)
Dividends paid	(a)	(697)	0
Transactions with shareholders of the parent company		**(1,352)**	**(519)**
Capital increases in non-controlling interests	(a)	13	10
Acquisitions of minority interests without gain of control		(9)	(29)
Disposals of minority interests without loss of control		12	0
Changes in investment-related liabilities following the exercise of put options of minority shareholders	(9.1)	(21)	(5)
Dividends paid to non-controlling interests	(a)	(31)	(44)
Transactions with non-controlling interests		**(36)**	**(68)**
Increase (decrease) in bank overdrafts and other short-term debt		(107)	218
Increase in long-term debt	(b) (10.3)	52	1,621
Decrease in long-term debt	(b) (10.3)	(1,584)	(1,786)
Decrease in lease liabilities	(b)	(762)	(766)
Change in debt		**(2,401)**	**(713)**
NET CASH FROM (USED IN) FINANCING ACTIVITIES		**(3,789)**	**(1,300)**
Net effect of exchange rate changes on cash and cash equivalents		31	(126)
Net effect of changes in fair value on cash and cash equivalents		1	(4)
Cash and cash equivalents classified within assets held for sale		17	(19)
INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS		**(1,500)**	**3,456**
CASH AND CASH EQUIVALENTS AT BEGINNING OF PERIOD		**8,443**	**4,987**
CASH AND CASH EQUIVALENTS AT END OF PERIOD		**6,943**	**8,443**

(a) Please refer to the consolidated statement of changes in equity.

(b) Including bond premiums, prepaid interest, issue costs and interest on lease liabilities.

(c) Of which Lapeyre for a negative €262 million.

In 2021, income tax paid represented €793 million (€466 million in 2020), total rental expenses paid €905 million (€904 million in 2020), including €54 million in interest paid on lease liabilities (€58 million in 2020), and interest paid net of interest received €244 million (€243 million in 2020).

The accompanying notes are an integral part of the consolidated financial statements.

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

(in € millions)	Capital stock	Additional paid-in capital and legal reserve	Retained earnings and consolidated net income	Cumulative translation adjustments	Fair value reserves	Treasury stock	Shareholders' equity	Non-controlling interests	Total equity
AT JANUARY 1, 2020	**2,179**	**5,551**	**12,518**	**(1,467)**	**743**	**(108)**	**19,416**	**364**	**19,780**
Income and expense recognized directly in equity	0	0	47	(1,390)	(160)	0	**(1,503)**	(52)	**(1,555)**
Net income for the year			456				**456**	33	**489**
Total income and expense for the year	**0**	**0**	**503**	**(1,390)**	**(160)**	**0**	**(1,047)**	**(19)**	**(1,066)**
Issues of capital stock									
Group Savings Plan	24	115					**139**		**139**
Other							**0**	10	**10**
Dividends paid							**0**	(44)	**(44)**
Shares purchased and sold			(7)			(651)	**(658)**		**(658)**
Shares canceled	(72)	(562)				634	**0**		**0**
Reclassification of the fair value reserve to reserves further to the disposal of Sika			631		(631)		**0**		**0**
Share-based payments			32				**32**		**32**
Changes in Group structure and other			10				**10**	0	**10**
AT DECEMBER 31, 2020	**2,131**	**5,104**	**13,687**	**(2,857)**	**(48)**	**(125)**	**17,892**	**311**	**18,203**
Income and expense recognized directly in equity	0	0	678	908	32	0	**1,618**	2	**1,620**
Net income for the year			2,521				**2,521**	93	**2,614**
Total income and expense for the year	**0**	**0**	**3,199**	**908**	**32**	**0**	**4,139**	**95**	**4,234**
Issues of capital stock									
Group Savings Plan	22	177					**199**		**199**
Other							**0**	13	**13**
Dividends paid			(698)				**(698)**	(31)	**(729)**
Shares purchased and sold			19			(873)	**(854)**		**(854)**
Shares canceled	(57)	(737)				794	**0**		**0**
Share-based payments			58				**58**		**58**
Changes in Group structure and other			(21)				**(21)**	23	**2**
AT DECEMBER 31, 2021	**2,096**	**4,544**	**16,244**	**(1,949)**	**(16)**	**(204)**	**20,715**	**411**	**21,126**

The accompanying notes are an integral part of the consolidated financial statements.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

The consolidated financial statements reflect the accounting position of Compagnie de Saint-Gobain (the Company) and its subsidiaries ("the Group"), as well as the Group's interests in associate companies and joint ventures. They are expressed in euros rounded to the nearest million.

These consolidated financial statements were adopted on February 24, 2022 by the Board of Directors and will be submitted to the Shareholders' Meeting of June 2, 2022 for approval.

Accounting principles and policies are highlighted in a distinct color.

NOTE 1 ACCOUNTING PRINCIPLES AND POLICIES

The accounting policies applied are consistent with those used to prepare the financial statements for the year ended December 31, 2020, except for the application of the new standards and interpretations described below. The consolidated financial statements have been prepared using the historical cost convention, except for certain assets and liabilities that have been measured using the fair value model as explained in these notes.

1.1. Standards applied

The consolidated financial statements have been prepared in accordance with the International Financial Reporting Standards (IFRS) and interpretations adopted for use in the European Union at December 31, 2021. These consolidated financial statements have also been prepared in accordance with the IFRS issued by the International Accounting Standards Board (IASB).

1.1.1. Standards, interpretations and amendments to existing standards applicable for reporting periods beginning on or after January 1, 2021

The following standards and amendments, effective since January 1, 2021, were applied where necessary to the consolidated financial statements for the year ended December 31, 2021:

- Amendments to IFRS 9, IAS 39 and IFRS 7, "Interest Rate Benchmark Reform – Phase 2";
- Amendments to IFRS 4, "Extension of the Temporary Exemption from Applying IFRS 9", applicable to insurers;
- Amendment to IFRS 16, "Covid-19-Related Rent Concessions beyond June 30, 2021".

The main IFRIC decisions published in 2021 concern:

- IAS 19, "Attributing Benefit to Period of Service", introducing changes to the method of calculating benefit obligations for certain defined benefit schemes;
- IAS 38, "Configuration or Customization Costs in a Cloud Computing Arrangement";
- IFRS 9, "Hedging Variability in Cash Flows due to Real Interest Rates";
- IAS 2, "Costs Necessary to Sell Inventories";
- IFRS 16, "Non-refundable Value Added Tax on Lease Payments";
- IAS 32, "Accounting for Warrants that are Classified as Financial Liabilities on Initial Recognition".

These amendments have no material impact on the Group's consolidated financial statements.

1.1.2. Standards, interpretations and amendments to existing standards available for early adoption in reporting periods beginning on or after January 1, 2021

The new standards, interpretations and amendments to existing standards applicable to accounting periods starting on or after January 1, 2022 were not early adopted by the Group at December 31, 2021. These are:

- Amendment to IFRS 3, "Reference to the Conceptual Framework";
- Amendment to IAS 37, "Onerous Contracts – Cost of Fulfilling a Contract";
- Amendment to IAS 16, "Property, Plant and Equipment – Proceeds before Intended Use".

The annual improvements to IFRSs – 2018-2020 Cycle that are available for early adoption concern the following standards:

- IFRS 9, "Fees in the '10 per cent' Test for Derecognition of Financial Liabilities";
- IAS 41, "Fair Value Measurement of Biological Assets";
- IFRS 16, "Lease Incentives (Amendment to Illustrative Examples)";
- IFRS 1, "Subsidiary as a First-time Adopter", concerning the measurement of cumulative translation differences.

1.1.3. Standards, interpretations and amendments to existing standards published but not yet applicable

The new standards, interpretations and amendments to existing standards that have been published but are not yet applicable concern:

- Amendment to IAS 1, "Classification of Liabilities as Current or Non-current" (effective date deferred by one year, i.e., to January 1, 2024) along with information on accounting policies;
- Amendment to IFRS 17, "Insurance Contracts", including amendments published in June 2020;
- Amendment to IAS 8, "Definition of Accounting Estimates".

Where applicable to Saint-Gobain, these amendments are currently being analyzed by the Group.

1.2. Estimates and assumptions

The preparation of consolidated financial statements in compliance with IFRS requires management to make estimates and assumptions that affect the amounts of assets and liabilities reported in the balance sheet and the disclosure of contingent assets and liabilities in the notes to the financial statements, as well as the reported amounts of income and expenses during the period. These estimates and assumptions are based on past experience and on various other factors in the prevailing economic and financial environment which makes it difficult to predict future business performance. Actual amounts may differ from those obtained through the use of these estimates and assumptions.

The main estimates and assumptions described in these notes concern the measurement of employee benefit obligations and share-based payment (note 6 "Employees, personnel expenses and employee benefit obligations"), asset impairment tests (notably the assumptions used in the tests relating to the Group's commitments to reduce its net carbon emissions) and the determination of lease terms (note 7 "Intangible assets, property, plant and equipment, and right-of-use assets"), provisions for other liabilities and charges (note 9 "Other current and non-current liabilities and provisions, contingent liabilities and litigation"), the measurement of financial instruments (note 10 "Financing and financial instruments"), and taxes (note 12 "Tax")

Due to the mainly local nature of the Group's operations, Brexit did not have a direct material impact on the financial statements. However, it does give rise to a degree of macroeconomic uncertainty that could affect business in the United Kingdom and, therefore, Group entities operating in the country.

In the context of the ongoing coronavirus pandemic, the estimates and assumptions used in 2021 take into account uncertainties as to the development of the health situation going forward. However, these are expected to have a limited impact on the Group's businesses.

NOTE 2 IMPACTS OF THE COVID-19 PANDEMIC

After being severely affected by the Covid-19 pandemic in the first half of 2020, trading in the second half of 2020 was almost back to normal levels for most of the Group's businesses.

In a macroeconomic and health environment which remains affected by uncertainties, the Group delivered a solid operating performance throughout 2021 and enjoyed good momentum in its main markets, especially renovation in Europe and construction in the Americas and in Asia-Pacific.

These trends may change in the coming months depending on how the coronavirus pandemic evolves in terms of duration and magnitude, vaccination progress and available medical treatment, and the resulting consequences for the Group's partners (customers, suppliers, etc.).

- Impact on current operating items

As in 2020, the costs of the measures taken in response to the Covid-19 crisis were included in full within operating income. However, these costs were not material in 2021.

Operating income includes, as in 2020, business travel cost savings resulting from the reduction in, or cancellation of, business trips in most countries where the Group does business.

- Impairment review in light of the Covid-19 pandemic

No impairment was recognized in connection with the Covid-19 pandemic in 2021 (see note 7.5.2).

NOTE 3 CLIMATE ISSUES

Given its activities in the renovation market, sustainability is essential in supporting the growth of the Saint-Gobain Group. Sustainability issues are therefore an integral part of the Group's growth outlook, in line with issues relating to the energy transition.
Responding to climate challenges is therefore at the heart of the Group's strategy, and its net-zero-carbon commitment is taken into account in its financial decisions.

3.1 The commitment to carbon neutrality is at the heart of the Group's strategy

In line with the Paris Agreement, Saint-Gobain signed the pledge of the UN Global Compact's "Business ambition for 1.5°C" on September 23, 2019 in New York, thereby affirming its commitment to achieving carbon neutrality (net-zero-carbon emissions) by 2050.

In order to achieve this goal by 2050, Saint-Gobain defined a 2030 roadmap in 2020. Besides confirming targets for reducing its environmental footprint by the end of 2025, the roadmap aims for a 33% reduction in CO_2 emissions in absolute terms compared with 2017 for scopes 1 and 2, and a 16% reduction for scope 3.

These new reduction targets through to 2030 reflect an acceleration in Group's ambitions. Its commitment to carbon neutrality places its response to climate change at the heart of its strategy, alongside its range of solutions enabling customers to address the environmental challenges that they face.

3.2 The commitment to carbon neutrality is taken into account when preparing the Group's financial statements

In line with these commitments and targets, the Group has taken into account climate change and sustainable development issues in its financial statements, mainly in the areas cited below.

- Basis of measurement applicable to assets

The Group's commitments to carbon neutrality were taken into account when carrying out asset impairment tests and assessing the useful life of its non-current assets (see notes 7.3 and 7.5).

- CO_2 emissions allowances

The Saint-Gobain Group was allocated 3.7 million tonnes of greenhouse gas emissions allowances by the European Commission at the end of 2021. These allowances will cover the Group's actual CO_2 emissions for 2021. As a result, no provision was recorded in this respect in the Group's financial statements (see note 5.5.4).

- Sustainable investments, research and development expenditure, and other expenditure aimed at combating climate change and protecting the environment

In 2021, the Group set aside €55 million in capital expenditure and €44 million in research and development expenditure to further its environmental CO_2 emissions reduction strategy.

- Executive compensation policy

In stepping up its commitment to carbon neutrality, the Group increased since 2020 the weighting of CSR objectives in the criteria determining long-term executive compensation plans: CSR objectives now determine 20% of amounts paid out under such plans compared to 15% previously, while CO_2 objectives now account for 10% versus 5% previously (see note 6.2).

The consideration of climate change issues did not have a material impact on the judgments made or the key estimates required to prepare the financial statements.

The Group will continue to analyze the potential impacts of future changes in regulations related to climate change and the energy transition as part of its commitment to achieve carbon neutrality by 2050.

NOTE 4 SCOPE OF CONSOLIDATION

4.1. Accounting principles related to consolidation

The Group's consolidated financial statements include the accounts of Compagnie de Saint-Gobain and of all companies controlled by the Group, as well as those of jointly controlled companies and companies over which the Group exercises significant influence.

4.1.1. Consolidation methods

- Full consolidation

Companies over which the Group exercises exclusive control, either directly or indirectly, are fully consolidated.

- Joint arrangements

Joint arrangements that meet the definition of joint ventures are accounted for by the equity method. Balance sheet and income statement items relating to joint arrangements that meet the definition of joint operations are consolidated line-by-line based on the amount actually contributed by the Group.

- Equity accounting

Companies over which the Group directly or indirectly exercises significant influence are accounted for by the equity method.

The Group's share of the income of equity-accounted companies is shown on two separate lines of the income statement. The income of equity-accounted companies whose main business activity is in keeping with the Group's core operational business is presented in business income under "Share in net income of core business equity-accounted companies", while the income of other equity-accounted companies is shown under "Share in net income of non-core business equity-accounted companies" in pre-tax income.

4.1.2. Business combinations

- Step acquisitions and partial disposals

When the Group acquires control of an entity in which it already holds an equity interest, the transaction is treated as a step acquisition (an acquisition in stages), as follows: (i) as a disposal of all the previously-held interest, with recognition of any resulting gain or loss in the consolidated financial statements, and (ii) as an acquisition of all of the shares, with recognition of the corresponding goodwill on the entire interest (previous and new acquisitions).

In the event of a partial disposal resulting in the loss of control (but with the Group retaining a non-controlling interest), the transaction is also treated as both a disposal and an acquisition, as follows: (i) as a disposal of the entire interest, with recognition of any resulting gain or loss in the consolidated financial statements, and (ii) as an acquisition of a non-controlling interest, measured at fair value.

- Potential voting rights and share purchase commitments

Potential voting rights conferred by call options on minority interests are taken into account in determining whether the Group exclusively controls an entity only when the Group has control.

When calculating its percentage interest in controlled companies, the Group considers the impact of cross put and call options on minority interests in the companies concerned. This approach gives rise to the recognition in the financial statements of an investment-related liability, included within other provisions and non-current liabilities, corresponding to the present value of the estimated exercise price of the put option, with a corresponding reduction in non-controlling interests and shareholders' equity. Any subsequent changes in the fair value of the liability are recognized by adjusting equity.

- Non-controlling interests

Under IFRS 10, non-controlling interests are considered as a shareholder category (single economic entity approach). As a result, changes in minority interests with no loss of control continue to be recorded in the statement of changes in equity and have no impact on the income statement or balance sheet, except for changes in cash and cash equivalents.

4.1.3. Non-current assets and liabilities held for sale – Discontinued operations

Assets and liabilities that are immediately available for sale, and for which a sale is highly probable within the next 12 months, are classified as non-current assets and liabilities held for sale. When several assets are held for sale in a single transaction, they are accounted for as a disposal group, which also includes any liabilities directly associated with those assets. The assets or disposal groups held for sale are measured at the lower of carrying amount and fair value less costs to sell. Depreciation/amortization ceases when non-current assets are classified as held for sale. Non-current assets and liabilities held for sale are presented separately on two lines of the consolidated balance sheet, and income and expenses continue to be recognized in the consolidated income statement on a line-by-line basis. The reclassified assets are carried at the lower of their fair value less costs to sell and their carrying amount. At the end of each reporting period, the value of the assets and liabilities held for sale is reviewed to determine whether any provision adjustments should be recorded due to a change in their fair value less costs to sell.

An operation is classified as discontinued when it represents a separate major line of business for the Group, and when the criteria for classification as an asset held for sale have been met, or when the Group has sold the asset. Discontinued operations are reported on a single line in the Group's income statement. This line shows the after-tax net income from discontinued operations until the date of disposal and the gains or losses net of taxes realized on the disposals of these operations. In addition, cash flows generated by the discontinued operations are reported, by type of operation, on a separate line in the consolidated statement of cash flows for the relevant periods.

4.1.4. Intragroup transactions

All intragroup transactions in the balance sheet and income statement are eliminated in consolidation.

4.1.5. Translation of the financial statements of foreign companies

The consolidated financial statements are presented in euros, which is Compagnie de Saint-Gobain's functional and presentation currency.

Assets and liabilities of subsidiaries outside the Eurozone are translated into euros at the closing exchange rate, while income and expense items are translated using the average exchange rate for the period.

The Group's share of any translation gains or losses is included in equity under "Cumulative translation adjustments" until the assets or liabilities and all foreign operations to which they relate are sold, liquidated or deconsolidated. In this case, these translation differences are either taken to the income statement, if the transaction results in a loss of control, or recognized directly in the statement of changes in equity, if the change in minority interests does not result in a loss of control.

4.1.6. Foreign currency transactions

Expenses and income from operations in currencies other than the Company's functional currency are translated at the exchange rates prevailing at the transaction date. Assets and liabilities denominated in foreign currencies are translated at the closing rate and any exchange differences are recorded in the income statement. However, exchange differences relating to loans and borrowings between consolidated Group companies are recorded in equity, net of tax, under "Cumulative translation adjustments", as they are in substance an integral part of the net investment in a foreign subsidiary.

4.1.7. Hyperinflation

Under IAS 29, "Financial Reporting in Hyperinflationary Economies", financial statements prepared based on historical cost must be restated. This involves applying a general price index that enables the financial statements to be presented in the measuring unit in force at the reporting date. All non-monetary assets and liabilities must therefore be adjusted for inflation in order to reflect changes in purchasing power at the reporting date. Similarly, the income statement is adjusted for inflation during the period. Monetary items do not need to be restated as they already reflect purchasing power at the reporting date.

4.1.7.1. Argentina

Argentina has been classified as a hyperinflationary economy since July 1, 2018. IAS 29 therefore applies to entities using the Argentine peso as their functional currency (based on the table of indices issued by FACPCE).

4.1.7.2. Lebanon

Lebanon has been classified as a hyperinflationary economy since October 2020. As from December 31, 2020, IAS 29 is therefore applicable to entities using the Lebanese pound as their functional currency.
However, as the Group's exposure to Lebanon is not material (sales in the country represent less than 1% of total Group sales), IAS 29 was not applied to the Group's Lebanese companies in 2021.

4.2. Changes in Group structure

Significant changes in the Group's structure during 2021 and 2020 are presented below and a list of the main consolidated companies at December 31, 2021 is provided in note 15 "Principal consolidated companies".

4.2.1. Transactions carried out in 2021

In 2021, Saint-Gobain acquired 31 consolidated companies for a total purchase price of €985 million. The Group also sold 12 consolidated companies for a sale price of €187 million.

4.2.1.1. Main acquisitions in 2021

Acquisitions in 2021 represent full-year sales of around €816 million and €123 million in EBITDA.

- On February 19, 2021, in accordance with the agreement to strengthen its partnership with El Volcan in Argentina and Peru, Saint-Gobain acquired El Volcan Soluciones Constructivas, which specializes in the production and sale of plasterboard in Peru.

- On March 15, 2021, Saint-Gobain announced that it had acquired a majority stake in Brüggemann, one of Germany's leading companies in the manufacture and installation of turnkey modular timber construction solutions for new construction and renovation in Germany.

- On July 15, 2021, Saint-Gobain completed the acquisition of Russia's Scientific and Production Company Adhesive LLC, a specialist company that controls the entire polyurethane and epoxy production cycle in order to develop, manufacture and supply a wide range of high quality products for the construction, transportation and aerospace markets.

- On September 1, 2021, Saint-Gobain acquired Netherlands-based Equflow BV, a leading designer and supplier of flowmeters for the single-use bioprocessing market. This acquisition expands the Group's range of single-use fluid management solutions.

- On September 29, 2021, in line with its May 20, 2021 announcement, Saint-Gobain announced that it had completed the acquisition of Chryso, a leading global player on the construction chemicals market thanks to its comprehensive additives solutions for sustainable construction. This acquisition, perfectly in line with Saint-Gobain's strategy to position itself as a world leader in sustainable construction, allows the Group to strengthen its presence on the growing construction chemicals market, while benefiting from cost and sales synergies. With an enterprise value of €1,020 million, the acquisition was financed entirely out of proceeds from the Group's disposals.

  The acquisition of Chryso represents pro forma full-year sales of €431 million and €87 million in EBITDA for 2021.

  The process of identifying and measuring the assets acquired and liabilities assumed at their fair value began in the second half of 2021 and will be completed in 2022.

- On September 30, 2021, Saint-Gobain completed the acquisition of Romanian group Duraziv specializing in the production of adhesives and other value-added construction chemicals solutions.

- On September 30, 2021, in line with its May 11, 2021 announcement, Saint-Gobain completed the acquisition of the French company Panofrance, a specialist distributor of timber and panels for the construction and furnishing industries.

- On October 1, 2021, Saint-Gobain acquired a majority stake in Abe Mauritius, a leading supplier of waterproofing, admixtures and technical mortar solutions and a Chryso brand licensee.

- On October 4, 2021, Saint-Gobain announced that it had completed the acquisition of Raboni Normandie, a multi-specialist distributor of construction materials on the dynamic home renovation and energy efficiency market in France.

- On November 10, 2021, Saint-Gobain announced that it had acquired a minority stake in Livspace, a digital company focused on the growing residential housing markets in India and South-East Asia.

