REGISTERED NUMBER: 05405478 (England and Wales)

Saint-Gobain Aldwych Limited

Strategic Report, Report of the Directors and

Financial Statements for the Year Ended 31 December 2022

Contents of the Financial Statements
for the year ended 31 December 2022

	Page
Company Information	1
Strategic Report	2
Report of the Directors	5
Statement of Directors' Responsibilities	7
Report of the Independent Auditor to the members of Saint-Gobain Aldwych Limited	8
Profit and Loss Account	11
Other Comprehensive Income	12
Balance Sheet	13
Statement of Changes in Equity	14
Notes to the Financial Statements	15

Company Information
for the year ended 31 December 2022

DIRECTORS:	N J Cammack M S Chaldecott S M S Billet
SECRETARY:	R Keen
REGISTERED OFFICE:	Saint-Gobain House East Leake Loughborough Leicestershire LE12 6JU
REGISTERED NUMBER:	05405478 (England and Wales)
AUDITOR:	KPMG LLP Chartered Accountants 4th Floor East West Tollhouse Hill Nottingham NG1 5FS

Strategic Report
for the year ended 31 December 2022

The directors present their strategic report for the year ended 31 December 2022.

PRINCIPAL ACTIVITY
The company acts as an investment holding company. Details of its investments are provided in note 6.

REVIEW OF BUSINESS
The company made a profit after tax of £97,861,000 for the year ended 31 December 2022 (year ended 31 December 2021: profit £74,608,000).

PRINCIPAL RISKS AND UNCERTAINTIES
Risks facing the Saint-Gobain group, which includes Saint-Gobain Aldwych Limited, are discussed in the Annual Report of Saint-Gobain. As an intermediate holding company with most of its income arising from group companies, there are no other significant risks within the company.

KEY BUSINESS STRATEGIES
Saint-Gobain, the world leader in sustainable habitat and construction markets, designs, manufactures and distributes building and high-performance materials, providing innovative solutions to the challenges of growth, energy efficiency and environmental protection.

Saint-Gobain is uniquely positioned, with complementary strategic positions in building materials and high-performance materials technologies:

- It is a worldwide or European leader in all of its businesses, with local solutions tailored to the needs of each market.
- It has an unrivalled portfolio of energy efficiency products and solutions.
- With its deep understanding of building professionals' needs, acquired through daily contacts with customers, solutions can be adapted to highly specific customer requirements.
- It has an outstanding potential for innovation, supported by a unique industrial and distribution expertise and a commitment to materials research.
- Its culture of operational excellence gives the group an underlying robustness and the ability to respond quickly to changes in the economic environment.
- Its solid set of tested values helps the group to build lasting relations with all stakeholders, from customers and employees to suppliers, subcontractors, shareholders and the community.

The company acts as an investment holding company in support of the group's objectives.

Strategic Report
for the year ended 31 December 2022

SECTION 172(1) STATEMENT
The company's sole member is Saint-Gobain Europe du Nord, which is 100% owned by Compagnie de Saint-Gobain. The directors consider that their duty to promote the success of the company for the benefit of its members as a whole means that they should fully support Compagnie de Saint-Gobain in its purpose of "Making the world a better home".

Our purpose, to make the world a better home, reflects who we are and sets the course for our future. Over 350 years of history, our collective strength and leadership empowers us to address major challenges facing humanity, including climate change, resource protection and inclusion.

We operate both internationally and locally and are fully integrated within our local communities to support their vitality and help build a fairer and more sustainable world. Our purpose calls on us to innovate openly, with the profound ambition to act every day to make the world a more beautiful and sustainable place to live.

"MAKING THE WORLD A BETTER HOME"
Our purpose sets the course for our common future. Together with and for our customers, we design, manufacture and distribute materials and solutions that have a positive impact on everyone's life and provide well-being, quality of life and performance, while caring for the planet.

Our purpose reflects who we are. Our 350 years of history, our collective strength and our leadership empower us to pursue our development, by addressing the major challenges facing humanity, namely, climate change, resource protection and inclusion. We are both an international and multi-local company, fully integrated into the territories where we operate to support their vitality and help build a fairer and more sustainable, open and engaging world.

Our purpose is a call to action. Our approach is clearly focused on the future. Together with our customers, partners and all our stakeholders, it guides our action to unleash individual and collective aspirations, and enable everyone to live better in the world. It calls on us to innovate openly, with the ever-renewed ambition of better uniting humanity and nature for the common good.

Our purpose is based on values that guide us. We carry out our business in compliance with the principles of conduct and action and the humanist values that permeate our corporate culture. Listening, dialogue, care, solidarity, trust and respect for difference are central to our commitment.

This is the profound ambition of our purpose: to act every day to make the world a more beautiful and sustainable place to live.

Through its purpose, Saint-Gobain bases its development on strong values embodied in nine Principles of Conduct and Action, which constitute a true code of ethics. Formalized in 2003, translated into 33 languages, and distributed to all employees, these principles constitute an ethical reference applicable in action. They are a condition of belonging to the Group. The directors of the company have fully embraced and implemented these values as part of the foundation of our business.

General Principles of Conduct:
o Professional commitment
o Respect for others
o Integrity
o Loyalty
o Solidarity

Principles of Action:
o Respect for the law
o Caring for the environment
o Worker health and safety
o Employee rights

Saint-Gobain Attitudes:
o Cultivate customer intimacy: Focusing on our customers
o Act as an entrepreneur: Setting ambitious goals, priorities, clear rules
o