- On November 15, 2021, the Group announced that it had acquired a gypsum plant in Nairobi, Kenya. This will be Saint-Gobain's first production site in Kenya, where it will also invest in a construction chemicals production line.

The process of identifying and measuring at fair value the assets acquired and liabilities assumed within the scope of the acquisitions carried out in 2021 will be finalized within 12 months of each acquisition date.

The table below shows the fair value measurement of each major category of assets acquired and liabilities assumed at December 31, 2021:

(in € millions)	**Chryso group**	**Other newly-consolidated companies**	**Total at the acquisition date**
Intangible assets	210	49	**259**
Property, plant and equipment, and right-of-use assets	70	94	**164**
Financial assets and other non-current assets	8	26	**34**
NON-CURRENT ASSETS	**288**	**169**	**457**
Inventories	63	68	**131**
Trade accounts receivable, net	95	49	**144**
Other receivables	9	17	**26**
Cash and cash equivalents	56	16	**72**
CURRENT ASSETS	**223**	**150**	**373**
Non-current portion of long-term debt and lease liabilities	14	19	**33**
Non-current portion of provisions and other liabilities	63	26	**89**
NON-CURRENT LIABILITIES	**77**	**45**	**122**
Current portion of long-term debt and lease liabilities	0	9	**9**
Current portion of provisions and other liabilities	1	3	**4**
Trade accounts payable	53	51	**104**
Other payables	23	30	**53**
Short-term debt and bank overdrafts	341	23	**364**
CURRENT LIABILITIES	**418**	**116**	**534**
TOTAL FAIR VALUE OF NET ASSETS ACQUIRED	**16**	**158**	**174**
Acquisition cost of shares	738	247	**985**
Minority interests	0	10	**10**
GOODWILL	**722**	**99**	**821**

4.2.1.2. Main disposals in 2021

Disposals represent full-year sales of around €1,856 million, of which €641 million relates to the disposal of Lapeyre.

The main company deconsolidations in 2021 are summarized below:

- On February 15, 2021, Saint-Gobain finalized the disposal of Saniplus in Spain to the Spanish group Stonewall Ventures SL with the sale of Saniplast, its civil engineering materials distribution business. This follows the disposal of Sanigrif, its plumbing, heating and sanitary distribution business, at the end of 2020.

- On May 28, 2021, Saint-Gobain sold La Plataforma – its construction materials distribution business in Spain – to the Bigmat group, and on July 5, 2021 completed the disposal of its Discesur banner to the Jorge Fernandez group in association with the Terrapilar group.

- On May 31, 2021, Saint-Gobain announced that it had sold Saint-Gobain Glassolutions Objekt-Center, which specializes in glass processing operations as part of the Glassolutions network in Germany, to the German privately-owned Aequita group based in Munich.

- After having entered into exclusive negotiations on November 9, 2020, Saint-Gobain announced on June 1, 2021 that it had finalized the sale of Lapeyre and its subsidiaries in France to Mutares, a company listed in Frankfurt.

- On July 12, 2021, Saint-Gobain signed an agreement to sell Graham, its plumbing, heating and sanitaryware specialist distribution business in the United Kingdom, to UK Plumbing Supplies and Wolseley.

- On July 28, 2021, Saint-Gobain completed the sale of PAM China assets and liabilities (SG Pipelines Co. Ltd), further to the signature on April 16, 2021 of an agreement for the sale in second-half 2021 of 67% of its Pipe business in China to a consortium led by local management.

- After entering into exclusive negotiations on January 4, 2021, on July 30, 2021 Saint-Gobain completed the sale of Saint-Gobain Distribution The Netherlands (SGD NL), operating in the Netherlands under the Raab Karcher, Tegelgroep Nederland, Galvano and Van Keulen brands, to the BME group (Building Materials Europe).

- On August 31, 2021, the Group announced the sale of French flat glass processing and shaping company Aurys to a former Saint-Gobain manager.

- On August 31, 2021, Saint-Gobain also announced that it had sold German tempered glassmaker GVG Deggendorf to the Swiss Arbonia group.

These disposals are part of Saint-Gobain's continued portfolio optimization strategy to enhance the Group's growth and profitability profile in line with the objectives of its "Grow & Impact" plan.

4.2.2. Transactions carried out in 2020

In 2020, Saint-Gobain acquired 13 consolidated companies for a total purchase price of €1,229 million. The Group also sold six consolidated companies for a sale price of €11 million.

The main transactions are summarized below:

- Following the commencement of the proceeding under Chapter 11 of the US Bankruptcy Code on January 23, 2020, the assets and liabilities of DBMP LLC and its wholly-owned subsidiary Millwork & Panel LLC are no longer consolidated in the Group's financial statements.
- On February 3, 2020, Saint-Gobain completed the acquisition of Continental Building Products (NYSE: CBPX), a leading plasterboard player in North America.
- On March 10, 2020, Saint-Gobain divested part of Glasssolutions, its glass processing business in Germany, to DIK Deutsche Industriekapital GmbH.
- On May 27, 2020, Saint-Gobain announced the completion of a private placement with qualified institutional investors of approximately 15.2 million Sika shares held by its subsidiary SWH, representing its entire 10.75% stake in Sika.
- On September 1, 2020, Saint-Gobain acquired Strikolith in the Netherlands, a company specialized in the production of external insulation systems, interior finishings and renovation products and solutions.
- On September 7, 2020, Saint-Gobain announced that it had acquired two subsidiaries of the family-owned MS Group: MS Techniques, which specializes in high-precision tubing for medical applications, and Transluminal, a specialist in R&D and sales in the area of minimally invasive catheter design expertise for OEMs.

  At December 31,2020, acquisitions represented full-year sales of around €500 million and €110 million in EBITDA. Disposals represented full-year sales of around €130 million.

4.3. Assets and liabilities held for sale

On December 10, 2021, Saint-Gobain announced the sale of Glasssolutions, its regional glass processing business in Denmark, to German glassmaker Semcoglas Holding GmbH. This transaction was finalized in January 2022.

On December 13, 2021, Saint-Gobain announced that it had entered into binding agreements to sell three of its remaining four United Kingdom distribution brands specializing in plumbing, heating and sanitaryware products (Neville Lumb, DHS and Bassetts) to Wolseley UK. These transactions are expected to be completed in early 2022. Saint-Gobain has also entered into exclusive negotiations with Wolseley UK for the sale of Ideal Bathrooms, its remaining United Kingdom distribution brand specialized in plumbing, heating and sanitaryware products.

These disposals are part of Saint-Gobain's portfolio optimization strategy, which is designed to improve the Group's growth and profitability profile.

Since the assets and liabilities held for sale meet the qualifying criteria (see note 4.1.3), the balance sheet accounts of Glassolutions Denmark and the plumbing, heating and sanitaryware distribution brands in the United Kingdom were combined and measured within assets and liabilities held for sale in the consolidated balance sheet at December 31, 2021, in accordance with IFRS 5.
For confidentiality reasons, the position of each individual company at December 31, 2021 is not disclosed.
These entities in the process of being sold were not considered as discontinued operations within the meaning of IFRS 5 as they do not represent a major line of business for the Group.

However, as the sale of Lapeyre and SGD NL were effective at December 31, 2021, assets and liabilities held for sale at that date no longer include these companies.

The breakdown of assets and liabilities held for sale at the end of the reporting period is as follows:

(in € millions)	Dec. 31, 2021	Dec. 31, 2020
Intangible assets, property, plant and equipment, right-of-use assets and other non-current assets	66	164
Inventories, trade accounts receivable and other receivables	159	146
Cash and cash equivalents	2	19
ASSETS HELD FOR SALE	**227**	**329**
Provisions for pensions and other employee benefits	3	36
Other current and non-current liabilities and provisions	11	17
Trade accounts payable, other payables and other current liabilities	98	281
Debt and bank overdrafts	55	167
LIABILITIES HELD FOR SALE	**167**	**501**
NET ASSETS (LIABILITIES) HELD FOR SALE	**60**	**(172)**

4.4. Changes in the number of consolidated companies

At December 31, 2021, the number of consolidated companies was as follows:

	France	Outside France	Total
Fully consolidated companies			
At December 31, 2020	**129**	**616**	**745**
Newly consolidated companies	17	61	78
Merged companies	(5)	(24)	(29)
Deconsolidated companies	(15)	(17)	(32)
Change in consolidation method		(2)	(2)
At December 31, 2021	**126**	**634**	**760**
Equity-accounted companies and joint arrangements			
At December 31, 2020	**3**	**83**	**86**
Newly consolidated companies		2	2
Merged companies			0
Deconsolidated companies		(2)	(2)
Change in consolidation method		2	2
At December 31, 2021	**3**	**85**	**88**
Total			
At December 31, 2020	**132**	**699**	**831**
At December 31, 2021	**129**	**719**	**848**

4.5. Off-balance sheet commitments related to companies within the scope of consolidation

Non-cancelable purchase commitments represented €2,132 million at December 31, 2021.

Around €2 billion of non-cancelable purchase commitments relate to GCP Applied Technologies, a leading global player in the construction chemicals market, with which Saint-Gobain signed an agreement on December 6, 2021 to purchase all of GCP's outstanding shares.
Offering highly complementary geographic and commercial footprints with Chryso, the acquisition of which was completed in September 2021, GCP represents a unique opportunity for Saint-Gobain to establish a leading worldwide presence in the growing construction chemicals sector, and furthers the Group's strategy as a worldwide leader in light and sustainable construction.
Closing of the transaction is subject to the approval of GCP shareholders, antitrust clearance and satisfaction of other customary closing conditions, and should be effective by the end of 2022.

Share purchase commitments also include the acquisition of Impac, a leading player in the construction chemicals market in Mexico, with which Saint-Gobain signed a purchase agreement on October 20, 2021.
This acquisition will enable the Group to consolidate its leadership in Latin America while accelerating its growth in the region by enriching its range of solutions for light and sustainable construction.
Completion of the acquisition is subject to clearance from the Mexican antitrust authorities and should be effective in the first half of 2022.

Non-cancelable purchase commitments also take into account the agreement signed on December 21, 2021 by Saint-Gobain with the Alghanim group to acquire Rockwool India Pvt Ltd, a major player in the production of stone wool in India.

NOTE 5 INFORMATION CONCERNING THE GROUP'S OPERATING ACTIVITIES

5.1. Income statement items

5.1.1. Revenue recognition

Revenue generated by the sale of goods or services is recognized net of rebates, discounts and sales taxes when control of the goods or services has been transferred to the customer. Revenue generated by the sale of goods is primarily recognized at the time the goods are delivered. Revenue generated by the sale of services is recognized when the services have been rendered, or based on the stage of completion of the services, as calculated based on costs incurred. Similarly, within the Distribution entities, estimated returns are recognized as a deduction from revenue (sales) and reclassified within inventories for their net carrying amount, since there is a possibility that goods will be returned within the allotted timeframe. A liability relating to future refunds for goods returned is also recognized.

Revenue generated under construction contracts is accounted for by the Group's companies on a percentage-of-completion basis, as calculated based on costs incurred. The related costs are expensed as incurred. When the outcome of a construction contract cannot be estimated reliably, contract revenue is recognized to the extent of contract costs incurred that it is probable will be recovered. When it is probable that total contract costs will exceed total contract revenue, the expected loss is recognized as an expense immediately.

Construction contract revenues are not material in relation to total consolidated sales.

5.1.2. Operating income

Operating income is a measure of the performance of the Group's different reporting segments and has been used by the Group as its key external and internal management indicator for many years. Foreign exchange gains and losses are included in operating income, as are changes in the fair value of financial instruments that do not qualify for hedge accounting when they relate to operating items. The share of income of core business equity-accounted companies is also posted under operating income.

Supplier discounts granted to entities in the Distribution business are included in operating income as a reduction of cost of sales. Contractual supplier discounts are customary practice in the industrial goods distribution sector. These discounts are mostly calculated by applying a contractually guaranteed rate by product type to volumes purchased. The calculation is made automatically, based on the supplier invoices. Consequently, little judgment is needed when determining the amounts to be recognized in the income statement for these discounts. Other discounts are calculated based on a step mechanism linked to specified targets, whereby the percentage discount increases as the entity achieves the various targets over a given period. In this case, judgment is required based on historical data, past performance and future trends in order to determine the discount to be recognized in the income statement. Such judgment is exercised in a prudent manner and consistently from one period to the next.

5.1.3. Business income

Business income includes all income and expenses other than financial income and expense, the Group's share in net income of non-core business equity-accounted companies, and income taxes.

Business income is detailed by type below:

(in € millions)	**2021**	**2020**
SALES	**44,160**	**38,128**
Personnel expenses:		
Salaries and payroll taxes[1]	(8,296)	(7,625)
Share-based payments[2]	(76)	(45)
Pensions and employee benefit obligations[2]	(249)	(222)
Depreciation and amortization of property, plant and equipment, intangible assets and right-of-use assets[3]	(1,934)	(1,902)
Share in net income of core business equity-accounted companies	52	13
Other[4]	(29,150)	(25,492)
OPERATING INCOME	**4,507**	**2,855**
Other business income	176	88
Other business expense[3]	(747)	(1,511)
OTHER BUSINESS INCOME AND EXPENSE	**(571)**	**(1,423)**
BUSINESS INCOME (EXPENSE)	**3,936**	**1,432**

(1) The year-on-year increase in salaries and payroll taxes in 2021 is attributable to the upsurge in trading during the period, whereas this item was lower in 2020 owing to the use of furlough schemes in response to the Covid-19 pandemic.

(2) Share-based payments (IFRS 2 expense) and changes in employee benefit expenses are detailed in note 6 "Employees, personnel expenses and employee benefit obligations".

(3) Total depreciation and amortization of property, plant and equipment, intangible assets and right-of-use assets, along with amortization charged against intangible assets within the scope of purchase price accounting (PPA), represented €1,986 million in 2021 versus €1,948 million in 2020.

(4) The "Other" operating income line relates to cost of sales, supplier discounts and selling expenses for Distribution entities, and to transport costs, raw materials costs, and other production costs for the other entities. This item also includes research and development costs recorded under operating expenses, amounting to €447 million in 2021 (2020: €429 million).

5.1.4. Other business income and expense

Other business income and expense mainly include changes in provisions for claims and litigation (excluding those arising in the ordinary course of operations) and environmental matters, disposal gains and losses, asset impairment, amortization charged against intangible assets within the scope of purchase price accounting, restructuring costs incurred upon the disposal or discontinuation of operations and the costs of workforce reduction measures.

Other business income and expense can be analyzed as follows:

(in € millions)	**2021**	**2020**
Impairment of assets and other [(1)]	(213)	(977)
Amortization of intangible assets related to PPA[(2)]	(52)	(46)
Other business expense [(3)]	(243)	(146)
Impairment of assets and other business expenses	**(508)**	**(1,169)**
Gains on disposals of non-current assets	**176**	**88**
GAINS AND LOSSES ON DISPOSALS, ASSET IMPAIRMENT, IMPACT OF CHANGES IN GROUP STRUCTURE	**(332)**	**(1,081)**
NON-OPERATING INCOME AND EXPENSE [(4)]	**(239)**	**(342)**
OTHER BUSINESS INCOME AND EXPENSE	**(571)**	**(1,423)**

(1) The "Impairment of assets and other" line includes the impairment of goodwill, other intangible assets, property, plant and equipment, right-of-use assets, assets held for sale and other assets. In 2020, this item chiefly concerned impairment recognized against intangible assets belonging to the Distribution business in the United Kingdom.

(2) Following the major Continental Building Products acquisition carried out in 2020, amortization charged against brands and customer lists is included on a separate line within "Impairment of assets and other business expenses" together with other gains and losses arising on business combinations which are not taken into account when determining the performance of the Group's operating segments. Amortization charged against brands and customer lists amounted to €52 million in 2021 versus €46 million in 2020.

(3) As in 2020, other business expense mainly includes capital losses on assets divested or scrapped, acquisition fees and contingent consideration incurred in connection with business combinations;

(4) In 2021, non-operating income and expense include restructuring costs for €71 million (€261 million in 2020).

5.2. Segment information

In accordance with IFRS 8, segment information reflects the Group's internal organization as presented to management. The Group has chosen to present segment information in line with its internal reporting.

Segment assets and liabilities include net property, plant and equipment, working capital, goodwill and net other intangible assets, after deducting deferred taxes on brands and land, and assets and liabilities held for sale.

Capital expenditure corresponds to acquisitions of property, plant and equipment and does not include right-of-use assets.

The Group is organized into five reporting units: four regional businesses and a global High Performance Solutions unit. Segment information is presented for:

- High Performance Solutions (HPS), which is organized by market for global customers, i.e., Mobility, Life Sciences, Construction Industry and Industry;

And for four regions:

- Northern Europe, comprising the Nordic countries, United Kingdom, Ireland, Switzerland, Germany, Austria, Eastern Europe and Russia;
- Southern Europe – Middle East (ME) & Africa, comprising France, Benelux, Mediterranean, Middle East and Africa;

- Americas, comprising North America and Latin America;
- Asia-Pacific, comprising the Asia region and India;
- Other, comprising the Group's various holding companies.

Segment information for 2021 and 2020 is as follows:

2021

(in € millions)	High Performance Solutions[2]	Northern Europe	Southern Europe[2] - ME & Africa	Americas[2]	Asia-Pacific	Other[1]	Group Total
Sales	7,511	15,028	14,044	6,815	1,787	(1,025)	**44,160**
Operating income (loss)	931	1,100	1,166	1,123	211	(24)	**4,507**
Business income (loss)	712	966	1,019	1,012	252	(25)	**3,936**
Share in net income of equity-accounted companies	1	14	1	32	6	2	**56**
Operating depreciation and amortization	332	623	575	262	91	51	**1,934**
Impairment of assets	7	90	78	11	2		**188**
EBITDA	1,098	1,709	1,715	1,358	302	20	**6,202**
Acquisitions of property, plant and equipment and intangible assets[3]	346	424	395	276	134	16	**1,591**
Goodwill, net[4]	2,697	4,239	2,038	1,924	283	0	**11,181**
Brands, customer relationships and intellectual property[4]	270	1,050	490	389	0	0	**2,199**
Total segment assets and liabilities[4]	6,736	9,265	7,224	4,940	1,383	328	**29,876**

(1) "Other" corresponds to the elimination of intragroup transactions for internal sales, and holding company transactions for the other captions.
(2) France, United States and United Kingdom sales represent €11,346 million, €6,187 million and €4,441 million, respectively. France, United States and United Kingdom segment assets represent €7,503 million, €5,581 million and €2,742 million, respectively.
(3) Capital expenditure does not include right-of-use assets.
(4) "Net goodwill" and "Brands, customer relationships and intellectual property" do not include assets relating to companies held for sale (assets and liabilities relating to companies held for sale are however included in the line "Total segment assets and liabilities").

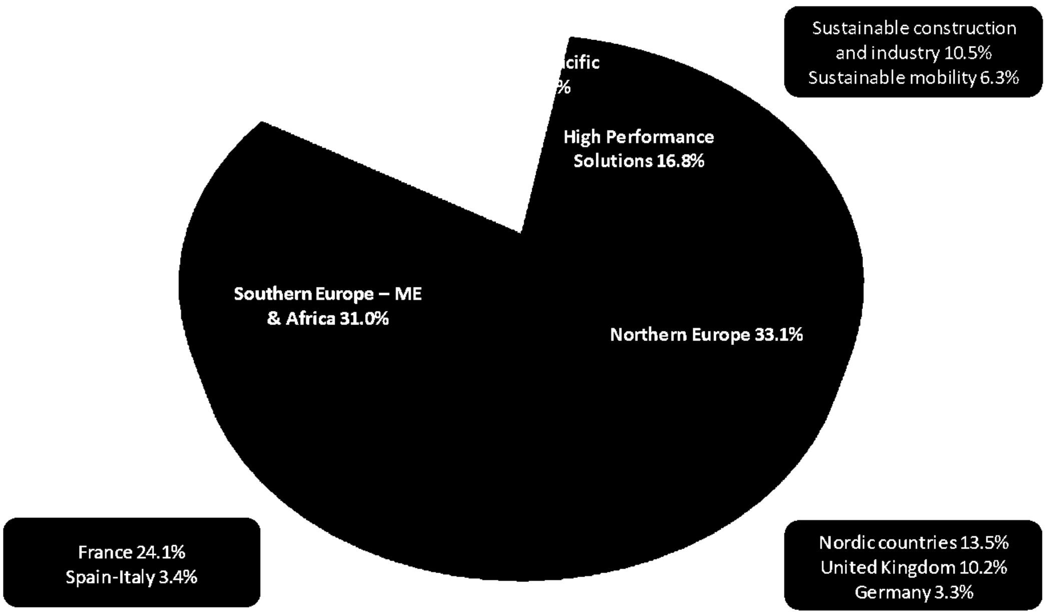
2020

(in € millions)	High Performance Solutions[2]	Northern Europe	Southern Europe[2] - ME & Africa	Americas[2]	Asia-Pacific	Other[1]	Group Total
Sales	6,544	12,807	12,454	5,697	1,520	(894)	**38,128**
Operating income (loss)	613	788	644	656	163	(9)	**2,855**
Business income (loss)	407	73	479	516	151	(194)	**1,432**
Share in net income (loss) of equity-accounted companies	0	8	(16)	17	5	2	**16**
Operating depreciation and amortization	331	594	582	258	89	48	**1,902**
Impairment of assets	39	639	88	24	0	167	**957**
EBITDA	810	1,305	1,153	872	245	30	**4,415**
Acquisitions of property, plant and equipment and intangible assets[3]	262	329	291	216	99	39	**1,236**
Goodwill, net[4]	1,840	4,106	2,024	1,778	280	0	**10,028**
Brands, customer relationships and intellectual property[4]	59	1,026	485	392	0	0	**1,962**
Total segment assets and liabilities[4]	5,329	9,092	7,164	4,541	1,302	195	**27,623**

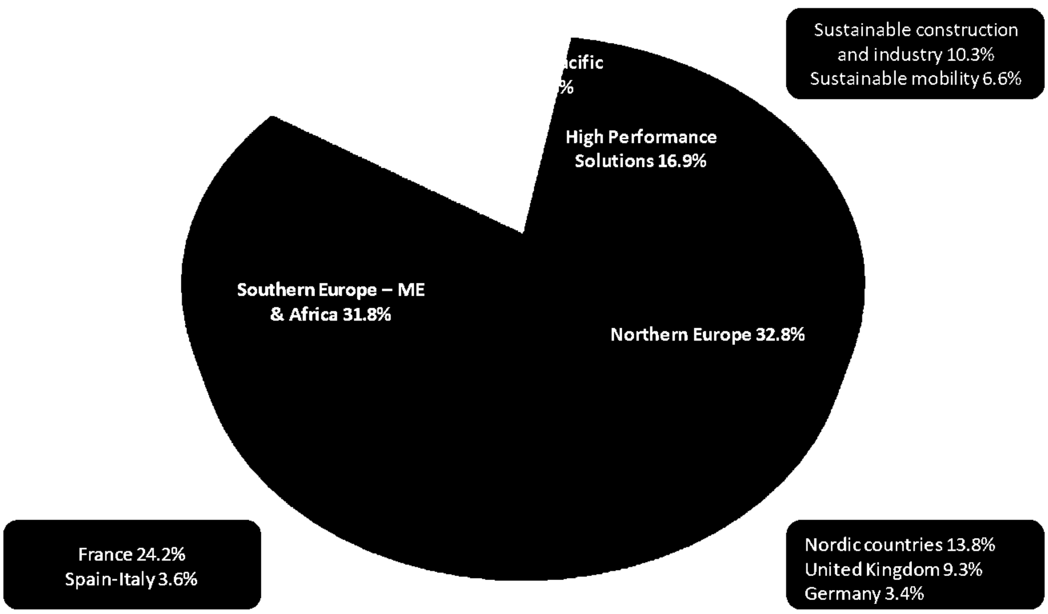
(1) "Other" corresponds to the elimination of intragroup transactions for internal sales, and holding company transactions for the other captions.
(2) France and United States sales represent €9,765 million and €5,436 million, respectively. France and United States segment assets represent €6,128 million and €5,148 million, respectively.
(3) Capital expenditure does not include right-of-use assets.
(4) "Net goodwill" and "Brands, customer relationships and intellectual property" do not include assets relating to companies held for sale (assets and liabilities relating to companies held for sale are however included in the line "Total segment assets and liabilities").

Sales and operating income for the Distribution business in Europe (Northern Europe and Southern Europe - ME & Africa) amount to €18,390 million and €1,209 million, respectively, in 2021 (2020: €16,347 million and €680 million, respectively).

In 2021, the breakdown of sales by segment and for the Group's main countries is as follows:



In 2020, the breakdown of sales by segment was as follows:



5.3. Performance indicators

5.3.1. EBITDA

EBITDA represents operating income plus depreciation and amortization of property, plant and equipment, intangible assets and right-of-use assets, as well as non-operating income and expense.

EBITDA amounted to €6,202 million in 2021 (2020: €4,415 million), calculated as follows:

(in € millions)	**2021**	**2020**
Operating income	4,507	2,855
Depreciation/amortization of property, plant and equipment and intangible assets	1,255	1,227
Depreciation of right-of-use assets	679	675
Non-operating income and expense	(239)	(342)
EBITDA	**6,202**	**4,415**

5.3.2. Free cash flow

Free cash flow (FCF) represents the surplus cash generated from the entity's operations. Free cash flow represents EBITDA plus net financial income/(expense), income tax and changes in working capital, less depreciation of right-of-use assets and investments in property, plant and equipment and intangible assets excluding additional capacity investments.

5.3.3. Operating free cash flow

Operating free cash flow (OFCF) represents the surplus cash generated from the entity's operations and is calculated as operating income plus non-operating income and expense and changes in working capital, less operating depreciation and amortization, investments in property, plant and equipment and intangible assets, and right-of-use assets.

5.3.4. Return on capital employed

Return on capital employed (ROCE) corresponds to annualized operating income adjusted for changes in the scope of consolidation (based on 12 months' of operating income for acquired companies and with no operating income taken into account for divested companies), expressed as a percentage of total assets at the year end. Total assets include net property, plant and equipment, working capital, net goodwill, other intangible assets and assets and liabilities held for sale, but exclude deferred tax assets arising on non-amortizable brands and land.

5.3.5. Recurring net income

Recurring net income corresponds to income after tax and non-controlling interests but before disposal gains or losses, asset impairment, material non-recurring provisions and the related tax and minority interests.

Recurring net income totaled €2,815 million in 2021 (2020: €1,470 million). Based on the weighted average number of shares outstanding at December 31 (526,244,506 shares in 2021 and 536,452,195 shares in 2020), recurring earnings per share amounted to €5.35 in 2021 and €2.74 in 2020.

The difference between net income and recurring net income corresponds to the following items:

(in € millions)	**2021**	**2020**
GROUP SHARE OF NET INCOME	**2,521**	**456**
Less:		
Gains (losses) on disposals of assets	(7)	(28)
Impairment of assets and other	(272)	(1,007)
Changes in provisions for non-recurring items	0	(42)
Impact of non-controlling interests	(1)	1
Tax on disposal gains and losses, asset impairment, non-recurring provisions and write-downs of deferred taxes on tax loss carry-forwards	(14)	62
GROUP SHARE OF RECURRING NET INCOME	**2,815**	**1,470**

5.4. Working capital

Working capital can be analyzed as follows:

(in € millions)	**Dec. 31, 2021**	**Dec. 31, 2020**
INVENTORIES, NET	**6,598**	**5,362**
TRADE ACCOUNTS RECEIVABLE, NET	**5,104**	**4,597**
Other operating receivables	1,424	1,206
Other non-operating receivables	80	63
OTHER RECEIVABLES, NET	**1,504**	**1,269**
CURRENT TAX RECEIVABLE	**166**	**147**
TRADE ACCOUNTS PAYABLE	**6,903**	**5,897**
Other operating payables	4,153	3,454
Other non-operating payables	655	457
OTHER PAYABLES	**4,808**	**3,911**
CURRENT TAX LIABILITIES	**236**	**175**
Operating working capital	2,070	1,814
Non-operating working capital (including current tax receivable and liabilities)	(645)	(422)
WORKING CAPITAL	**1,425**	**1,392**

5.4.1. Inventories

Inventories are stated at the lower of cost and net realizable value. The cost of inventories includes purchase costs (net of supplier discounts), processing costs and other costs incurred in bringing the inventories to their present location and condition. Cost is generally determined using the weighted-average cost method, and in some cases the First-In-First-Out (FIFO) method. Inventory costs may also include the transfer from equity of any gains/losses on qualifying cash flow hedges of foreign currency purchases of raw materials. Net realizable value is the selling price in the ordinary course of business, less estimated completion and selling costs. No account is taken in the inventory valuation process of the impact of below-normal capacity utilization rates.

At December 31, 2021 and 2020, inventories were as follows:

(in € millions)	**Dec. 31, 2021**	**Dec. 31, 2020**
Gross value		
Raw materials	1,726	1,368
Work in progress	367	308
Finished goods	5,033	4,170
GROSS INVENTORIES	**7,126**	**5,846**
Provisions for impairment		
Raw materials	(191)	(175)
Work in progress	(16)	(15)
Finished goods	(321)	(294)
TOTAL PROVISIONS FOR IMPAIRMENT	**(528)**	**(484)**
INVENTORIES, NET	**6,598**	**5,362**

The net value of inventories is €6,598 million at December 31, 2021 compared to €5,362 million at December 31, 2020. Impairment losses on inventories recorded in the 2021 income statement totaled €279 million (2020: €222 million). Reversals of impairment losses on inventories amounted to €219 million in 2021 (2020: €175 million).

5.4.2. Operating and non-operating receivables and payables

Trade accounts receivable and payable and other receivables and payables are stated at their carrying amount, which approximates their fair value as they generally have maturities of less than three months. Provisions for impairment are booked to cover the risk of total or partial non-recovery, within the limit of expected credit losses.

The Group deems that its exposure to concentrations of credit risk is limited due to its diversified business line-up, broad customer base and global presence. Past-due trade receivables are regularly monitored and analyzed, and impairment losses recognized are adjusted where appropriate.

The Group has various securitization and factoring programs for its trade receivables. Receivables transferred under some of these programs continue to be shown on the balance sheet with a corresponding liability in short-term debt if, based on an analysis of the contracts, the risks associated with the receivables are not transferred in substance to the financing institutions (further information is provided in notes 10.3.8 and 10.3.10).

- Trade and other accounts receivable

Trade and other accounts receivable can be analyzed as follows:

(in € millions)	Dec. 31, 2021	Dec. 31, 2020
Gross value	5,449	4,959
Provisions for impairment	(345)	(362)
TRADE ACCOUNTS RECEIVABLE, NET	**5,104**	**4,597**
Discounts obtained from and advances granted to suppliers	636	566
Prepaid payroll taxes	35	36
Other prepaid and recoverable taxes (other than income tax)	470	350
Miscellaneous operating receivables	289	260
Other non-operating receivables	81	64
Provision for impairment of other receivables	(7)	(7)
OTHER RECEIVABLES, NET	**1,504**	**1,269**

The increase in trade and other accounts receivable at December 31, 2021 is a result of the strong level of business in the year.

The impact of movements in provisions and bad debt write-offs fell to a negative €55 million at end-2021 versus a negative €95 million at end-2020.
Bad debt write-offs remained stable at €78 million compared to €76 million at December 31, 2020.

Trade accounts receivable at December 31, 2021 and 2020 are analyzed below by maturity:

(in € millions)	Gross value		Impairment		Net value	
	Dec. 31, 2021	Dec. 31, 2020	Dec. 31, 2021	Dec. 31, 2020	Dec. 31, 2021	Dec. 31, 2020
TRADE ACCOUNTS RECEIVABLE NOT YET DUE	**4,616**	**4,121**	**(62)**	**(60)**	**4,554**	**4,061**
Less than 1 month	350	330	(29)	(18)	321	312
1-3 months	148	125	(30)	(26)	118	99
More than 3 months	335	383	(224)	(258)	111	125
TRADE ACCOUNTS RECEIVABLE PAST DUE	**833**	**838**	**(283)**	**(302)**	**550**	**536**
TRADE ACCOUNTS RECEIVABLE	**5,449**	**4,959**	**(345)**	**(362)**	**5,104**	**4,597**

- Trade and other accounts payable

Trade and other accounts payable and accrued expenses can be analyzed as follows:

(in € millions)	Dec. 31, 2021	Dec. 31, 2020
TRADE ACCOUNTS PAYABLE	**6,903**	**5,897**
Downpayments received and rebates granted to customers	1,636	1,356
Payables to suppliers of non-current assets	439	274
Grants received	91	99
Accrued personnel expenses	1,439	1,263
Accrued taxes other than on income	403	368
Other operating payables	675	467
Other non-operating payables	125	84
OTHER PAYABLES	**4,808**	**3,911**

5.5. Off-balance sheet commitments related to operating activities

5.5.1. Non-cancelable purchase commitments

Non-cancelable purchase commitments include contractual commitments to purchase raw materials and services along with firm orders for property, plant and equipment and intangible assets.

		Payments due by period			
(in € millions)	**Total 2021**	**Due within 1 year**	**Due in 1 to 5 years**	**Due beyond 5 years**	**Total 2020**
Property, plant and equipment and intangible assets	129	23	30	76	33
Raw materials and energy	1,550	515	781	254	1,357
Services	155	82	58	15	183
TOTAL	**1,834**	**620**	**869**	**345**	**1,573**

5.5.2. Guarantee commitments

In some cases, the Group grants seller's warranties to the buyers of divested businesses. A provision is recognized whenever a risk is identified and the related cost can be estimated reliably.

The Group also receives guarantees, amounting to €56 million at December 31, 2021 (December 31, 2020: €72 million).

5.5.3. Commercial commitments

The Group's commercial commitments are shown below:

		Commitment amounts by period			
(in € millions)	**Total 2021**	**Due within 1 year**	**Due in 1 to 5 years**	**Due beyond 5 years**	**Total 2020**
Security for borrowings	51	32	9	10	45
Other commitments given	224	135	34	55	144
TOTAL	**275**	**167**	**43**	**65**	**189**

Guarantees given to the Group in respect of receivables totaled €75 million at December 31, 2021 (December 31, 2020: €77 million). At December 31, 2021, pledged assets represented €1,095 million (December 31, 2020: €674 million) and chiefly concerned non-current assets pledged in the United Kingdom.

5.5.4. Other commitments

A provision for greenhouse gas emissions allowances is recorded in the consolidated financial statements to cover any difference between the Group's emissions and the allowances granted.

The Saint-Gobain Group had 3.7 million tonnes of greenhouse gas emissions allowances at December 31, 2021, which will cover its actual CO_2 emissions for 2021. As a result, no provision has been recorded in this respect in the Group's financial statements.

NOTE 6 EMPLOYEES, PERSONNEL EXPENSES AND EMPLOYEE BENEFIT OBLIGATIONS

6.1. Employees of fully consolidated companies

- Average headcount

	2021	2020
Managerial-grade employees	29,007	29,027
Administrative employees	69,398	70,658
Other employees	68,475	68,775
TOTAL AVERAGE NUMBER OF EMPLOYEES	**166,880**	**168,460**

- Closing headcount

The total number of Group employees for fully consolidated companies was 167,816 employees at December 31, 2021 and 167,552 employees at December 31, 2020.

6.2. Management compensation

Direct and indirect compensation and benefits paid to the members of the Board of Directors and to the Group's senior management were as follows in 2021 and 2020:

(in € millions)	2021	2020
Directors' compensation	1,1	1,0
Direct and indirect compensation (gross)		
Fixed portion	8,7	8,1
Variable portion	5,5	5,2
Share-based payment expense (IFRS 2)	16,2	6,6
TOTAL excluding estimated cost of pensions and other employee benefit obligations (IAS 19)	**31,5**	**20,9**
Estimated cost of pensions and other employee benefit obligations (IAS 19)*	5,7	1,8
TOTAL	**37,2**	**22,7**

* The year-on-year rise in the expense for 2021 is due to the transfer of obligations to a third-party insurer falling within the scope of Article L. 137-11 of the French Social Security Code.

Total gross compensation and benefits paid in 2021 to Saint-Gobain management by the French and foreign companies in the Group (excluding any long-term cash settled compensation) amounted to €14.2 million (2020: €13.3 million), including €5.5 million in gross variable compensation (2020: €5.2 million).

Provisions for pensions and other post-employment benefit obligations (defined benefit obligations [DBO] in respect of length-of-service awards and pensions) accruing to Group management totaled €31 million at December 31, 2021 (December 31, 2020: €46 million). The decrease in this item reflects changes during the year as well as the transfer of obligations to a third-party insurer falling within the scope of Article L. 137-11 of the French Social Security Code, as taken up in the PACTE Law.

6.3. Provisions for pensions and other employee benefits

6.3.1. Description of defined benefit plans

After retirement, some of the Group's former employees are eligible for pension benefits in accordance with the applicable laws and regulations in the respective countries in which the Group operates. There are also additional pension obligations in certain Group companies, both in France and in other countries.

The Group's obligation for the payment of pensions and length-of-service awards is determined at the end of the reporting period by independent actuaries using the projected unit credit method (taking into account changes in salaries until retirement) and the economic conditions in each country. This obligation may be financed by pension funds, with a provision recognized in the balance sheet for the unfunded portion.

When plan assets exceed the defined benefit obligation, the excess is recognized in other non-current assets under "Net pension assets". The asset ceiling corresponds to the maximum future economic benefit. Changes in the asset ceiling are recognized in equity.

Actuarial gains and losses result from changes in actuarial assumptions, experience adjustments and the difference between the funds' actual and estimated (calculated) rates of return. They are recognized against equity as and when they arise.

The interest cost of these obligations and the return on the related plan assets are measured by the Group using the discount rate applied to estimate the obligation at the beginning of the period, and are recognized as financial income or expense.

The Group's main defined benefit plans are described below.

In France, employees receive length-of-service awards on retirement based on years of service and the calculation methods prescribed in the applicable collective bargaining agreements.

In addition to length-of-service awards, there are three defined benefit plans, all of which are final salary plans. These plans were closed to new entrants by the companies concerned between 1969 and 1997. Effective March 1, 2012, a defined benefit plan complying with Article L.137-11 of France's Social Security Code (*Code de la sécurité sociale*) was set up by Compagnie de Saint-Gobain. Pursuant to an order of July 4, 2019 issued in the wake of France's PACTE Law setting out an action plan for business growth and transformation, this plan was closed and any vested rights frozen at December 31, 2019. In 2021, two new plans were set up pursuant to Article L. 137-11-2 resulting from the PACTE Law, effective January 1, 2020. Under these plans, final payments are made to a third-party insurer who takes on responsibility for the liability.

In 2021, the Group applied the IFRIC agenda decision, "Attributing Benefit to Periods of Service", which changes the method for calculating obligations under certain defined benefit plans. Since the impact of applying this agenda decision was not material at January 1, 2021, the 2020 financial statements have not been restated.

In Germany, retirement plans provide pensions and death and disability benefits for employees. These plans have been closed to new entrants since 1996. Since January 1997, new employees have been offered pension plans based on contributions financed jointly by employer and employee.

On January 1, 2019, the main pension plan in the Netherlands covering 80% of employees was converted into a defined contribution plan with a residual defined benefit plan for a transitional period of up to 12 years.

In the United Kingdom, retirement plans provide pensions as well as death and permanent disability benefits. These defined benefit plans – which are based on employees' average salaries over their final years of employment – have been closed to new entrants since 2001. The legal structure of the plans is being altered, which will include the closure of the Building Distribution Section to future accrual from January 1, 2022.

In the United States and Canada, the Group's defined benefit plans are final-salary plans. Since January 1, 2001, new employees have been offered a defined contribution plan.

In the United States and Spain, retired employees receive benefits other than pensions, mainly concerning healthcare. The Group's obligation under these plans is determined using the actuarial method and is covered by a provision recorded in the balance sheet.

Provisions for other long-term employee benefits cover all other employee benefits. These benefits primarily include long-service awards in France, jubilee awards in Germany, deferred compensation, provisions for social security benefits in the United States, and termination benefits in different countries. The related defined benefit obligation is generally calculated on an actuarial basis using the same rules as for pension obligations. Actuarial gains and losses relating to these benefits are recognized immediately in the income statement.

6.3.2. Actuarial assumptions used to measure defined benefit obligations and plan assets

6.3.2.1. Interest rate assumptions

Assumptions related to mortality, employee turnover and future salary increases take into account the economic conditions specific to each country and Group company. The discount rates are established by region or country based on observed bond rates at December 31, 2021.

For the Eurozone, two discount rates were calculated based on the term of the plans using a yield curve model developed by consulting firm Mercer: one rate for plans with a term of 14 years or less and one for plans with a term of over 14 years.

The rates used in 2021 for the Group's main plans were the following:

	France		**Eurozone**		**United Kingdom**	**United States**
(in %)	**Short-term plans**	**Long-term plans**	**Short-term plans**	**Long-term plans**		
Discount rate	1.06%	1.42%	1.06%	1.42%	1.95%	2.70%
Salary increases	1,90% to 5.50%		2.10% to 2.30%		2.00%*	3.00%
Inflation rate	1.70%		1.60% to 2.00%		2.70%	2.20%

* A cap applies to the reference salaries used to calculate benefit entitlements.

The rates used in 2020 for the Group's main plans were the following:

	France		**Eurozone**		**United Kingdom**	**United States**
(in %)	**Short-term plans**	**Long-term plans**	**Short-term plans**	**Long-term plans**		
Discount rate	0.70%	1.11%	0.70%	1.11%	1.20%	2.30%
Salary increases	3.10%		1.20% to 2.30%		2.00%*	3.00%
Inflation rate	1.50%		0.90% to 1.60%		2.15%	2.20%

* A cap applies to the reference salaries used to calculate benefit entitlements.

As the above three regions account for substantially all of the Group's pension obligation, the revised actuarial assumptions, notably the discount and inflation rates, contributed to a decrease in the obligation, and therefore in the provision, by an amount of €597 million.

The actual return on plan assets for almost all plans was higher than expected, at €222 million, leading to a decrease in the provision of the same amount.

6.3.2.2. Sensitivity to assumptions

A 0.5-point decrease (increase) in the discount rate would lead to an increase (decrease) in defined benefit obligations of around €200 million for the United States plans, €180 million for the Eurozone plans and €510 million for the United Kingdom plans. A 0.5-point increase in the inflation rate would lead to an overall increase in defined benefit obligations of around €560 million.

The same assumptions concerning mortality, employee turnover and interest rates are used to determine the Group's defined benefit obligations for other long-term employee benefits. In the United States, retirees' healthcare costs are projected to rise between 4.00% and 5.63% per year (under 65 years of age), and between 2.80% and 6.56% per year (older than 65), depending on the age of the beneficiary. A 1-point increase in this rate would lead to an increase of around €24 million in the related projected benefit obligation.

6.3.3. Breakdown of and changes in pension and other post-employment benefit obligations

6.3.3.1. Carrying amount of provisions

Provisions for pension and other employee benefit obligations consist of the following:

(in € millions)	**Dec. 31, 2021**	**Dec. 31, 2020**
Pension obligations	1,263	1,822
Length-of-service awards	361	400
Post-employment healthcare benefits	255	278
TOTAL PROVISIONS FOR PENSIONS AND OTHER POST-EMPLOYMENT BENEFIT OBLIGATIONS	**1,879**	**2,500**
Healthcare benefits	26	24
Long-term disability benefits	8	11
Other long-term benefits	101	94
PROVISIONS FOR PENSIONS AND OTHER EMPLOYEE BENEFITS	**2,014**	**2,629**

Provisions for all other long-term benefits total €135 million at December 31, 2021 (€129 million at December 31, 2020).

The following table shows net obligations under pensions and other post-employment benefit plans, excluding other long-term benefits:

(in € millions)	**Dec. 31, 2021**	**Dec. 31, 2020**
Provisions for pensions and other post-employment benefit obligations – liabilities	1,879	2,500
Pension plan surpluses – assets	(894)	(334)
NET PENSION AND OTHER POST-EMPLOYMENT BENEFIT OBLIGATIONS	**985**	**2,166**

6.3.3.2. Analysis of obligations

At December 31, 2021, pension obligations and provisions for other post-employment benefit obligations break down by major geographic region as follows:

(in € millions)	France	Eurozone	United Kingdom	United States	Rest of the World	Net total
AVERAGE DURATION *(in years)*	**14**	**17**	**20**	**13**	**16**	**17**
Defined benefit obligations - funded plans	584	1,496	5,471	2,941	1,029	11,521
Defined benefit obligations - unfunded plans	294	51		220	270	835
Fair value of plan assets	(249)	(848)	(6,261)	(2,915)	(1,129)	(11,402)
DEFICIT (SURPLUS)	**629**	**699**	**(790)**	**246**	**170**	**954**
Asset ceiling			2		29	31
NET PENSION AND OTHER POST-EMPLOYMENT BENEFIT OBLIGATIONS	**629**	**699**	**(788)**	**246**	**199**	**985**

At December 31, 2020, pension obligations and provisions for other post-employment benefit obligations break down by major geographic region as follows:

(in € millions)	France	Eurozone	United Kingdom	United States	Rest of the World	Net total
AVERAGE DURATION *(in years)*	**14**	**17**	**20**	**13**	**17**	**17**
Defined benefit obligations - funded plans	616	1,459	5,518	2,987	965	11,545
Defined benefit obligations - unfunded plans	330	147		243	258	978
Fair value of plan assets	(228)	(482)	(5,810)	(2,885)	(965)	(10,370)
DEFICIT (SURPLUS)	**718**	**1,124**	**(292)**	**345**	**258**	**2,153**
Asset ceiling		6	2		5	13
NET PENSION AND OTHER POST-EMPLOYMENT BENEFIT OBLIGATIONS	**718**	**1,130**	**(290)**	**345**	**263**	**2,166**

6.3.3.3. Changes in provisions

Changes in pensions and other post-employment benefit obligations are as follows:

(in € millions)	Pension obligations	Fair value of plan assets	Asset ceiling	Net pension and other post-employment benefit obligations
AT JANUARY 1, 2020	**12,235**	**(10,024)**	**8**	**2,219**
Changes during the year				
Service cost	202			202
Interest cost/return on plan assets as per calculations	232	(204)		28
Employee contributions and plan administration costs		1		1
Past service cost	1			1
Plan curtailments/settlements	(5)	2		(3)
Pension contributions		(119)		(119)
Benefit payments	(550)	459		(91)
Actuarial gains and losses and asset ceiling	1,070	(1,086)	7	(9)
Translation adjustments	(613)	597	(2)	(18)
Changes in Group structure and reclassifications	(14)	2		(12)
Liabilities held for sale	(35)	2		(33)
TOTAL CHANGES	**288**	**(346)**	**5**	**(53)**
AT DECEMBER 31, 2020	**12,523**	**(10,370)**	**13**	**2,166**
Changes during the year				
Service cost	205			205
Interest cost/return on plan assets as per calculations	189	(160)		29
Employee contributions and plan administration costs		(3)		(3)
Past service cost	11			11
Plan curtailments/settlements	13			13
Pension contributions		(492)		(492)
Benefit payments	(625)	532		(93)
Actuarial gains and losses and asset ceiling	(597)	(222)	17	(802)
Translation adjustments	677	(693)	1	(15)
Changes in Group structure and reclassifications	(31)	(1)		(32)
Liabilities held for sale	(9)	7		(2)
TOTAL CHANGES	**(167)**	**(1,032)**	**18**	**(1,181)**
AT DECEMBER 31, 2021	**12,356**	**(11,402)**	**31**	**985**

6.3.3.4. Actuarial gains and losses

Actuarial gains and losses on provisions result from the following items:

(in € millions)	**2021**	**2020**
Pension obligations	(597)	1,070
Fair value of plan assets	(222)	(1,086)
Asset ceiling	17	7
TOTAL CHANGES	**(802)**	**(9)**

6.3.3.5. Plan assets

Plan assets have been progressively built up by contributions, primarily in the United Kingdom and the United States. Contributions paid in by the Group totaled €492 million in 2021 (2020: €119 million), of which €380 million relates to an exceptional contribution in Germany.

A 0.5-point increase or decrease in the actual return on plan assets would have an impact of approximately €56 million on equity.

Plan assets mainly comprise:

	Dec. 31, 2021	**Dec. 31, 2020**
Equities	17%	22%
Bonds	63%	56%
Other	20%	22%
TOTAL	**100%**	**100%**

Contributions to pension plans for 2022 are estimated at around €87 million.

6.3.4. Defined contribution plans

Contributions to defined contribution plans are expensed as incurred.

Contributions to defined contribution plans for 2021 represented an estimated €647 million (2020: €628 million), including €423 million for government-sponsored basic pension schemes (2020: €412 million), €126 million for government-sponsored supplementary pension schemes, mainly in France (2020: €123 million), and €98 million for corporate-sponsored supplementary pension plans (2020: €93 million).

6.4. Share-based payments

6.4.1. Group Savings Plan

The Group Savings Plan (*Plan d'Epargne Groupe* – PEG) is an employee stock purchase plan open to all Group employees in France and most other countries where the Group is present. Eligible employees must have completed a minimum of three months' service with the Group. Eligible employees are able to invest in Saint-Gobain shares at a preferential subscription price. These shares are held either directly or through the employee saving plan's mutual funds, depending on local legislation, and are subject to a mandatory five- or ten-year lock-up, except following the occurrence of certain events. The Board of Directors delegates authorization for setting the subscription price to the Chief Executive Officer of Compagnie de Saint-Gobain. The subscription price corresponds to the average of the opening prices for the Saint-Gobain share on Euronext Paris over the 20 trading days preceding the date of the decision, subject to a 20% discount, in accordance with applicable laws, the Shareholders' Meeting resolutions and the deliberations of the Board of Directors. The Group makes a matching contribution to amounts paid in by employees, which is expensed in the consolidated financial statements.

The IFRS 2 expense measuring the benefit granted to employees is calculated in accordance with CNC recommendations (press release dated December 21, 2004 relating to group savings plans, and additional press release dated February 7, 2007). It is measured by reference to the fair value of a discount offered on restricted stock (i.e., stock subject to a lock-up). The cost of the lock-up for the employee is defined as the cost of a two-step strategy that involves first selling the restricted stock forward five or ten years and then purchasing the same number of shares on the spot market and financing the purchase with debt. The borrowing cost is estimated at the rate that would be charged by a bank to an individual with an average risk profile for a general-purpose five- or ten-year consumer loan repayable at maturity. The cost of the plans is recognized in full at the end of the subscription period.

In 2021, Saint-Gobain implemented a new PEG. The terms of the 2021 PEG are identical to the 2020 PEG and are described below.

In 2021, 5,562,855 new shares with a par value of €4 were issued to employees under the PEG at an average subscription price of €35.81 (6,099,996 shares at an average price of €23.03 in 2020), representing a share capital increase of €199 million (€139 million in 2020), net of transaction fees.

The IFRS 2 expense relating to this plan recorded in the 2021 income statement amounted to €13.2 million (€3.7 million in 2020).

The following table shows the main features of the standard plans, the amounts invested in the plans and the valuation assumptions applied in 2021 and 2020:

	2021	**2020**
Plan characteristics		
Date of Shareholders' Meeting	June 6, 2019 (22nd Resolution)	June 6, 2019 (22nd Resolution)
Date of the Chief Executive Officer's decision fixing the subscription price	March 15	June 15
Plan duration (in years)	5 or 10	5 or 10
Reference price (in €)	44.76	28.79
Subscription price (in €)	35.81	23.03
Discount (in %)	20.00%	20.00%
Total discount on the date of the Chief Executive Officer's decision (in %) **(a)**	25.97%	24.57%
Employee investments (in € millions)	199.2	140.5
Total number of shares subscribed	5,562,855	6,099,996
Valuation assumptions (5-year maturity)		
Interest rate applicable to employees*	3.50%	4.80%
Risk-free interest rate	-0.51%	-0.45%
Repo rate	0.51%	0.29%
Lock-up discount (in %) **(b)**	19.12%	21.77%
Total cost to the Group (in %) **(a-b)**	6.85%	2.80%

* A 0.5-point decline in borrowing costs for the employee would increase the expense as calculated in accordance with IFRS 2 by €3.6 million in 2021.

6.4.2. Stock option plans

Until 2018, Compagnie de Saint-Gobain operated stock option plans for certain employees.

Under these plans, the Board of Directors granted options allowing beneficiaries to obtain Saint-Gobain shares at a price set, at no discount, by reference to the average of the opening prices for the Saint-Gobain share over the 20 stock market trading days preceding the date of the decision by the Board of Directors.

For all of the plans, beneficiaries must wait at least four years from the grant date to exercise any options. None of the options received may be exercised until this four-year period has lapsed. Options must be exercised within 10 years of the grant date. Except in specified circumstances, grantees forfeit these options if they leave the Group.

Among the plans outstanding at December 31, 2021, the 2012 plan offers subscription options, while the 2013, 2015, 2016 and 2017 plans offer purchase options. For plan launched in 2018, the Board of Directors has decided that it would determine the type of option (subscription or purchase) at the latest on the day before the start of the exercise period, with any options exercised prior to such decision considered as subscription options.

A performance condition applies for all beneficiaries under current plans.

No stock options plan has been launched since 2019.

The following table presents changes in the number of outstanding options:

	€4 par value shares	Average exercise price (in €)
OPTIONS OUTSTANDING AT DECEMBER 31, 2019	**1,057,522**	**40.12**
Options granted		
Options exercised		
Options forfeited	(212,998)	40.43
OPTIONS OUTSTANDING AT DECEMBER 31, 2020	**844,524**	**40.04**
Options granted		
Options exercised	(151,173)	38.59
Options forfeited*	(83,875)	49.38
OPTIONS OUTSTANDING AT DECEMBER 31, 2021	**609,476**	**39.11**

* Including 66,875 options granted under the 2017 stock option plan that lapsed because the performance conditions were not met, and 17 000 lapsed after they had been withdrawn.

The cost of stock option plans is calculated using the Black & Scholes option pricing model.

The following inputs were used:

- volatility assumptions that take into account the historical volatility of the share price over a rolling 10-year period, as well as implied volatility from traded share options. Periods of extreme share price volatility are disregarded;
- assumptions relating to the average holding period of options, based on observed behavior of option holders;
- expected dividends, as estimated on the basis of historical dividend information dating back to 1988;
- a risk-free interest rate corresponding to the yield on long-term government bonds;
- the effect of any stock market performance conditions, which is taken into account in the initial measurement of IFRS 2 share-based payment expense.

The cost calculated using this method is recognized in the income statement over the vesting period of the options, which is a maximum of four years.

Under IFRS 2, the expense attributable to the amortization of stock options granted under previous plans totaled €0.4 million in 2021 (€0.7 million in 2020).

The table below summarizes information about stock options outstanding at December 31, 2021, after taking into account partial fulfillment of the performance criteria attached to certain plans:

	Exercisable options			Non-exercisable options		Total options outstanding	
Grant date	Exercise price (in €)	Number of options	Weighted average contractual life (in months)	Exercise price (in €)	Number of options	Number of options	Type of options
2012	27.71	5,432	11			5,432	Subscription
2013	38.80	36,707	23			36,707	Purchase
2014	34.13		35			0	Purchase
2015	39.47	38,018	47			38,018	Purchase
2016	40.43	45,244	59			45,244	Purchase
2017	49.38	193,575	71			193,575	Purchase
2018			83	32.24	290,500	290,500	Subscription or purchase*
TOTAL		**318,976**			**290,500**	**609,476**	

* 2018 plan: see above.

At December 31, 2021, 318,976 stock options were exercisable (at an average exercise price of €45.34) and 290,500 options (with an average exercise price of €32.24) had not yet vested.

6.4.3. Performance shares and performance unit grants

Since 2009, performance share plans have also been set up for certain categories of employees. These plans are subject to eligibility criteria based on the grantee's period of service (service conditions) with the Group as well as performance criteria (performance conditions), which are described below. The IFRS 2 share-based payment expense takes into account these conditions and the lock-up feature. It is determined after deducting the present value of the dividends forfeited on the performance shares and is recognized over the vesting period, not exceeding four years.

From 2012 to 2015, performance unit plans have been set up for certain employees in France. These plans are also subject to service and performance conditions. The IFRS 2 share-based payment expense therefore takes into account these factors, as well as the fact that the units are cash-settled. IFRS 2 stipulates that for cash-settled share-based payment transactions, the granted instruments are initially measured at fair value at the grant date, then remeasured at the end of each reporting period, with the expense adjusted accordingly *pro rata* to the rights that have vested at the reporting date. The expense is recognized over the vesting period of the rights.

6.4.3.1. Performance share plans

At December 31, 2021, there were four outstanding performance share plans, approved by the Board of Directors in 2018, 2019 and 2020 and on November 25, 2021.

The expense recorded for these plans in the 2021 income statement amounted to €44.4 million (2020: €27.6 million).

All plans are subject to service and performance conditions. The vesting period for the shares awarded under these plans is four years and the shares will be delivered under all plans the fourth day after the end of the vesting period for the 2018, 2019, 2020 and 2021 plans.

The table below shows changes in the number of performance share rights:

	Number of rights
NUMBER OF PERFORMANCE SHARE RIGHTS AT DECEMBER 31, 2019	**4,927,869**
Performance share rights granted in November 2020	1,268,295
Shares issued/delivered	(733,024)
Lapsed and canceled rights	(497,306)
NUMBER OF PERFORMANCE SHARE RIGHTS AT DECEMBER 31, 2020	**4,965,834**
Performance share rights granted in November 2021	1,184,475
Shares issued/delivered	(904,712)
Lapsed and canceled rights*	(324,838)
NUMBER OF PERFORMANCE SHARE RIGHTS AT DECEMBER 31, 2021	**4,920,759**

* Rights granted under the 2017 plan, including 237,758 rights that lapsed because the performance condition had only been partly met, and 87,080 rights that lapsed after they had been withdrawn.

The fair value of the performance shares corresponds to the Saint-Gobain share price on the grant date less the value of dividends not payable on the shares during the vesting period and, as for the Group Savings Plan, minus the cost of the four-year lock-up feature, which has been estimated at around 30% of the share price. The expense is recognized over the vesting period, which covers a maximum of four years.

The following table shows the expected dates when shares under the four performance share plans outstanding at December 31, 2021 will be delivered (except in the case of early release following the grantee's death or disability, along with the service and performance conditions remaining to be fulfilled):

Grant date	Number of rights at December 31, 2021*	Delivery date	Type of shares
November 22, 2018	1,217,119	November 25, 2022	existing
November 21, 2019	1,251,270	November 24, 2023	existing
November 26, 2020	1,267,895	November 29, 2024	existing
November 25, 2021	1,184,475	November 28, 2025	existing
TOTAL	**4,920,759**		

* Subject to fulfillment of the service and performance conditions applicable to each plan.

6.4.3.2. Performance unit plans

Performance unit plans subject to service and performance conditions were set up every year between 2012 and 2015 for certain management-grade employees and senior managers of the Group in France. These plans do not give rise to the delivery of shares but entitle grantees to receive cash compensation deferred over the long-term (exercise period between four and ten years after the grant date), the amount of which will be determined by reference to Saint-Gobain's share price.

No long-term compensation plan in the form of performance units has been set up since 2016.
Since the acquisition time of the last plan has ended in 2019, there are no longer any expenses in respect of such plans.

NOTE 7 INTANGIBLE ASSETS, PROPERTY, PLANT AND EQUIPMENT, AND RIGHT-OF-USE ASSETS

7.1. Goodwill

When an entity is acquired by the Group, its identifiable assets and assumed liabilities are recognized at their fair value. IFRS allows a 12-month period after the acquisition date ("measurement period") to identify the assets and liabilities of the acquired entity that were not recognized in the initial accounting for the combination, and to retroactively modify the amounts initially allocated.

The final acquisition price ("consideration transferred" in IFRS 3R), including, as appropriate, the estimated fair value of any earn-out payments or other deferred consideration ("contingent consideration" in IFRS 3R), is determined in the 12 months following the acquisition. Under IFRS 3R, any adjustments to the acquisition price beyond this 12-month period are recorded in the income statement. Directly attributable acquisition costs are expensed as incurred.

In addition, goodwill is recognized only at the date that control is achieved. Any subsequent increase in ownership interest (without change of control) is recorded as a change in equity without adjusting goodwill.

Goodwill is recorded in the consolidated balance sheet as the difference between (i) the acquisition-date fair value plus the amount of any non-controlling interests in the acquiree – measured either at fair value (full goodwill method) or at the proportionate interest in the fair value of the net identifiable assets acquired (partial goodwill method) – and (ii) the net amount of assets and liabilities acquired at their fair value at the acquisition date. The Group generally applies the partial goodwill method and the amount of goodwill calculated under the full goodwill method is not therefore material.

Any excess of the cost of an acquisition over the fair value of the Group's share of the assets and liabilities of the acquired entity is recorded as goodwill. If the fair value of the net assets acquired and liabilities assumed exceeds their acquisition cost, this negative difference is recognized in the income statement in the year of acquisition.

Changes in goodwill in 2021 and 2020 are detailed below:

(in € millions)	**Dec. 31, 2021**	**Dec. 31, 2020**
At January 1		
Gross value	12,229	12,495
Accumulated impairment	(2,201)	(2,466)
NET VALUE	**10,028**	**10,029**
Changes during the year		
Impairment	(30)	(201)
Translation adjustments and restatement for hyperinflation	354	(484)
Changes in Group structure	815	719
Assets held for sale	14	(35)
TOTAL CHANGES	**1,153**	**(1)**
At December 31		
Gross value	13,399	12,229
Accumulated impairment	(2,218)	(2,201)
NET VALUE	**11,181**	**10,028**

In 2021, changes in Group structure mainly reflect first-time consolidations following the acquisition of Chryso (see note 4.2.1) for €722 million and of Equflow and Duraziv for €20 million and €17 million, respectively, as well as adjustments to purchase price accounting in progress. Impairment losses were recognized for €30 million, mainly against assets sold in the period. Currency translation adjustments primarily reflect the impacts of fluctuations in the US dollar, pound sterling, Norwegian krone and Brazilian real.

In 2020, changes in Group structure mainly reflected first-time consolidations following the acquisition of Continental Building Products for €637 million and of MS Techniques and Transluminal. These changes also resulted from acquisitions carried out at the end of 2019 (consolidated in 2020), in particular High Tech Metal Seals (HTMS) and Sonex. Impairment losses were recognized for €201 million, mainly against the United Kingdom Distribution business and assets held for sale. Currency translation adjustments primarily reflected the impacts of fluctuations in the US dollar, pound sterling, Brazilian real, Norwegian krone, Thai baht and South African rand.

7.2. Other intangible assets

Other intangible assets primarily include brands, customer relationships, intellectual property, software, patents and development costs. They are measured at historical cost less accumulated amortization and impairment.

Certain retail or manufacturing brands acquired are treated as intangible assets with indefinite useful lives as they have a strong national and/or international reputation. These brands are not amortized but are tested systematically for impairment on an annual basis. Other brands are amortized over their useful lives, not exceeding 40 years.

Customer relationships are amortized over the attrition period used to value these assets.

Costs incurred to develop software in-house – primarily configuration, programming and testing costs – are recognized as intangible assets. Patents and purchased computer software are amortized over their estimated useful lives, not exceeding 20 years for patents and three to five years for software.

Research costs are expensed as incurred. Development costs meeting the recognition criteria under IAS 38 are included in intangible assets and amortized over their estimated useful lives (not exceeding five years) from the date when the products to which they relate are first marketed.

Changes in other intangible assets during 2021 and 2020 are analyzed below:

(in € millions)	**Brands**	**Intellectual property and customer relationships**	**Software**	**Other**	**Total intangible assets**
At January 1, 2020					
Gross value	2,876	86	1,365	636	4,963
Accumulated amortization and impairment	(843)	(14)	(972)	(425)	(2,254)
NET VALUE	**2,033**	**72**	**393**	**211**	**2,709**
Changes during the year					
Acquisitions			34	80	114
Disposals			(1)	(2)	(3)
Translation adjustments and restatement for hyperinflation	(51)	(46)	(11)	(8)	(116)
Amortization[1]	(8)	(42)	(113)	(18)	(181)
Impairment	(450)		(12)	(3)	(465)
Transfers			81	(81)	0
Changes in Group structure and other	3	458	5	(4)	462
Assets held for sale	(7)	0	(8)	0	(15)
TOTAL CHANGES	**(513)**	**370**	**(25)**	**(36)**	**(204)**
At December 31, 2020					
Gross value	2,062	496	1,323	536	4,417
Accumulated amortization and impairment	(542)	(54)	(955)	(361)	(1,912)
NET VALUE	**1,520**	**442**	**368**	**175**	**2,505**
Changes during the year					
Acquisitions			41	69	110
Disposals			(4)	1	(3)
Translation adjustments and restatement for hyperinflation	37	31	8	4	80
Amortization[1]	(8)	(47)	(121)	(18)	(194)
Impairment	(4)	(25)	(9)	(2)	(40)
Transfers			56	(56)	0
Changes in Group structure and other	160	93	4	(7)	250
Assets held for sale			(1)	(2)	(3)
TOTAL CHANGES	**185**	**52**	**(26)**	**(11)**	**200**
At December 31, 2021					
Gross value	2,294	651	1,411	548	4,904
Accumulated amortization and impairment	(589)	(157)	(1,069)	(384)	(2,199)
NET VALUE	**1,705**	**494**	**342**	**164**	**2,705**

(1) "Amortization" includes amortization charged against intangible assets within the scope of purchase price accounting, representing €52 million in 2021 (2020: €46 million).

The breakdown of brands, intellectual property and customer relationships by segment is provided in the segment information tables in note 5 "Information concerning the Group's operating activities".

In 2021, changes in Group structure relate mainly to brands and customer relationships acquired as a result of the Chryso acquisition for €158 million and €48 million, respectively. They also include customer relationships acquired as a result of the MS Techniques, Transluminal and Duraziv acquisitions for a total amount of €23 million, as well as Saint-Gobain Brüggemann Holzbau GmbH intellectual property for €10 million. Impairment losses were recognized against certain individual assets for a total of €40 million.

In 2020, changes in Group structure related mainly to customer relationships acquired as a result of the Continental Building Products acquisition for €422 million. Impairment losses were recognized for a total of €465 million.

7.3. Property, plant and equipment

Land, buildings and equipment are carried at historical cost less accumulated depreciation and impairment.

Cost may also include incidental expenses directly attributable to the acquisition, as well as the impact of transfers from equity of any gains/losses on qualifying cash flow hedges of property, plant and equipment purchases.

Expenses incurred in exploring and evaluating mineral resources are included in property, plant and equipment when it is probable that associated future economic benefits will flow to the Group. They include mainly the costs of topographical or geological studies, drilling costs, sampling costs and all costs incurred in assessing the technical feasibility and commercial viability of extracting the mineral resource.

Material borrowing costs incurred for the construction and acquisition of property, plant and equipment are included in the cost of the related asset if they are significant.

Property, plant and equipment are considered as having no residual value, as they chiefly consist of industrial assets that are intended to be used until the end of their useful lives.

Property, plant and equipment other than land are depreciated using the components approach on a straight-line basis over the following estimated useful lives, which are regularly reviewed:

- Major factories and offices 30-40 years
- Other buildings 15-25 years
- Production machinery and equipment 5-16 years
- Vehicles 3-5 years
- Furniture, fixtures, office and computer equipment 4-16 years

Gypsum quarries are depreciated over their estimated useful lives, based on the quantity of gypsum extracted during the year compared with extraction capacity.

Provisions for site restoration are recognized as a component of assets whenever the Group has a legal or constructive obligation to restore a site in accordance with contractually determined conditions or in the event of a sudden deterioration in site conditions. These provisions are reviewed periodically and may be discounted over the expected useful lives of the assets concerned. The component is depreciated over the same useful life as that used for mines and quarries.

Government grants for purchases of property plant and equipment are recorded under "Other payables" and taken to the income statement over the estimated useful lives of the relevant assets. They are included within operating items on the line corresponding to the nature of the asset.

Changes in property, plant and equipment in 2021 and 2020 are analyzed below:

(in € millions)	Land and quarries	Buildings	Machinery and equipment	Assets under construction	Total property, plant and equipment
At January 1, 2020					
Gross value	2,485	8,444	20,031	1,552	32,512
Accumulated depreciation and impairment	(719)	(5,232)	(14,809)	(45)	(20,805)
NET VALUE	**1,766**	**3,212**	**5,222**	**1,507**	**11,707**
Changes during the year					
Acquisitions	13	47	216	846	1,122
Disposals	(61)	(28)	(30)	(5)	(124)
Translation adjustments and restatement for hyperinflation	(70)	(201)	(330)	(91)	(692)
Depreciation	(31)	(242)	(819)		(1,092)
Impairment	(11)	(19)	(60)	(5)	(95)
Transfers		266	723	(989)	0
Changes in Group structure and other	46	83	118	31	278
Assets held for sale	(11)	(15)	(6)	0	(32)
TOTAL CHANGES	**(125)**	**(109)**	**(188)**	**(213)**	**(635)**
At December 31, 2020					
Gross value	2,293	7,925	19,169	1,312	30,699
Accumulated depreciation and impairment	(652)	(4,822)	(14,135)	(18)	(19,627)
NET VALUE	**1,641**	**3,103**	**5,034**	**1,294**	**11,072**
Changes during the year					
Acquisitions	46	70	249	1,116	1,481
Disposals	(32)	(26)	(34)	(3)	(95)
Translation adjustments and restatement for hyperinflation	49	104	166	53	372
Depreciation	(33)	(241)	(837)	(2)	(1,113)
Impairment	(5)	(30)	(64)	(5)	(104)
Transfers		185	668	(853)	0
Changes in Group structure and other	38	12	29	(2)	77
Assets held for sale	(1)	(14)	(9)	(3)	(27)
TOTAL CHANGES	**62**	**60**	**168**	**301**	**591**
At December 31, 2021					
Gross value	2,380	8,161	19,848	1,611	32,000
Accumulated depreciation and impairment	(677)	(4,998)	(14,646)	(16)	(20,337)
NET VALUE	**1,703**	**3,163**	**5,202**	**1,595**	**11,663**

In 2021, changes in Group structure relate mainly to the first-time consolidation of Chryso. Translation adjustments and restatement for hyperinflation primarily reflect the impacts of fluctuations in the US dollar, pound sterling, Chinese renminbi, Indian rupee, Mexican peso, Czech koruna, Norwegian krone, Argentine peso, Brazilian real, Canadian dollar and Turkish lira.

In 2020, changes in Group structure related mainly to the first-time consolidation of Continental Building Products. Translation adjustments and restatement for hyperinflation primarily reflected the impacts of fluctuations in the Brazilian real, US dollar, Mexican peso, Indian rupee, pound sterling, Polish zloty, Russian ruble and Argentine peso.

7.4. Right-of-use assets linked to leases

The Saint-Gobain Group has chosen to apply IFRS 16 using the full retrospective method at January 1, 2019 (i.e., with effect from January 1, 2018) and has restated all of its leases that were identified ahead of first-time application of the standard. Entities' historical lease contracts were restated with effect from the date on which the entities were first consolidated by the Group.

The following recognition exemptions proposed by IFRS 16 have been used by the Group:
- leases with a lease term of 12 months or less;
- leases where the underlying asset has a value of less than US$5,000 when new.

- Property leases

The lease term corresponds to the non-cancelable period of the lease, plus any renewal (or termination) options that the Group is reasonably certain to exercise (or not to exercise). The Group determined whether or not lease renewal (or termination) options were reasonably certain to be exercised based on the location of, and any improvements inseparable from, the leased asset. The lease term at inception for "3/6/9-year" commercial leases in France is generally nine years. The Group did not identify any material leases with similar characteristics in other countries.

At December 31, 2019 and with retroactive effect from January 1, 2018, Saint-Gobain took account of the IFRIC's November 2019 agenda decision in reviewing the terms of its automatically renewable leases, considering the importance of the underlying assets to its operations.

The discount rate used to calculate the lease liability is the incremental borrowing rate. This rate is applied at the commencement of the lease or at the date of the decision to renew the lease. The Group calculated the rate applicable to each lease contract on the basis of its duration, which reflects the payment profile of the lease liability.

The useful life of non-movable leasehold improvements cannot exceed the useful life of the right-of-use assets to which they relate.

- Leases other than property leases

The main leases identified correspond to leases of vehicles, machinery and production equipment.

The lease capitalization period (lease term) represents the non-cancelable period of the lease. Where leases provide for a renewal (or termination) option, the Group determined whether or not that option was reasonably certain to be exercised based on the ease with which the leased asset could be replaced and its criticality.

The discount rate used to determine the lease liability is calculated using the same approach as for property leases.

The interest rate implicit in the lease is used as the discount rate only in the case of non-property leases and only if this is expressly stipulated in the lease contract.

Although leases can generally incorporate indexation clauses, lease liabilities are measured based solely on indexes known at the end of the reporting period.

At December 31, 2021, right-of-use assets under leases relate mainly to land and buildings for €2,419 million (€2,367 million at December 31, 2020) and to machinery and equipment for €540 million (€535 million at December 31, 2020).

Lease payments made under low-value and/or short-term leases, along with variable lease payments or lease payments falling outside the scope of IFRS 16, totaled €169 million in 2021 (€158 million in 2020).

The table below presents right-of-use assets for lease contracts by category:

(in € millions)	Land and buildings	Machinery and equipment	Total
At January 1, 2020			
Gross value	5,786	1,118	6,904
Accumulated depreciation and impairment	(3,389)	(561)	(3,950)
NET VALUE	**2,397**	**557**	**2,954**
Changes during the year			
New leases	589	244	833
Lease modifications	49	0	49
Disposals	(63)	(14)	(77)
Translation adjustments	(67)	(19)	(86)
Depreciation	(462)	(213)	(675)
Impairment	(23)	(7)	(30)
Assets held for sale	0	0	0
Changes in Group structure and other	(53)	(13)	(66)
TOTAL CHANGES	**(30)**	**(22)**	**(52)**
At December 31, 2020			
Gross value	5,549	1,070	6,619
Accumulated depreciation and impairment	(3,182)	(535)	(3,717)
NET VALUE	**2,367**	**535**	**2,902**
Changes during the year			
New leases	538	231	769
Lease modifications	10		10
Disposals	(46)	(18)	(64)
Translation adjustments	47	13	60
Depreciation	(463)	(216)	(679)
Impairment	(11)	(3)	(14)
Changes in Group structure and other	17	8	25
Assets held for sale	(40)	(10)	(50)
TOTAL CHANGES	**52**	**5**	**57**
At December 31, 2021			
Gross value	5,761	1,133	6,894
Accumulated depreciation and impairment	(3,342)	(593)	(3,935)
NET VALUE	**2,419**	**540**	**2,959**

7.5. Impairment review

7.5.1. Impairment of property, plant and equipment, intangible assets, goodwill and right-of-use assets

Property, plant and equipment, right-of-use assets, goodwill and other intangible assets are tested for impairment on a regular basis and at least annually for the December 31 closing. These tests consist of comparing the asset's carrying amount to its recoverable amount. The recoverable amount is the higher of the asset's fair value less costs to sell and its value in use, calculated by reference to the net present value of the future cash flows expected to be derived from the asset.

For property, plant and equipment, amortizable intangible assets and right-of-use assets, an impairment test is performed whenever revenues from the asset decline or the asset generates operating losses due to either internal or external factors, and no material improvement is forecast in the relevant business plan.

For goodwill and other unamortized intangible assets (including brands with indefinite useful lives), an impairment test is performed at least annually based on financial forecasts. Goodwill is reviewed systematically and exhaustively at the level of each cash-generating unit (CGU).

In 2021, the number of CGUs was reduced from 27 to 23, following various disposals and reorganizations within the Group.

Assets and liabilities held for sale are carried at the lower of their fair value less costs to sell and their net carrying amount.

The method used for these impairment tests is consistent with that used by the Group to value companies acquired in business combinations or acquisitions of equity interests. The carrying amount of the CGUs is compared to their value in use, corresponding to the net present value of future cash flows excluding interest but including tax. It is determined using assumptions made by management based on estimates and judgments including future changes in sales, profitability, investments and other cash flows arising from the use of the corresponding assets, as well as the discount rate applied to future cash flows. Cash flows for the last year of the business plan beyond the three-year forecast period are rolled forward over the following two years. For impairment tests of goodwill, normative cash flows (corresponding to cash flows at the mid-point in the business cycle) are then projected to perpetuity using an annual growth rate (between 1.5% and 2% barring exceptional cases). The average cost of capital remained unchanged in 2021, at 6.85%. This rate corresponds to the Group's average cost of capital, plus a country risk premium where applicable, depending on the geographic area concerned.
The rates applied in 2021 were 6.85% for Western Europe and North America, 7.85% for Eastern Europe and emerging Asia-Pacific, 8.35% for Latin America, and 9.35% for Russia and Turkey.

7.5.2. CGU impairment tests

When the annual impairment test reveals that the recoverable amount of an asset is less than its carrying amount, an impairment loss is recorded.

Impairment losses on goodwill can never be reversed through income. For property, plant and equipment and other intangible assets, an impairment loss recognized in prior periods may be reversed, taking into account depreciation/amortization adjustments, if there is an indication that the impairment no longer exists and that the recoverable amount of the asset concerned exceeds its carrying amount.

During the impairment tests, different assumptions measuring the method's sensitivity are systematically tested using the following inputs:

- 0.5-point increase in the discount rate applied to cash flows;
- 0.5-point decrease in the annual average rate of growth in cash flows projected to perpetuity;
- 1-point decrease in the operating income rate for Industry activities and 0.5-point decrease for Distribution activities.

On the basis of the sensitivity tests carried out at December 31, 2021 (i.e., sensitivity to changes in the discount rate, perpetuity growth rate and profitability rate), three CGUs were identified as sensitive: the United Kingdom Distribution CGU and the two Pipe CGUs.
As the outlook improved for the Southern Europe - Flat Glass and Brazil Distribution businesses, these CGUs are no longer considered sensitive.

At December 31, 2021, a 0.5-point increase in the discount rate for all CGUs would have led to approximately €28 million in additional impairment of non-current assets, concerning mainly the Pipe Europe CGU.
A 0.5-point decrease in the average annual cash flow growth rate projected to perpetuity for all CGUs would have resulted in additional non-current asset impairment of around €22 million, also mainly affecting the Pipe Europe CGU.
The impact of a 1-point decrease in the operating income rate for all Industry CGUs would have generated additional non-current asset impairment of approximately €154 million, primarily affecting the two Pipe CGUs.
A 0.5-point decrease in the rate for Distribution activities would have generated additional impairment of around €132 million for the United Kingdom Distribution CGU.

Owing to the Covid-19 pandemic, the Group decided to perform an additional one-off sensitivity analysis, incorporating broader criteria, i.e.:

- 0.75-point increase in the discount rate applied to cash flows;
- 1.5-point decrease in the operating income rate for Industry activities and a 1-point decrease for Distribution activities.

The following table presents the results of the sensitivity analysis for the various CGUs at December 31, 2021:

	Impact of changes in the						
	discount rate		growth rate	operating income rate			
(in € millions)	0.5-point increase	0.75-point increase	0.5-point decrease	1-point decrease Industry CGUs	0.5-point decrease Distribution CGUs	1.5-point decrease Industry CGUs	1.0-point decrease Distribution CGUs
High Performance Solutions							
Northern Europe		(16)			(132)		(315)
Southern Europe - ME & Africa	(27)	(40)	(22)	(143)		(217)	
Americas	(1)	(3)		(11)		(18)	
Asia-Pacific							
TOTAL	(28)	(59)	(22)	(154)	(132)	(235)	(315)

The breakdown of asset impairment by region for 2021 and 2020 is provided in the segment information tables in note 5 “Information concerning the Group’s operating activities”.

In 2021 the Group reviewed its impairment tests in light of the current situation and the outlook for certain businesses and countries.

The sale of the plumbing, heating and sanitaryware operations of the United Kingdom Distribution CGU was part of Saint-Gobain's continuing portfolio optimization strategy to improve its growth and profitability profile in line with the objectives of the "Grow & Impact" plan. Although turnaround plans have been put in place and are ongoing, we continue to adopt a cautious outlook for this CGU, which is sensitive to a change in the profitability rate.

In 2021 the Pipe Europe CGU saw strong inflation in raw materials needed to manufacture cast iron (iron ore, scrap metal, coke). The outlook for 2022 is better, thanks in particular to the favorable impact of sales price increases generated in the last four months of 2021. The CGU remains sensitive to a change in the discount rate, perpetuity growth rate and profitability rate.

The planned privatization of water distribution companies in Brazil has confirmed the prospects of recovery and medium-term profitability for the Latin America Pipe CGU. The CGU remains sensitive to a change in the discount or profitability rate.

2021 confirmed the prospects of recovery and profitability for the Brazil Distribution CGU. At the end of 2021, the CGU is no longer sensitive to any of the changes in the discount rate, perpetuity growth rate or profitability rate tested.

The assumptions used in the asset impairment tests take into account the actions envisaged in connection with the Group's commitment to reduce by 2030 its scope 1 and 2 net carbon emissions by 33% compared to 2017 in order to limit its impact on the environment and contribute to the decarbonization of its markets, in particular an annual amount of €100 million in capital expenditure and research and development expenditure set aside to further its environmental strategy to reduce CO_2 emissions.

In addition, although the current legal environment in the various countries in which the Group operates does not tax, outside the European Union, tonnes of CO_2 emitted in excess of any allowances allocated, and in line with its emissions reduction strategy, the Group has carried out sensitivity tests on the value of its CGUs, assuming a carbon price of €75 and €95 per tonne as of 2022, as well as the maintenance or development of government support mechanisms such as the allocation of CO_2 emissions allowances. If these assumptions were to prove accurate, no significant additional impairment would need to be recognized against fixed assets.

NOTE 8 INVESTMENTS IN EQUITY-ACCOUNTED COMPANIES AND OTHER NON-CURRENT ASSETS

A joint venture is a joint arrangement whereby the parties have joint control of the arrangement, and decisions about the relevant activities require the unanimous consent of the parties sharing control. The parties that have joint control of the arrangement have rights to the net assets of the arrangement. By contrast, an associate is an entity over which a partner has significant influence over the power to participate in decisions, but not control.

Under IAS 28, investments in both associates and joint ventures must be recognized using the same equity-accounting consolidation method.

8.1. Changes in investments in equity-accounted companies

Changes in investments in equity-accounted companies in 2021 and 2020 can be analyzed as follows:

(in € millions)	**2021**	**2020**
At January 1		
Group share in:		
Associates	185	182
Joint ventures	246	236
TOTAL	**431**	**418**
Goodwill	31	19
INVESTMENTS IN EQUITY-ACCOUNTED COMPANIES	**462**	**437**
Changes during the year		
Group share in net income of associates	31	11
Group share in net income of joint ventures	25	4
Dividends paid	(33)	(14)
Translation adjustments and restatement for hyperinflation	27	(33)
Acquisitions and capital increases	4	55
Changes in Group structure, transfers and other variations	20	2
TOTAL CHANGES	**74**	**25**
At December 31		
Group share in:		
Associates	221	185
Joint ventures	283	246
TOTAL	**504**	**431**
Goodwill	32	31
INVESTMENTS IN EQUITY-ACCOUNTED COMPANIES	**536**	**462**

Investments in non-core business equity-accounted companies represented €62 million at December 31, 2021 (€57 million at end-2020).

The principal financial aggregates of equity-accounted companies are as follows:

	2021			2020		
(in € millions)	**Associates**	**Joint ventures**	**Total**	**Associates**	**Joint ventures**	**Total**
Sales	1,182	781	1,963	813	633	1,446
Net income	107	50	157	52	8	60
Non-current assets	536	514	1,050	469	430	899
Current assets	785	285	1,070	526	262	788
Non-current liabilities	959	673	1,632	811	596	1,407
Current liabilities	362	126	488	184	96	280
Shareholders' equity	754	597	1,351	607	520	1,127

8.2. Transactions with equity-accounted companies – related parties

The consolidated financial statements include transactions conducted by the Group in the normal course of its businesses with associates and joint ventures. These transactions are carried out on an arm's length basis.

The assets and liabilities of equity-accounted companies at December 31 are as follows:

(in € millions)	**Dec. 31, 2021**	**Dec. 31, 2020**
Financial receivables	33	5
Inventories	2	2
Short-term receivables	15	11
Cash and cash equivalents	0	0
Provisions for asset impairment	0	0
Short-term debt	8	6
Cash advances	0	0

Purchases and sales transactions with equity-accounted companies are as follows:

(in € millions)	**2021**	**2020**
Purchases	63	54
Sales	38	36

8.3. Other non-current assets

Changes in other non-current assets in 2021 and 2020 are analyzed below:

(in € millions)	Equity investments and other	Loans, deposits and surety	Pension plan surpluses	Total
At January 1, 2020				
Gross value	2,685	574	288	3,547
Provisions for impairment	(27)	(9)		(36)
NET VALUE	**2,658**	**565**	**288**	**3,511**
Changes during the year				
Increases (decreases)	(2,376)	(97)	61	(2,412)
Provisions for impairment		(1)		(1)
Translation adjustments and restatement for hyperinflation	(6)	(22)	(15)	(43)
Transfers and other movements		2		2
Changes in Group structure	(49)			(49)
Changes in fair value	(157)			(157)
Assets held for sale		(6)		(6)
TOTAL CHANGES	**(2,588)**	**(124)**	**46**	**(2,666)**
At December 31, 2020				
Gross value	92	446	334	872
Provisions for impairment	(22)	(5)		(27)
NET VALUE	**70**	**441**	**334**	**845**
Changes during the year				
Increases (decreases)	30	(77)	524	477
Provisions for impairment	(1)			(1)
Translation adjustments and restatement for hyperinflation	3	10	36	49
Transfers and other movements	17	2		19
Changes in Group structure	(1)	22		21
Changes in fair value	12			12
TOTAL CHANGES	**60**	**(43)**	**560**	**577**
At December 31, 2021				
Gross value	152	403	894	1,449
Provisions for impairment	(22)	(5)		(27)
NET VALUE	**130**	**398**	**894**	**1,422**

In 2020, changes in the fair value of equity investments related mainly to Sika shares. The decrease in other non-current assets at December 31, 2020 chiefly resulted from the sale of Sika shares (see note 4.2, "Changes in Group structure").

NOTE 9 OTHER CURRENT AND NON-CURRENT LIABILITIES AND PROVISIONS, CONTINGENT LIABILITIES AND LITIGATION

A provision is booked when (i) the Group has a present legal or constructive obligation towards a third party as a result of a past event, (ii) it is probable that an outflow of resources will be required to settle the obligation, and (iii) the amount of the obligation can be estimated reliably.

If the amount or due date of the obligation cannot be estimated reliably, it is classified as a contingent liability and reported as an off-balance sheet commitment.

Provisions for other material liabilities and charges whose timing can be estimated reliably are discounted to present value.

9.1. Provisions for other liabilities and charges

The table below provides a breakdown by type along with details of changes in other provisions and current and non-current liabilities:

(in € millions)	Provisions for claims, litigation and environmental risks	Provisions for restructuring costs and personnel expenses	Provisions for customer warranties	Provisions for other contingencies	Total provisions for other liabilities	Investment-related liabilities	Total provisions for other liabilities and investment-related liabilities
At January 1, 2020							
Current portion	88	72	106	65	331	12	343
Non-current portion	643	127	95	97	962	164	1,126
TOTAL PROVISIONS FOR OTHER LIABILITIES AND INVESTMENT-RELATED LIABILITIES	**731**	**199**	**201**	**162**	**1,293**	**176**	**1,469**
Changes during the year							
Additions	65	142	84	61	352		352
Reversals	(7)	(19)	(13)	(22)	(61)		(61)
Utilizations	(58)	(91)	(45)	(44)	(238)		(238)
Changes in Group structure	(500)	(1)		419	(82)		(82)
Translation adjustments and reclassifications	(5)	(5)	(4)	(52)	(66)	(37)	(103)
Liabilities held for sale	0	(3)	(8)		(11)		(11)
TOTAL CHANGES	**(505)**	**23**	**14**	**362**	**(106)**	**(37)**	**(143)**
At December 31, 2020							
Current portion	64	96	108	82	350	11	361
Non-current portion	162	126	107	442	837	128	965
TOTAL PROVISIONS FOR OTHER LIABILITIES AND INVESTMENT-RELATED LIABILITIES	**226**	**222**	**215**	**524**	**1,187**	**139**	**1,326**
Changes during the year							
Additions	193	73	94	83	443		443
Reversals	(8)	(27)	(16)	(22)	(73)		(73)
Utilizations	(72)	(121)	(44)	(41)	(278)		(278)
Changes in Group structure	4	(2)	(5)	8	5		5
Translation adjustments and reclassifications	11	3	13	35	62	57	119
Liabilities held for sale	(5)	15		(7)	3		3
TOTAL CHANGES	**123**	**(59)**	**42**	**56**	**162**	**57**	**219**
At December 31, 2021							
Current portion	165	61	135	92	453	26	479
Non-current portion	184	102	122	488	896	170	1,066
TOTAL PROVISIONS FOR OTHER LIABILITIES AND INVESTMENT-RELATED LIABILITIES	**349**	**163**	**257**	**580**	**1,349**	**196**	**1,545**

9.1.1. Provisions for claims, litigation and environmental risks

These provisions cover costs relating to litigation, environmental protection measures, as well as site rehabilitation and clean-up costs.

They cover in particular PFOA-related proceedings and the antitrust lawsuit in the Distribution sector in Switzerland.

Litigation provisions amounted to €155 million at December 31, 2021. These provisions are described in further detail in note 9.2 “Contingent liabilities and litigation”.

The decrease in provisions for claims and litigation at December 31, 2020 primarily reflected the deconsolidation of DBMP LLC, which carried on its books the legacy asbestos-related claims against the former CertainTeed Corporation. The offsetting entry for this decrease was a rise in provisions for other risks, which mainly results from the financing commitments undertaken by CertainTeed LLC in favor of DBMP LLC (see note 9.2.2.2 discussing asbestos-related liabilities in the United States).

9.1.2. Provisions for restructuring costs and personnel expenses

Provisions for restructuring costs and personnel expenses amounted to €163 million at December 31, 2021 (December 31, 2020: €222 million).
These provisions cover restructuring transactions (personnel costs and other charges linked to reorganization plans), as well as provisions for personnel expenses unrelated to restructuring plans, in particular provisions for severance payments.

9.1.3. Provisions for customer warranties

These provisions cover the Group’s commitments under warranties granted to customers mainly in the United States. They are determined on a statistical basis using a range of criteria and take into account contractual warranty payments made in prior years in the business and region concerned. In addition, specific provisions may be set aside for identified contingencies in the context of a specific claim.

9.1.4. Provisions for other contingencies

At December 31, 2021, provisions for other contingencies amount to €580 million (December 31, 2020: €524 million) and mainly concern the United States (€427 million), France (€52 million) and Brazil (€68 million).

9.1.5. Investment-related liabilities

Investment-related liabilities correspond to commitments to purchase minority interests, liabilities relating to the acquisition of shares in Group companies, and minority shareholder puts.

In 2021, changes in investment-related liabilities primarily concerned liabilities relating to the acquisition of equity interests.

9.2. Contingent liabilities and litigation

9.2.1. Antitrust law and related proceedings

9.2.1.1. Investigation by the Swiss Competition Commission in the sanitary products wholesale industry

In November 2011, the Swiss Competition Commission (*Commission suisse de la concurrence*) opened an investigation into anti-competitive practices in the sanitary products wholesale industry. In May 2014, the Commission Secretariat issued a notice of complaints against Sanitas Troesch and other wholesalers in the industry alleging that Sanitas Troesch and some of its competitors had, among other things, agreed in 2005 and 2012 to lower gross prices.

The total fine imposed on all companies involved is CHF 80 million. For Sanitas Troesch, the fine is CHF 28.8 million. Sanitas Troesch appealed this decision on May 2, 2016 and continues to firmly refute the claims made. The hearing took place before the Federal Administrative Court on January 21, 2020 and the date on which the Federal Administrative Court will issue its decision is not yet known. However, a provision for claims and litigation was recognized at December 31, 2015 in an amount equivalent to the fine (unchanged as at December 31, 2021).

9.2.1.2. Investigation by the French Competition Authority in the building insulation products industry

On July 28, 2014, the French Competition Authority sent a statement of objections to Saint-Gobain Isover and Compagnie de Saint-Gobain (as parent company of the Saint-Gobain Group). A hearing took place on May 11, 2016, whereupon the Competition Authority sent the case back for further investigation in light of the arguments put forward by Saint-Gobain Isover and Compagnie de Saint-Gobain. In October 2018, Saint-Gobain Isover and Compagnie de Saint-Gobain received a second statement of objections, in which the Competition Authority alleges anti-competitive practices in the building insulation products market, between 2001 and 2013.

Saint-Gobain Isover and Compagnie de Saint-Gobain rejected the allegations in their response to the second statement of objections filed in January 2019.

A new report was sent by the Authority at the end of 2019, which gave rise to comments in response from Saint-Gobain Isover and Compagnie de Saint-Gobain on February 11, 2020.

The hearing before the Competition Authority was held on October 6, 2020. By decision dated January 14, 2021, the French Competition Authority considered that the alleged anti-competitive practices were not established and dismissed all the objections notified.

Actis appealed this decision to the Paris Court of Appeal on February 26, 2021, following which the other parties, including Saint-Gobain Isover and Compagnie de Saint-Gobain filed incidental appeals. Hearing is expected to occur end of 2022.

On the civil law front, Actis served in March 2013 a damages claim on Saint-Gobain Isover, the Centre scientifique et technique du bâtiment, and the FILMM before the Paris Civil Court (*Tribunal judiciaire de Paris*) based on the facts being investigated by the Competition Authority. A stay of proceedings has been declared and following the dismissal decided by the Competition Authority and the appeal filed by Actis against such dismissal, Actis requested that the proceeding remain stayed until the Paris Court of Appeal's decision to be made in relation to the appeal filed by Actis against the dismissal decision of the Competition Authority.

9.2.2.Asbestos-related litigation

Current legal actions related to asbestos are described below.

9.2.2.1. Asbestos-related litigation in France

- Inexcusable fault lawsuits

In France, where Everite and Saint-Gobain PAM had carried out fiber-cement operations in the past, seven additional lawsuits to those brought since 1996 were filed in 2021 by former employees (or persons claiming through them) for recognition of inexcusable fault resulting from exposure for asbestos-related occupational diseases.

As of December 31, 2021, a total of 844 lawsuits had been issued against the two companies since 1996 with the aim of obtaining supplementary compensation over and above the amounts paid by the French Social Security authorities in this respect.

As of the same date, 812 of these 844 lawsuits had been completed, the employer's inexcusable fault having been upheld in all of these cases. 32 actions are still pending against Everite and Saint-Gobain PAM.

Compensation paid by Everite and Saint-Gobain PAM since the outset of these litigations in settlement of these lawsuits totaled approximately €6.6 million as of December 31, 2021 (compared to €6.2 million as of December 31, 2020).

In addition, as of December 31, 2021, a total of 272 similar suits had been filed since the outset of the litigation by current or former employees, or persons claiming through them, of 13 French companies of the Group (excluding suits against companies that are no longer part of the Group), in particular by current or former employees who in the past used equipment containing asbestos to protect themselves against heat from furnaces.

As of December 31, 2021, 230 of this 272 lawsuits had been completed, with the employer's inexcusable fault having been upheld in 147 of them. 42 actions were still pending at the same date.

The total amount of compensation paid since the outset of the litigation by these companies was approximately €10.5 million as of December 31, 2021 (compared to approximately €8.7 million as of December 31, 2020).

- Anxiety claims

Eight of the Group's subsidiaries, including six that operate or have operated facilities in France classified as containing asbestos, were the subject of anxiety claims.

"Facilities classified as containing asbestos" are defined as industrial facilities, that have been closed or are still operating, which previously manufactured materials containing asbestos or used protection and insulation equipment containing asbestos and that are included by ministerial decree on the official list of facilities whose current or former employees are entitled to the early-retirement benefit paid to asbestos workers (ACAATA).

As of December 31, 2021, a total of 824 lawsuits had been brought by current or former employees – benefiting from ACAATA or not - claiming compensation for prejudice of anxiety suffered as a result of their alleged exposure to asbestos. These 824 suits have all been definitely completed, representing a total amount of compensation of €8.5 million as of December 31, 2021 (compared to €7.6 million euros as at December 31, 2020).

It should be clarified that the above figures do not take into account suits filed against companies that are no longer part of the Group.
The provision related to asbestos-related litigation in France amounted to around €6.9 million as of December 31, 2021 (compared to €5.5 million as of December 31, 2020).

9.2.2.2. Situation in the United States

- Action taken to achieve equitable and permanent Resolution of the former CertainTeed Corporation's legacy asbestos liabilities in the United States

DBMP LLC, an affiliate of CertainTeed LLC based in North Carolina, that holds the legacy asbestos liabilities of the former CertainTeed Corporation, filed, on January 23, 2020, a voluntary petition for relief under Chapter 11 of the US Bankruptcy Code in the US Bankruptcy Court for the Western District of North Carolina in Charlotte. The purpose of the filing is to achieve a certain, final and equitable Resolution of all current and future claims arising from asbestos-containing products manufactured and sold by the former CertainTeed Corporation.

DBMP LLC intends to seek court authority to establish a trust under Section 524(g) of the US Bankruptcy Code – a specific provision that is applicable to companies that face substantial numbers of asbestos-related claims – to achieve a fair and equitable resolution of its asbestos-related liabilities. Upon establishment of the trust, current and future plaintiffs with qualifying claims will be able to receive faster payment of their claims without the delay, stress and uncertainty of litigation in the tort system; at the same time, the creation and funding of such a trust will permanently and finally resolve DBMP LLC's asbestos liability.

During the course of this bankruptcy process, which is expected to take approximately three to eight years, all asbestos litigation will be stayed and all related costs suspended, providing DBMP LLC with the time and protection to negotiate an agreement to be approved on behalf of all claimants and by the court.

This action was taken as a result of the increasing risks presented in the US tort system. Despite the passage of time, the aging of the population and lessening opportunity for claimants to assert legitimate claims of exposure to the asbestos-containing products of the former CertainTeed Corporation, naming practices in the tort system continued to result in a steady volume of claims against DBMP LLC, with no foreseeable end in sight. In addition, there has been, in general, an escalation of settlement demands and verdicts in the tort system

- Impact on the Group's financial statements

Following the commencement of the proceeding under Chapter 11 of the US Bankruptcy Code on January 23, 2020, the assets and liabilities of DBMP LLC and its wholly-owned subsidiary Millwork & Panel LLC, and in particular the provision for asbestos-related litigation in the United States, are no longer consolidated in the Group's financial statements.

Nonetheless, because of a funding agreement between CertainTeed LLC and DBMP LLC by which CertainTeed LLC has agreed to fund the costs of the Chapter 11 case and, ultimately, the 524(g) trust, in both cases solely to the extent DBMP LLC is unable to do so in full, the Group recorded in its consolidated financial statements a debt against DBMP LLC amounting to $417 million as of December 31, 2021.

The Group's consolidated income for 2021 is not impacted by the ongoing Chapter 11 proceeding described above.

As a result of this bankruptcy proceeding, all legal costs and indemnity payments related to DBMP LLC's asbestos tort claims have been suspended, and no further charges in relation to such claims have been taken in 2021 (as in 2020).

9.2.2.3. Situation in Brazil

In Brazil, former employees of Brasilit, that once manufactured fiber cement containing asbestos, suffering from asbestos-related occupational illnesses are offered, depending on the case, either financial compensation alone or lifetime medical assistance combined with financial compensation. Around 1,200 contractual instruments have accordingly been signed to date.

Two class actions were initiated against Brasilit in 2017 by two associations defending former employees exposed to asbestos at the São Caetano (São Paulo state) and Recife (Pernambouc state) plants, asking for their medical assistance and compensation to be revised. First and second instance decisions were rendered in connection with the first suit respectively in July 2020 and July 2021, rejecting the claims of the plaintiffs. The latter have nevertheless appealed the second instance decision. The suit related to Recife is still at an early stage and there is no court decision issued so far.

A third class action was initiated against Brasilit in 2019 in Capivari (State of São Paulo) by the Labor prosecutor asking for health insurance, as well as collective moral damages, in favor of employees, former employees and their respective families, as well as subcontractors who were exposed to asbestos. A first instance decision was rendered in September 2020 partly in favor of the plaintiffs. In particular, collective moral damages were granted to the plaintiffs, for an amount reduced to BRL 5 million (€0.8 million). Brasilit has appealed the decision.

Brasilit is subject to controls by the Ministry of Labor and continues to comply with all of its legal obligations with regard to medical assistance for its current and former employees.

In November 2017, the Supreme Court of Brazil decided to ban asbestos definitively across the country. Brasilit stopped using asbestos voluntarily as early as 2002

9.2.3.Environmental disputes

- PFOA matters in the United States

Levels of PFOA (perfluorooctanoic acid) in excess of US Environmental Protection Agency (EPA) health advisories or state maximum contaminant levels for drinking water have been found in municipal water systems and private wells near current Saint-Gobain Performance Plastics (SG PPL) facilities in Hoosick Falls (New York) and Merrimack (New Hampshire), and two former facilities in North Bennington (Vermont) in the United States. PFOA and PTFE (polytetrafluorethylene) have never been manufactured by these plants. SG PPL is a processor of PTFE which it purchases from third party suppliers and which in the past contained some PFOA.

SG PPL has voluntarily provided bottled water in all three communities, installed point-of-entry treatment systems to residents and businesses in all three communities, installed carbon filtration systems on the municipal water supply in Hoosick Falls and funded the installation of a carbon filtration system on the Merrimack Valley District's municipal water supply. In addition, it has voluntarily funded construction of water line extensions in certain communities in the Merrimack and Bennington areas. The investigations are on-going and the scope of responsibility for SG PPL arising from environmental remediation in New Hampshire and New York and clean-up obligations at these sites has not yet been established. The scope of the remediation in Vermont is defined and largely completed; future operation and maintenance obligations remain. Without admitting liability, SG PPL has signed consent orders with the environmental regulators in New York in 2016, in Vermont in 2017 and 2019 with respect to two different areas, and in New Hampshire in 2018, pursuant to which SG PPL has agreed to complete investigations, implement interim or final remediation measures at its current and former facilities and in the case of Vermont and New Hampshire, fund construction of water lines. Responsibility, if any, is expected to be shared with other parties as regards in particular the Hoosick Falls site.

PFOA-related lawsuits alleging both health-related and economic damages claims have been filed in civil courts in New York, New Hampshire and Vermont, some of which are in the form of proposed or certified class actions. It is difficult to predict the timing or outcome of any such litigation, or whether any additional litigation will be brought against SG PPL, however, both the New York and Vermont class actions have signed settlements, the Vermont settlement remaining under final review by the courts.

On December 31, 2021, the provision recorded by the Company in respect of this matter amounts to €116 million (compared to €31 million as of December 31, 2020). This provision covers fully the amount of the New York and Vermont class action settlements, as well as various other costs related to PFOA matters including remediation works.

9.2.4.Other contingent liabilities

- Grenfell Tower fire in the United Kingdom

Celotex provides insulation materials for specific applications for the building and construction industry.

Insulation materials from two Celotex ranges were purchased via distributors and used in refurbishing Grenfell Tower, London in 2015/2016, including as one component of the rainscreen cladding system designed and installed (by third parties) on the tower's external facade.

Following the Grenfell Tower fire on June 14, 2017, a Public Inquiry is underway, which is considering, among other things, the modifications made to the building as part of the refurbishment, the role played by the various construction professionals, and the information provided by the manufacturers of the products used. The Inquiry is conducting its work in two phases: its phase 1 report was published on October 30, 2019, phase 2 commenced in January 2020 – public hearings are expected to continue until July 2022, with a final report to follow some time thereafter. A criminal investigation into the circumstances of the fire is also in progress.

There are a large number of issues and circumstances that need to be explored and the implications for Celotex are unlikely to be known for some time. Civil proceedings in connection with Grenfell Tower brought against Celotex Limited and/or Saint-Gobain Construction Products UK Limited (which respectively held the Celotex business until or after December 31, 2015) and a number of other defendants – who are also core participants in the Public Inquiry – have been issued and are stayed prior to the service of full pleadings. No figure has yet been put on the quantum claimed.

The extent to which Celotex may incur civil or criminal liability in connection with the production, marketing, supply or use of its products is currently unclear and Celotex Limited and Saint-Gobain Construction Products UK are currently unable to make a reliable estimate of their potential liability in this respect.

9.2.5. Other proceedings and disputes

Some of the Group's companies may also be the subject of other claims made by their employees or by the tax authorities, or in the context of the enforcement of seller's warranties granted by the Group to the buyers of divested businesses (see note 5.5.2). Apart from the proceedings and litigation described above, to the best of the Company's knowledge, no other government, court or arbitration proceedings exist (including pending proceedings or proceedings where the Company and/or the Group might be threatened) which could have or have had, in the last 12 months, a significant impact on the financial position or profitability of the Company and/or Group.

NOTE 10 FINANCING AND FINANCIAL INSTRUMENTS

10.1. Financial risks

10.1.1. Liquidity risk

10.1.1.1. Liquidity risk on financing

In a crisis environment, the Group might be unable to raise the financing or refinancing needed to cover its investment plans on the credit or capital markets, or to obtain such financing or refinancing on acceptable terms.

The Group's overall exposure to liquidity risk on its net debt is managed by the Treasury and Financing Department of Compagnie de Saint-Gobain, the Group's parent company. The subsidiaries generally enter into short- or long-term financing arrangements with Compagnie de Saint-Gobain or with the regional cash pools.

The Group's policy is to ensure that the Group's financing will be rolled over at maturity and to optimize borrowing costs. Long-term debt therefore systematically represents a high percentage of overall debt. At the same time, the maturity schedules of long-term debt are set in such a way that replacement capital market issues are spread over time.

The Group's main source of long-term financing is constituted by bonds, which are generally issued under the Medium Term Notes program. The Group also uses lease financing, perpetual bonds, participating securities, a long-term securitization program and bank borrowings.

Short-term debt is composed of borrowings under Negotiable European Commercial Paper (NEU CP), and occasionally Euro Commercial Paper and US Commercial Paper, but also includes receivables securitization programs and bank financing. The Group also has factoring programs. Financial assets comprise marketable securities and cash and cash equivalents.

Compagnie de Saint-Gobain's liquidity position is secured by confirmed syndicated lines of credit.

A breakdown of long- and short-term debt by type and maturity is provided in note 10.3, which also details the main characteristics of the Group's financing programs and confirmed credit lines.

Saint-Gobain's long-term debt issues have been rated BBB with a stable outlook by Standard & Poor's since April 30, 2014 and Baa2 with a stable outlook by Moody's since June 2, 2014.

There is no guarantee that the Company will be in a position to maintain its credit risk ratings at current levels. Any deterioration in the Group's credit risk rating could limit its capacity to raise funds and could lead to higher rates of interest on future borrowings.

10.1.1.2. Liquidity risk on investments

Short-term investments consist of bank deposits and mutual fund units. To reduce liquidity and high volatility risks, the Group invests in money market funds and/or bonds whenever possible.

10.1.2. Financial counterparty credit risk

The Group is exposed to the risk of default by the financial institutions that manage its cash or other financial instruments, since such default could lead to losses for the Group.

The Group limits its exposure to risk of default by its counterparties by dealing solely with reputable financial institutions and regularly monitoring their credit ratings. However, the credit quality of a financial counterparty can change rapidly, and a high credit rating cannot eliminate the risk of a rapid deterioration of its financial position. As a result, the Group's policy in relation to the selection and monitoring of its counterparties is unable to entirely eliminate exposure to a risk of default.

To limit Compagnie de Saint-Gobain's exposure to counterparty credit risk, the Treasury and Financing Department deals primarily with counterparties with a long-term rating of A- or above from Standard & Poor's or A3 or above from Moody's. Concentrations of credit risk are also closely monitored to ensure that they remain at reasonable levels, taking into account the relative CDS ("Credit Default Swap") level of each counterparty.

10.1.3. Market risks

10.1.3.1. Energy and commodity risk

The Group is exposed to changes in the price of the energy it consumes and the raw materials used in its activities. Its energy and commodity hedging programs may be insufficient to protect the Group against significant or unforeseen price swings that could result from the prevailing financial and economic environment.

The Group may limit its exposure to energy price fluctuations by using swaps and options to hedge part of its fuel oil, natural gas and electricity purchases. The swaps and options are mainly contracted in the functional currency of the entities concerned. Hedges of fuel oil, gas and electricity purchases are contracted in accordance with the Group's purchasing policy.

These hedges (excluding fixed-price purchases negotiated directly with suppliers by the Purchasing Department) are generally arranged by the Group Treasury and Financing Department (or with regional treasury departments) in accordance with instructions received from the Purchasing Department.

From time to time, the Group may enter into contracts to hedge purchases of certain commodities or engage in the CO_2 emissions market, in accordance with the same principles as those outlined above for energy purchases.

Note 10.4 provides a breakdown of instruments used to hedge energy and commodity risks.

10.1.3.2. Interest rate risk

The Group's overall exposure to interest rate risk on consolidated debt is managed by the Treasury and Financing Department of Compagnie de Saint-Gobain.

The Group's policy is aimed at fixing and optimizing its medium-term borrowing costs by hedging interest rate risk. According to Group policy, the derivative financial instruments used to hedge interest rate risk can include interest rate swaps, cross-currency swaps, options – including caps, floors and swaptions – and forward rate agreements.

The table below shows the sensitivity at December 31, 2021 of pre-tax income and pre-tax equity to fluctuations in the interest rate on the Group's net debt after hedging:

(in € millions)	**Impact on pre-tax income**	**Impact on pre-tax equity**
Interest rate increase of 50 basis points	23	7
Interest rate decrease of 50 basis points	(23)	(7)

Note 10.4 provides a breakdown of instruments used to hedge interest rate risk and of gross debt by type of interest (fixed or variable) after hedging.

10.1.3.3. Foreign exchange risk

The currency hedging policies described below could be insufficient to protect the Group against unexpected or sharper than expected fluctuations in exchange rates resulting from economic and financial market conditions.

Foreign exchange risks are managed by hedging virtually all transactions entered into by Group entities in currencies other than the functional currency of the particular entity. Compagnie de Saint-Gobain and its subsidiaries may use forward contracts and options to hedge exposures arising from current and forecast transactions.

The subsidiaries generally set up contracts through the Group's parent company, Compagnie de Saint-Gobain, which then carries out the corresponding forex hedging transactions on their behalf, or through the regional cash pools. Failing this, contracts are taken out with one of the subsidiary's banks.

Most forward contracts have short maturities of around three months. However, forward contracts taken out to hedge firm orders may have longer terms.

The Group monitors its exposure to foreign exchange risk using a monthly reporting system that captures the foreign exchange positions taken by its subsidiaries. At December 31, 2021, 98% of the Group's foreign exchange exposure was hedged.

The residual net foreign exchange exposure of subsidiaries for the currencies presented below was as follows at December 31, 2021:

(in millions of euro equivalent)	**Long**	**Short**
EUR	3	4
USD	18	4
Other currencies	0	2
TOTAL	**21**	**10**

The table below gives an analysis, as of December 31, 2021, of the sensitivity of the Group's pre-tax income to a 10% increase in the exchange rates of the following currencies given the subsidiaries' residual net foreign exchange exposure:

Currency of exposure *(in millions of euro equivalent)*	**Impact on pre-tax income**
EUR	(0.1)
USD	1.4
Other currencies	(0.2)
TOTAL	**1.1**

Assuming that all other variables remained unchanged, a 10% fall in the exchange rates for these currencies at December 31, 2021 would have the opposite impact.

Note 10.4 provides a breakdown of instruments used to hedge foreign exchange risk.

10.1.3.4. Saint-Gobain share price risk

The Group is exposed to changes in the Saint-Gobain share price as a result of its performance unit incentive plans. To reduce its exposure to fluctuations in the share price, the Group uses hedging instruments such as equity swaps.

As a result, if the price of the Saint-Gobain share changes, any changes in the expense recorded in the income statement will be fully offset by the hedges in place.

Note 10.4 provides a breakdown of instruments used to hedge share price risk.

10.2. Net financial income (expense)

Net financial income (expense) includes borrowing and other financing costs, income from cash and cash equivalents, interest on lease liabilities, interest cost for pension and other post-employment benefit plans net of the return on plan assets, and other financial income and expense.

Net financial income (expense) in 2021 and 2020 includes:

(in € millions)	**2021**	**2020**
Borrowing costs, gross	(240)	(274)
Income from cash and cash equivalents	7	6
BORROWING COSTS, NET, EXCLUDING LEASE LIABILITIES	**(233)**	**(268)**
Interest on lease liabilities	(54)	(58)
TOTAL BORROWING COSTS, NET	**(287)**	**(326)**
Interest cost – pension and other post-employment benefit obligations	(190)	(234)
Return on plan assets	160	204
INTEREST COST – PENSION AND OTHER POST-EMPLOYMENT BENEFIT OBLIGATIONS, NET	**(30)**	**(30)**
Other financial expense	(106)	(105)
Other financial income *	16	42
OTHER FINANCIAL INCOME AND EXPENSE	**(90)**	**(63)**
NET FINANCIAL INCOME (EXPENSE)	**(407)**	**(419)**

* Including €33 million of dividends received from Sika in 2020.

10.3. Net debt

10.3.1. Long- and short-term debt

10.3.1.1. Long-term debt

Long-term debt includes bonds, perpetual bonds, participating securities, long-term securitization and all other types of long-term financial liabilities, including the fair value of interest rate hedging derivatives.

Under IAS 32, the distinction between financial liabilities and equity is based on the substance of the contracts concerned rather than their legal form. As a result, participating securities are classified as debt.

At the end of the reporting period, long-term debt (excluding interest rate derivatives) is measured at amortized cost. Premiums and issuance costs are amortized using the effective interest method.

10.3.1.2. Short-term debt

Besides the current portion of long-term debt described above, short-term debt includes financing programs such as commercial paper, short-term securitization, bank overdrafts and other short-term financial liabilities including the fair value of derivatives related to debt and accrued interest on borrowings.

Short-term debt, excluding derivatives related to debt, is measured at amortized cost at the end of the reporting period. Premiums and issuance costs are amortized using the effective interest rate method.

10.3.1.3. Lease liabilities

Lease liabilities represent obligations to make lease payments in accordance with IFRS 16.

10.3.1.4. Cash and cash equivalents

Cash and cash equivalents mainly consist of bank accounts and marketable securities that are short-term (i.e., generally with maturities of less than three months), highly liquid investments readily convertible into known amounts of cash and subject to an insignificant risk of changes in value.

Marketable securities are measured at fair value through profit or loss.

Long- and short-term debt consists of the following:

(in € millions)	Dec. 31, 2021	Dec. 31, 2020
Bond issues	8,521	9,469
Perpetual bonds and participating securities	203	203
Long-term securitization	280	280
Other long-term financial liabilities	190	227
NON-CURRENT PORTION OF LONG-TERM DEBT	**9,194**	**10,179**
Bond issues	1,000	1,500
Long-term securitization	220	220
Other long-term financial liabilities	116	126
CURRENT PORTION OF LONG-TERM DEBT	**1,336**	**1,846**
Short-term financing programs (NEU CP, US CP, Euro CP)	0	0
Short-term securitization	263	144
Bank overdrafts and other short-term financial liabilities	282	357
SHORT-TERM DEBT	**545**	**501**
TOTAL GROSS DEBT EXCLUDING LEASE LIABILITIES	**11,075**	**12,526**
Lease liabilities	3,155	3,098
TOTAL GROSS DEBT	**14,230**	**15,624**
Cash at banks	(1,725)	(1,559)
Mutual funds and other marketable securities	(5,218)	(6,884)
CASH AND CASH EQUIVALENTS	**(6,943)**	**(8,443)**
TOTAL NET DEBT	**7,287**	**7,181**

Changes in the Group's long-term debt (excluding lease liabilities) can be analyzed as follows:

(in € millions)	Dec. 31, 2020	Cash impact		No cash impact			Dec. 31, 2021
		Increases	Decreases	Changes in Group structure	Translation adjustments	Other	
Non-current portion of long-term debt	10,179	42	(77)	0	66	(1,016)	9,194
Current portion of long-term debt	1,846	10	(1,507)	1	1	985	1,336
TOTAL LONG-TERM DEBT	**12,025**	**52**	**(1,584)**	**1**	**67**	**(31)**	**10,530**

The main changes with an impact on cash are described in note 10.3.3. The main change with no cash impact in the "Other" column relates to the reclassification of debt maturing within 12 months in the current portion of long-term debt.

The fair value of gross long-term debt (including the current portion), excluding lease liabilities, managed by Compagnie de Saint-Gobain amounts to €10.4 billion at December 31, 2021 (carrying amount: €9.8 billion). The fair value of bonds corresponds to the market price at the last cotation of the year. For other borrowings, fair value is considered equal to the amount repayable.

10.3.2. Gross debt repayment schedule

The schedule of the Group's total gross debt as of December 31, 2021 is as follows:

(in € millions)	Currency	Within 1 year	1 to 5 years	Beyond 5 years	Total
Bond issues	EUR	1,000	3,943	3,925	8,868
	GBP		357	296	653
Perpetual bonds and participating securities	EUR			203	203
Long-term securitization	EUR	220	280		500
Other long-term financial liabilities	All currencies	13	58	132	203
Accrued interest on long-term debt	All currencies	103			103
TOTAL LONG-TERM DEBT		**1,336**	**4,638**	**4,556**	**10,530**
SHORT-TERM DEBT	All currencies	**545**	**0**	**0**	**545**
TOTAL GROSS DEBT EXCLUDING LEASE LIABILITIES		**1,881**	**4,638**	**4,556**	**11,075**
Lease liabilities	All currencies	681	1,630	844	3,155
TOTAL GROSS DEBT		**2,562**	**6,268**	**5,400**	**14,230**

At December 31, 2021, future interest payments on gross long-term debt (including the current portion), excluding lease liabilities, managed by Compagnie de Saint-Gobain can be broken down as follows:

(in € millions)	Within 1 year	1 to 5 years	Beyond 5 years	Total
Future interest payments on gross long-term debt	184	513	427	1,124

Interest on perpetual bonds and on participating securities is calculated up to 2049.

10.3.3. Bonds

Compagnie de Saint-Gobain also redeemed the following instruments at maturity:
- a €750 million private placement paying variable-rate interest at 3-month Euribor +0.35% on March 22, 2021;
- €750 million worth of 3.625% bonds on June 15, 2021.

10.3.4. Perpetual bonds

In 1985, Compagnie de Saint-Gobain issued 25,000 perpetual bonds with a face value of ECU 5,000 (€5,000 today).

A total of 18,496 perpetual bonds have since been bought back and canceled, and 6,504 perpetual bonds are outstanding at December 31, 2021, representing a total face value of €33 million.

The bonds bear interest at a variable rate (average of interbank rates offered by the five reference banks for six-month euro deposits). The amount paid out per bond in 2021 was €0.

The bonds are not redeemable and interest on the bonds is classified as a component of finance costs.

10.3.5. Participating securities

In June 1983, Compagnie de Saint-Gobain issued 1,288,299 non-voting participating securities with a face value of FRF 1,000. Their face value is now €152.45, following their translation into euros in 1999.

A certain number of these participating securities have been bought back over the years. At December 31, 2021, 606,883 securities are still outstanding with an aggregate face value of €92.5 million.

Interest on the securities ranges from 75% to 125% of the average corporate bond yield (TMO), based on the Group's consolidated income. The amount paid out per bond in 2021 was €0.18.

In April 1984, 194,633 non-voting participating securities were issued by Compagnie de Saint-Gobain with a face value of ECU 1,000 (€1,000 today).

A certain number of these participating securities has been bought back over the years. At December 31, 2021, 77,516 securities are still outstanding, with an aggregate face value of €77.5 million.

Interest comprises (i) a fixed portion of 7.5% paid per year applicable to 60% of the nominal amount of the security, and (ii) a variable portion applicable to the remaining 40% of the nominal amount of the security, which is linked to consolidated net income of the previous year and to the reference six-month Euribor rate +7/8%. The amount paid per security in 2021 was €61.30, settled in two installments (€27.95 and €33.35).

These participating securities are not redeemable and the interest paid on them is classified as a component of finance costs.

10.3.6. Financing programs

The Group has a number of medium- and long-term financing programs (Medium-Term Notes) and short-term financing programs (Commercial Paper).

At December 31, 2021, the state of these programs is as follows:

(in € millions)	**Authorized drawings**	**Authorized limits at Dec. 31, 2021**	**Balance outstanding at Dec. 31, 2021**	**Balance outstanding at Dec. 31, 2020**
Medium-Term Notes	any duration	15,000	9,649	11,149
NEU CP	up to 12 months	4,000	0	0
US Commercial Paper	up to 12 months	883 *	0	0
Euro Commercial Paper	up to 12 months	883 *	0	0

* Equivalent of USD 1,000 million based on the exchange rate at December 31, 2021.

In accordance with market practices, Negotiable European Commercial Paper (NEU CP), US Commercial Paper and Euro Commercial Paper are generally issued with maturities of one to six months. They are treated as variable-rate debt since they are rolled over at frequent intervals.

10.3.7. Syndicated lines of credit

Compagnie de Saint-Gobain has two syndicated lines of credit that are intended to provide a secure source of financing for the Group (including as additional backing for its NEU CP, US Commercial Paper and Euro Commercial Paper programs):

- a €2.5 billion syndicated line of credit, maturing in December 2024 after the exercise of the two one-year rollover options;
- a second €1.5 billion syndicated line of credit, also maturing in December 2024 after the exercise of the two one-year rollover options.

Based on the Group's current credit rating for long-term debt, the two facilities are not subject to any covenants. Neither of these two lines of credit was drawn down at December 31, 2021.

10.3.8. Receivables securitization programs

The Group has set up two receivables securitization programs, one through its French subsidiary Point.P Finances GIE, and the other through its US subsidiary, Saint-Gobain Receivables Corporation.

The French program, covering an amount of up to €500 million, represented €500 million at both December 31, 2021 and December 31, 2020.
Based on observed seasonal fluctuations in receivables included in the program and on the contract's features, €280 million of this amount is classified as non-current and the remaining balance as current.

Under the US program, covering a maximum of up to USD 400 million, a total of USD 298 million had been drawn down at December 31, 2021. Its value amounts to an equivalent in euros of €263 million compared to €144 million at December 31, 2020.

10.3.9. Collateral

At December 31, 2021, €2 million of Group debt is secured by various non-current assets (real estate and securities).

10.3.10. Factoring

The Group has set up several trade receivables factoring programs. Based on an analysis of the risks and rewards as defined by IFRS 9, the Group has derecognized virtually all of the receivables sold under these programs. In all, €492 million in factored receivables were derecognized at December 31, 2021, compared to €368 million at December 31, 2020.

10.3.11. IBOR reform

The Group analyzed the impact of the reform of interbank offered rates (IBOR) on its financial instruments. No significant impact was identified for the instruments used. However, certain contracts were revised and information systems are being adapted accordingly.

10.4. Financial instruments

The Group uses interest rate, foreign exchange, energy, commodity and equity derivatives to hedge its exposure to changes in interest rates, exchange rates, and energy, commodity and equity prices that may arise in the normal course of business.

In accordance with IAS 32 and IFRS 9, all such instruments are recognized in the balance sheet and measured at fair value, irrespective of whether or not they are part of a hedging relationship that qualifies for hedge accounting under IFRS 9.

Changes in the fair value of both derivatives that are designated and qualified as fair value hedges and derivatives that do not qualify for hedge accounting during the period are taken to the income statement (in business income and expense for operational foreign exchange derivatives and commodity derivatives not qualifying for hedge accounting, and in financial income and expense for all other derivatives). However, in the case of derivatives that qualify as cash flow hedges, the effective portion of the gain or loss arising from changes in fair value is recognized directly in equity, and only the ineffective portion is recognized in the income statement.

- Fair value hedges

Fair value hedge accounting is applied by the Group mainly for derivative instruments which swap fixed rates against variable rates (fixed-for-floating interest rate swaps). These derivatives hedge fixed-rate debt exposed to a fair value risk. In accordance with hedge accounting principles, debt included in a designated fair value hedging relationship is remeasured at fair value to the extent of the risk hedged. As the loss or gain on the underlying hedged item offsets the effective portion of the gain or loss on the fair value hedge, the income statement is only impacted by the ineffective portion of the hedge.

- Cash flow hedges

Cash flow hedge accounting is applied by the Group mainly for derivative instruments which fix the cost of future investments (financial assets or property, plant and equipment) and the price of future purchases, mostly gas and fuel oil (commodity swaps) or foreign currencies (foreign exchange forwards). Transactions hedged by these instruments are qualified as highly probable. The application of cash flow hedge accounting allows the Group to defer the impact on the income statement of the effective portion of changes in the fair value of these derivatives by recording them in a hedging reserve in equity. This reserve is reclassified to the income statement when the hedged transaction occurs and the hedged item itself affects income. In the same way as for fair value hedges, cash flow hedging limits the Group's exposure to changes in the fair value of these derivatives to the ineffective portion of the hedge.

- Derivatives that do not qualify for hedge accounting

Changes in the fair value of derivatives that do not qualify for hedge accounting are recognized in the income statement. The instruments concerned are primarily foreign exchange swaps and foreign exchange forwards.

- Fair value of financial instruments

The fair value of financial assets and financial liabilities corresponds to their quoted price on an active market (if any): this represents level 1 in the fair value hierarchy defined in IFRS 7 and IFRS 13. The fair value of instruments not quoted in an active market, such as derivatives or financial assets and liabilities, is determined by reference to commonly used valuation techniques such as the fair value of another recent and similar transaction, or discounted cash flow analysis based on observable market inputs. This represents level 2 in the fair value hierarchy defined in IFRS 7 and IFRS 13.

The fair value of short-term financial assets and liabilities is considered as being the same as their carrying amount due to their short maturities.

The following table presents a breakdown of the main derivatives used by the Group:

(in € millions)	Fair value				Nominal amount by maturity			
	Derivatives recorded in assets	**Derivatives recorded in liabilities**	**Dec. 31, 2021**	**Dec. 31, 2020**	**Within 1 year**	**1 to 5 years**	**Beyond 5 years**	**Dec. 31, 2021**
FAIR VALUE HEDGES	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Cash flow hedges								
Currency	9	(3)	6	1	520	12	0	532
Interest rate	0	(60)	(60)	(92)	0	95	378	473
Energy and commodities	6	0	6	0	16	1	0	17
Other risks: equities	12	0	12	0	5	25	0	30
CASH FLOW HEDGES – TOTAL	**27**	**(63)**	**(36)**	**(91)**	**541**	**133**	**378**	**1,052**
Derivatives not qualifying for hedge accounting mainly contracted by Compagnie de Saint-Gobain								
Currency	18	(4)	14	(4)	3,021	0	0	3,021
Interest rate	0	0	0	0	0	0	0	0
Energy and commodities	0	0	0	0	0	0	0	0
DERIVATIVES NOT QUALIFYING FOR HEDGE ACCOUNTING – TOTAL	**18**	**(4)**	**14**	**(4)**	**3,021**	**0**	**0**	**3,021**
TOTAL	**45**	**(67)**	**(22)**	**(95)**	**3,562**	**133**	**378**	**4,073**

10.4.1. Currency instruments

- Currency swaps

The Group uses currency swaps mainly to convert euro-denominated funds into foreign currencies for cash management purposes.

- Forward foreign exchange contracts and currency options

Forward foreign exchange contracts and currency options are used to hedge foreign currency transactions, particularly commercial transactions (purchases and sales) and investments.

10.4.2. Interest rate instruments

- Interest rate swaps

The Group uses interest rate swaps to convert part of its fixed/variable-rate bank debt and bond debt to variable/fixed rates.

- Cross-currency swaps

The Group uses cross-currency swaps to convert foreign currency (euro) debt into euro (foreign currency) debt.

10.4.3. Energy and commodities

- Energy and commodity swaps

Energy and commodity swaps are used to hedge the risk of changes in the price of certain purchases used in Group subsidiaries' operating activities, particularly energy (fuel oil, natural gas and electricity) purchases.

10.4.4. Other risks

- Equity derivatives

Equity derivatives are used to hedge the risk of changes in the Saint-Gobain share price in connection with the performance units long-term incentive plan.

10.4.5. Credit value adjustments to derivative instruments

Credit value adjustments to derivative instruments are calculated in accordance with IFRS 13 based on historical probabilities of default derived from calculations performed by a leading rating agency and on the estimated loss given default. At December 31, 2021, credit value adjustments were not material.

10.4.6. Impact on equity of financial instruments qualifying for cash flow hedge accounting

At December 31, 2021, the IFRS cash flow hedge reserve carried in equity has a debit balance of €32 million, consisting mainly of:

- a debit balance of €27 million in relation to cross-currency swaps designated as cash flow hedges that are used to convert a GBP bond issue into euros;
- a debit balance of €17 million corresponding to changes in the fair value of interest rate hedges classified as cash flow hedges;
- a credit balance of €6 million corresponding to changes in fair value of energy hedges qualified as cash flow hedges;

- a credit balance of €6 million corresponding to changes in fair value of currency derivatives qualified as cash flow hedges.

The ineffective portion of cash flow hedge derivatives is not material.

10.4.7. Impact on income of financial instruments not qualifying for hedge accounting

The fair value of derivatives classified as "Financial assets and liabilities at fair value through profit or loss" represents a gain of €14 million in 2021 compared to a loss of €4 million in 2020.

10.4.8. Embedded derivatives

The Saint-Gobain Group regularly analyzes its contracts in order to separately identify financial instruments classified as embedded derivatives under IFRS.

At December 31, 2021, no embedded derivatives deemed to be material at Group level were identified.

10.4.9. Group debt structure (excluding lease liabilities)

The weighted average interest rate on total gross debt under IFRS and after hedging (interest rate swaps and cross-currency swaps) was 2.1% at December 31, 2021, compared with 2.0% at December 31, 2020.

The average internal rate of return for the main component of the Group's long-term debt before hedging (bonds) was 2.5% at December 31, 2021, compared with 2.4% at December 31, 2020.

The table below presents the breakdown by interest rate (fixed or variable) of the Group's gross debt at December 31, 2021, taking into account interest rate and cross-currency swaps.

(in € millions)	**Gross debt, excluding lease liabilities**		
	Variable rate	**Fixed rate**	**Total**
EUR	826	8,640	9,466
Other currencies	549	906	1,455
TOTAL	**1,375**	**9,546**	**10,921**
(in %)	13%	87%	100%
Accrued interest and other			154
TOTAL GROSS DEBT EXCLUDING LEASE LIABILITIES			**11,075**

10.5. Financial assets and liabilities

Financial assets and liabilities are classified as follows in accordance with IFRS 9:

At December 31, 2021

		Financial instruments				Financial instruments at fair value			
(in € millions)	Notes	Fair value through profit or loss	Fair value through the statement of recognized income and expense	Amortized cost	Total financial instruments	Level 1 inputs	Level 2 inputs	Level 3 inputs	Total financial instruments measured at fair value
Trade and other accounts receivable				6,573	**6,573**				**0**
Loans, deposits and surety	(8)			398	**398**				**0**
Equity investments and other	(8)		130		**130**			130	**130**
Derivatives recorded in assets		18	27		**45**		45		**45**
Cash and cash equivalents		5,218		1,727	**6,945**	5,218			**5,218**
TOTAL FINANCIAL ASSETS		**5,236**	**157**	**8,698**	**14,091**	**5,218**	**45**	**130**	**5,393**
Trade and other accounts payable				(11,708)	**(11,708)**				**0**
Long- and short-term debt				(11,022)	**(11,022)**				**0**
Long- and short-term lease liabilities				(3,155)	**(3,155)**				**0**
Derivatives recorded in liabilities		(4)	(63)		**(67)**		(67)		**(67)**
TOTAL FINANCIAL LIABILITIES		**(4)**	**(63)**	**(25,885)**	**(25,952)**	**0**	**(67)**	**0**	**(67)**
FINANCIAL ASSETS AND LIABILITIES - NET		**5,232**	**94**	**(17,187)**	**(11,861)**	**5,218**	**(22)**	**130**	**5,326**

At December 31, 2020

		Financial instruments				Financial instruments at fair value			
(in € millions)	Notes	Fair value through profit or loss	Fair value through the statement of recognized income and expense	Amortized cost	Total financial instruments	Level 1 inputs	Level 2 inputs	Level 3 inputs	Total financial instruments measured at fair value
Trade and other accounts receivable				5,768	**5,768**				**0**
Loans, deposits and surety	(8)			441	**441**				**0**
Equity investments and other	(8)		70		**70**			70	**70**
Derivatives recorded in assets		96	3		**99**		99		**99**
Cash and cash equivalents		6,884		1,559	**8,443**	6,884			**6,884**
TOTAL FINANCIAL ASSETS		**6,980**	**73**	**7,768**	**14,821**	**6,884**	**99**	**70**	**7,053**
Trade and other accounts payable				(9,723)	**(9,723)**				**0**
Long- and short-term debt				(12,418)	**(12,418)**				**0**
Long- and short-term lease liabilities				(3,098)	**(3,098)**				**0**
Derivatives recorded in liabilities		(100)	(94)		**(194)**		(194)		**(194)**
TOTAL FINANCIAL LIABILITIES		**(100)**	**(94)**	**(25,239)**	**(25,433)**	**0**	**(194)**	**0**	**(194)**
FINANCIAL ASSETS AND LIABILITIES - NET		**6,880**	**(21)**	**(17,471)**	**(10,612)**	**6,884**	**(95)**	**70**	**6,859**

IFRS 13 ranks the inputs used to determine fair value:

- Level 1: inputs resulting from quoted prices on an active market for identical instruments;
- Level 2: inputs other than level 1 inputs that can be observed directly or indirectly;
- Level 3: all other non-observable inputs.

NOTE 11 SHAREHOLDERS' EQUITY AND EARNINGS PER SHARE

11.1. Equity

11.1.1. Equity

At December 31, 2021, the capital stock of Compagnie de Saint-Gobain comprised a total of 524,017,595 shares, each with a par value of €4 (December 31, 2020: 532,683,713 shares).

11.1.2. Additional paid-in capital and legal reserve

This item includes capital contributions in excess of the par value of capital stock as well as the legal reserve, which corresponds to a cumulative portion of the yearly net income of Compagnie de Saint-Gobain.

11.1.3. Retained earnings and consolidated net income

Retained earnings and consolidated net income correspond to the Group's share in the undistributed earnings of all consolidated companies.

11.1.4. Treasury stock

Treasury stock is measured at cost and recorded as a deduction from equity. Gains and losses on disposals of treasury stock are recognized directly in equity and have no impact on net income for the period.

Forward purchases of treasury stock are treated in the same way. When a fixed number of shares is purchased forward at a fixed price, this amount is recorded in "Other liabilities" against a deduction from equity under "Retained earnings and net income for the year".

Saint-Gobain shares held or controlled by Compagnie de Saint-Gobain and Saint-Gobain Corporation are shown as a deduction from equity under "Treasury stock" at acquisition cost.

The liquidity agreement signed with Exane BNP Paribas on November 16, 2007 and implemented on December 3, 2007 for a period up to December 31, 2007 has been automatically renewed since that date.

At December 31, 2021, 2,746,687 shares were held in treasury (December 31, 2020: 2,650,208 shares). In 2021, the Group acquired 16,865,006 shares (2020: 20,733,422 shares) directly on the market, and sold 2,525,353 shares (2020: 2,578,937 shares). Lastly, 14,243,174 shares were canceled in 2021 and 18,100,000 shares in 2020.

For the purposes of a compensation plan set up in January 2008 for certain employees in the United States, Compagnie de Saint-Gobain shares are held by the trustee, Wachovia Bank, National Association. In the consolidated financial statements, these shares are treated as being controlled by Saint-Gobain Corporation.

11.1.5. Number of shares

	Number of shares	
	Issued	**Outstanding**
NUMBER OF SHARES AT DECEMBER 31, 2019	**544,683,451**	**542,087,728**
Group Savings Plan	6,099,996	6,099,996
Stock subscription option plans	266	266
Shares purchased		(20,733,422)
Shares sold		2,578,937
Shares canceled	(18,100,000)	
NUMBER OF SHARES AT DECEMBER 31, 2020	**532,683,713**	**530,033,505**
Group Savings Plan	5,562,855	5,562,855
Stock subscription option plans	14,201	14,201
Shares purchased		(16,865,006)
Shares sold		2,525,353
Shares canceled	(14,243,174)	
NUMBER OF SHARES AT DECEMBER 31, 2021	**524,017,595**	**521,270,908**

11.1.6. Dividends

The Annual Shareholders' Meeting of June 3, 2021 approved the recommended dividend payout for 2020 representing €1.33 per share. The ex-dividend date was June 7 and the dividend was paid on June 9, 2021.

11.2. Earnings per share

11.2.1. Basic earnings per share

Basic earnings per share are calculated by dividing net income by the weighted average number of shares of the Group outstanding during the period.

Basic earnings per share are as follows:

	2021	**2020**
Group share of net income *(in € millions)*	2,521	456
Weighted average number of shares in issue	526,244,506	536,452,195
BASIC EARNINGS (LOSS) PER SHARE, GROUP SHARE *(in €)*	4.79	0.85

11.2.2. Diluted earnings per share

Diluted earnings per share are calculated by adjusting earnings per share and the average number of shares outstanding for the effects of all potential dilutive common shares, such as stock options and performance shares.

Diluted earnings per share are as follows:

	2021	**2020**
Group share of net income *(in € millions)*	2,521	456
Weighted average number of shares assuming full dilution	529,905,261	539,325,415
DILUTED EARNINGS (LOSS) PER SHARE, GROUP SHARE *(in €)*	4.76	0.85

The weighted average number of shares assuming full dilution is calculated based on the weighted average number of shares outstanding, assuming conversion of all dilutive instruments. The Group's dilutive instruments include stock options and performance share grants, corresponding to a weighted average of 170,339 and 3,490,416 instruments, respectively, at December 31, 2021.

NOTE 12 TAX

12.1. Income taxes

Current income tax is the estimated amount of tax payable in respect of income for a given period, calculated by reference to the tax rates that have been enacted or substantively enacted at the end of the reporting period, plus any adjustments to current taxes recorded in previous financial periods.

Income tax expense breaks down as follows:

(in € millions)	**2021**	**2020**
CURRENT TAXES	**(843)**	**(519)**
France	(104)	(67)
Outside France	(739)	(452)
DEFERRED TAXES	**(76)**	**(7)**
France	(13)	(72)
Outside France	(63)	65
TOTAL INCOME TAX EXPENSE	**(919)**	**(526)**

Theoretical tax expense was reconciled with current tax expense using a tax rate of 28.41% in 2021 and 32.02% in 2020, and can be analyzed as follows:

(in € millions)	**2021**	**2020**
Net income	2,614	489
Less:		
Share in net income of equity-accounted companies	56	15
Income taxes	(919)	(526)
PRE-TAX INCOME OF CONSOLIDATED COMPANIES	**3,477**	**1,000**
French tax rate	28.41%	32.02%
Theoretical tax expense at French tax rate	(988)	(320)
Impact of different tax rates	117	73
Asset impairment, capital gains and losses on asset disposals	(34)	(129)
Deferred tax assets not recognized and provisions for deferred tax assets	75	(75)
Liability method	(106)	(27)
Research tax credit and value-added contribution for businesses (CVAE)	(6)	(16)
Deduction of interest not deductible in France	15	(3)
Costs related to dividends	(39)	(54)
Other taxes and changes in provisions	47	25
TOTAL INCOME TAX EXPENSE	**(919)**	**(526)**

The increase in future tax rates for the United Kingdom from 19% to 25% (applicable as of April 1, 2023) led the Group to recognize a tax expense of €106 million for 2021 in connection with the liability method.

The contribution of countries with low tax rates explains the impact of the different tax rates applicable outside France. The main contributors are the United States, Sweden, Norway, Poland, Switzerland, the Czech Republic, Ireland, the United Kingdom, China and India.

12.2. Deferred tax

Deferred tax assets and liabilities are recorded using the balance sheet method for temporary differences between the carrying amount of assets and liabilities and their tax basis. Deferred tax assets and liabilities are measured at the tax rates expected to apply to the period when the asset is realized or the liability settled, based on the tax laws that have been enacted or substantively enacted at the end of the reporting period.

No deferred tax liability is recognized in respect of undistributed earnings of subsidiaries that are not intended to be distributed.

For investments in subsidiaries, deferred tax is recognized on the difference between the consolidated carrying amount of the investments and their tax basis when it is probable that the temporary difference will reverse in the foreseeable future.

Deferred taxes are recognized as income or expense in the income statement, unless they relate to items that are recognized directly in equity, in which case they are also recognized in equity. Income tax resulting from changes in tax rates is recognized in income, except where it relates to items initially recognized in equity.

In the balance sheet, changes in net deferred tax assets and liabilities break down as follows:

(in € millions)	**Net deferred tax asset/(liability)**
NET VALUE at January 1, 2020	**385**
Deferred tax (expense)/benefit	(7)
Changes in deferred taxes relating to actuarial gains and losses (IAS 19)	4
Liability method on actuarial gains and losses	16
Translation adjustments and restatement for hyperinflation	(1)
Assets and liabilities held for sale	(3)
Changes in Group structure and other	(89)
NET VALUE at December 31, 2020	**305**
Deferred tax (expense)/benefit	(76)
Changes in deferred taxes relating to actuarial gains and losses (IAS 19)	(196)
Liability method on actuarial gains and losses*	60
Translation adjustments and restatement for hyperinflation	(11)
Assets and liabilities held for sale	0
Changes in Group structure and other	(61)
NET VALUE at December 31, 2021	**21**

* In 2021, the liability method on actuarial gains and losses mainly concerns the United Kingdom.

Changes in Group structure relate mainly to the first-time consolidation of Chryso.

The table below shows the main deferred tax components:

(in € millions)	Dec. 31, 2021	Dec. 31, 2020
Pensions	246	465
Brands, customer relationships and intellectual property	(512)	(432)
Depreciation and amortization, accelerated capital allowances and tax-driven provisions	(693)	(644)
Tax loss carry-forwards	410	440
Other	570	476
NET DEFERRED TAX	**21**	**305**
Of which:		
Deferred tax assets	576	665
Deferred tax liabilities	(555)	(360)

Deferred taxes are offset at the level of each tax entity, i.e., by tax group where applicable (mainly in France, the United Kingdom, Spain, Germany, the United States and the Netherlands).
Deferred tax assets of €576 million were recognized at December 31, 2021 (€665 million at December 31, 2020), primarily in France (€89 million), the United States (€43 million), Germany (€183 million) and Italy (€53 million).
Deferred tax liabilities of €555 million were recognized at December 31, 2021 (€360 million at December 31, 2020), including €309 million in the United Kingdom, €59 million in Switzerland, €40 million in India, and €39 million in Denmark. Deferred tax liabilities in other countries were not material.

12.3. Tax loss carry-forwards

Deferred tax assets are recognized only if it is considered probable that there will be sufficient future taxable income against which the temporary difference can be utilized. They are reviewed at the end of each reporting period and written down to the extent that it is no longer probable that there will be sufficient taxable income against which the temporary difference can be utilized. In determining whether to recognize deferred tax assets for tax loss carry-forwards, the Group applies a range of criteria that take into account the probable recovery period based on business plans and the strategy for the long-term recovery of tax losses applied in each country.

The Group recognized deferred tax assets for tax loss carry-forwards for a net amount of €410 million at December 31, 2021 and €440 million at December 31, 2020. This principally relates to the United States, for which the recovery period is shorter than the maximum utilization period of 20 years, and to France, Germany and Spain, where tax consolidation generally ensures that deferred tax can be recovered. In these countries, tax losses may be carried forward indefinitely. Nevertheless, after analyzing each situation, the Group may decide not to recognize them.

At December 31, 2021, deferred tax assets whose recovery is not considered probable totaled €299 million (December 31, 2020: €374 million) and a provision had been accrued for the full amount. Unrecognized deferred tax assets chiefly relate to France, China, Germany, Spain and the United States.

In light of the improved situation in France, €53 million of the €60 million provision recognized at December 31, 2020 was written back in 2021.

NOTE 13 SUBSEQUENT EVENTS

None.

NOTE 14 FEES PAID TO THE STATUTORY AUDITORS

Total fees paid to the Statutory Auditors and recognized in the income statement in 2021 and 2020 are detailed in the "Additional information and cross-reference tables" section of the Universal Registration Document.

NOTE 15 PRINCIPAL CONSOLIDATED COMPANIES

The table below shows the Group's principal consolidated companies, typically those with annual sales of over €100 million.

High Performance Solutions	Country	Consolidation method	Percentage held directly and indirectly
Saint-Gobain Diamantwerkzeuge GmbH, Norderstedt*	Germany	Full consolidation	100.00%
Saint-Gobain Abrasives GmbH, Wesseling*	Germany	Full consolidation	100.00%
Supercut Europe GmbH, Baesweiler*	Germany	Full consolidation	100.00%
Ernst Winter & Sohn Norderstedt GmbH & Co. KG, Norderstedt*	Germany	Full consolidation	100.00%
Saint-Gobain Performance Plastics Isofluor GmbH, Neuss*	Germany	Full consolidation	100.00%
Saint-Gobain Performance Plastics MG Silikon GmbH, Lindau*	Germany	Full consolidation	100.00%
Saint-Gobain Performance Plastics Pampus GmbH, Willich*	Germany	Full consolidation	100.00%
Saint-Gobain Performance Plastics L+S GmbH, Wertheim*	Germany	Full consolidation	100.00%
Saint-Gobain Performance Plastics Biolink GmbH, Waakirchen*	Germany	Full consolidation	100.00%
Saint-Gobain Adfors Deutschland GmbH, Neustadt an der Donau*	Germany	Full consolidation	100.00%
H.K.O. Isolier- und Textiltechnik GmbH, Oberhausen*	Germany	Full consolidation	100.00%
BEUHKO Fasertechnik GmbH, Leinefelde-Worbis*	Germany	Full consolidation	100.00%
SEPR Keramik GmbH & Co. KG, Aachen*	Germany	Full consolidation	100.00%
Freudenberger Autoglas GmbH, München*	Germany	Full consolidation	99.99%
Freeglass GmbH & Co. KG, Schwaikheim*	Germany	Full consolidation	99.99%
Saint-Gobain Sekurit Deutschland GmbH, Herzogenrath*	Germany	Full consolidation	99.99%
Saint-Gobain Sekurit Deutschland Beteiligungen GmbH, Herzogenrath*	Germany	Full consolidation	99.99%
FABA Autoglas Technik GmbH & Co. Betriebs-KG, Berlin*	Germany	Full consolidation	99.99%
Saint-Gobain Autover Deutschland GmbH, Kerpen*	Germany	Full consolidation	99.99%
Saint-Gobain Innovative Materials Belgium	Belgium	Full consolidation	99.98%
Saint-Gobain Do Brasil Produtos Industriais e Para Construçao Ltda	Brazil	Full consolidation	100.00%
Saint-Gobain Canada, Inc.	Canada	Full consolidation	100.00%
Saint-Gobain Performance Plastics (Shanghaï) Co., LTD	China	Full consolidation	100.00%
Saint-Gobain Abrasives (Shanghaï) Co., LTD	China	Full consolidation	99.99%
SG Hanglas Sekurit (Shanghaï) Co., Ltd	China	Full consolidation	99.81%
Hankuk Sekurit Limited	South Korea	Full consolidation	99.63%
Saint-Gobain Cristaleria S.L	Spain	Full consolidation	99.83%
Saint-Gobain Adfors America, Inc.	United States	Full consolidation	100.00%
Saint-Gobain Performance Plastics Corporation	United States	Full consolidation	100.00%
Saint-Gobain Abrasives, Inc.	United States	Full consolidation	100.00%
Saint-Gobain Ceramics & Plastics, Inc.	United States	Full consolidation	100.00%
Saint-Gobain Corporation	United States	Full consolidation	100.00%
Chryso	France	Full consolidation	100.00%
Saint-Gobain Abrasifs	France	Full consolidation	99.98%
Société Européenne des Produits Réfractaires - SEPR	France	Full consolidation	100.00%
Saint-Gobain Sekurit France	France	Full consolidation	100.00%
Grindwell Norton Ltd	India	Full consolidation	51.59%
Saint-Gobain Sekurit Italia S.R.L.	Italy	Full consolidation	100.00%
Saint-Gobain K.K.	Japan	Full consolidation	100.00%
Saint-Gobain America S.A De C.V	Mexico	Full consolidation	99.83%
Saint-Gobain Mexico	Mexico	Full consolidation	99.83%
Saint-Gobain Abrasives BV	Netherlands	Full consolidation	100.00%
Saint-Gobain HPM Polska Sp Zoo	Poland	Full consolidation	100.00%
Saint-Gobain Innovative Materials Polska Sp Zoo	Poland	Full consolidation	99.97%
Saint-Gobain Adfors CZ S.R.O.	Czech Republic	Full consolidation	100.00%
Saint-Gobain Sekurit CZ, Spol S.R.O	Czech Republic	Full consolidation	99.99%

Northern Europe	Country	Consolidation method	Percentage held directly and indirectly
Saint-Gobain Glass Deutschland GmbH, Stolberg*	Germany	Full consolidation	99.99%
Flachglas Torgau GmbH, Torgau*	Germany	Full consolidation	99.99%
Saint-Gobain Weisswasser GmbH, Aachen*	Germany	Full consolidation	99.99%
Saint-Gobain Deutsche Glas GmbH, Stolberg*	Germany	Full consolidation	99.99%
Vetrotech Saint-Gobain Würselen GmbH, Würselen*	Germany	Full consolidation	99.99%
Saint-Gobain Glassolutions Isolierglas-Center GmbH, Bamberg*	Germany	Full consolidation	99.99%
Kaimann GmbH	Germany	Full consolidation	100.00%
Saint-Gobain Isover G+H Aktiengesellschaft*	Germany	Full consolidation	99.91%
Saint-Gobain Rigips GmbH*	Germany	Full consolidation	100.00%
Saint-Gobain Weber GmbH*	Germany	Full consolidation	100.00%
Saint-Gobain PAM Deutschland GmbH*	Germany	Full consolidation	100.00%
Saint-Gobain Glassolutions Augustdorf, Augustdorf*	Germany	Full consolidation	99.99%
Saint-Gobain Brüggemann Holzbau GmbH, Neuenkirchen*	Germany	Full consolidation	100.00%
Brüggemann Dach- & Wandtechnik GmbH, Neuenkirchen*	Germany	Full consolidation	100.00%
Brüggemann Effizienzhaus GmbH, Neuenkirchen*	Germany	Full consolidation	100.00%
Saint-Gobain Austria GmbH	Austria	Full consolidation	100.00%
Saint-Gobain Denmark A/S	Denmark	Full consolidation	100.00%
Saint-Gobain Distribution Denmark	Denmark	Full consolidation	100.00%
Saint-Gobain Finland OY	Finland	Full consolidation	100.00%
Dahl Suomi OY	Finland	Full consolidation	100.00%
Saint-Gobain Construction Products (Ireland) Limited	Ireland	Full consolidation	100.00%
Glava As	Norway	Full consolidation	100.00%
Saint-Gobain Byggevarer AS	Norway	Full consolidation	100.00%
Brødrene Dahl As (Norway)	Norway	Full consolidation	100.00%
Optimera As	Norway	Full consolidation	100.00%
Saint-Gobain Polska Sp Zoo	Poland	Full consolidation	99.98%
Saint-Gobain Construction Products Polska Sp Zoo	Poland	Full consolidation	100.00%
Saint-Gobain Construction Products CZ AS	Czech Republic	Full consolidation	100.00%
Saint-Gobain Construction Products Romania Srl	Romania	Full consolidation	100.00%
Saint-Gobain Glass Romania Srl	Romania	Full consolidation	100.00%
Saint-Gobain Glass (United Kingdom) Limited	United Kingdom	Full consolidation	100.00%
Saint-Gobain Construction Products United Kingdom Ltd	United Kingdom	Full consolidation	100.00%
Saint-Gobain Building Distribution Ltd	United Kingdom	Full consolidation	100.00%
Saint-Gobain Construction Products Russia ooo	Russia	Full consolidation	100.00%
Saint-Gobain Ecophon AB	Sweden	Full consolidation	100.00%
Saint-Gobain Sweden AB	Sweden	Full consolidation	100.00%
Dahl Sverige AB	Sweden	Full consolidation	100.00%
Vetrotech Saint-Gobain International	Switzerland	Full consolidation	100.00%
Saint-Gobain Weber AG	Switzerland	Full consolidation	100.00%
Sanitas Troesch Ag	Switzerland	Full consolidation	100.00%

Southern Europe – ME & Africa	**Country**	**Consolidation method**	**Percentage held directly and indirectly**
Saint-Gobain Construction Products South Africa (Pty) Ltd	South Africa	Full consolidation	100.00%
Saint-Gobain Construction Products Belgium	Belgium	Full consolidation	100.00%
Saint-Gobain Cristaleria S.L	Spain	Full consolidation	99.83%
Saint-Gobain Placo Iberica	Spain	Full consolidation	99.83%
Saint-Gobain Idaplac, S.L.	Spain	Full consolidation	99.83%
Saint-Gobain Distribucion Construccion, S.L	Spain	Full consolidation	99.83%
SG PAM Espana S.A.	Spain	Full consolidation	99.83%
Saint-Gobain Glass Solutions Menuisiers Industriels	France	Full consolidation	100.00%
Saint-Gobain Glass France	France	Full consolidation	100.00%
Eurofloat	France	Full consolidation	100.00%
Placoplatre SA	France	Full consolidation	99.80%
Saint-Gobain Isover	France	Full consolidation	100.00%
Saint-Gobain Weber	France	Full consolidation	100.00%
Saint-Gobain PAM Canalisation	France	Full consolidation	100.00%
Distribution Sanitaire Chauffage	France	Full consolidation	100.00%
Saint-Gobain Distribution Bâtiment France	France	Full consolidation	100.00%
Saint-Gobain Glass Italia S.p.a	Italy	Full consolidation	100.00%
Saint-Gobain Italia S.p.a	Italy	Full consolidation	100.00%
Saint-Gobain Construction Products Nederland BV	Netherlands	Full consolidation	100.00%
Izocam Ticaret VE Sanayi A.S.	Turkey	Full consolidation	50.00%

Asia-Pacific	**Country**	**Consolidation method**	**Percentage held directly and indirectly**
Saint-Gobain India Private Limited	India	Full consolidation	99.03%
Mag-Isover K.K.	Japan	Full consolidation	99.98%
Saint-Gobain Vietnam Ltd	Vietnam	Full consolidation	100.00%

Americas	**Country**	**Consolidation method**	**Percentage held directly and indirectly**
Saint-Gobain Argentina S.A	Argentina	Full consolidation	100.00%
Cebrace Cristal Plano Ltda	Brazil	Full consolidation	50.00%
Saint-Gobain Do Brasil Produtos Industriais e Para Construçao Ltda	Brazil	Full consolidation	100.00%
Saint-Gobain Canalizaçao Ltda	Brazil	Full consolidation	100.00%
Saint-Gobain Distribuiçao Brasil Ltda	Brazil	Full consolidation	100.00%
Saint-Gobain Mexico	Mexico	Full consolidation	99.83%
CertainTeed Canada, Inc.	Canada	Full consolidation	100.00%
Certain Teed LLC	United States	Full consolidation	100.00%
Saint-Gobain Gypsum USA, Inc.	United States	Full consolidation	100.00%
CertainTeed Ceilings Corporation	United States	Full consolidation	100.00%

[*] German consolidated subsidiary or sub-group with corporate or limited liability status and meeting the criteria under Articles 264 paragraph 3, 264b and 291 of the German Commercial Code (HGB) exempting the relevant entities and sub-groups from publishing their statutory and consolidated financial statements or notes to the financial statements and management reports (entities or sub-groups above or below the €100 million threshold).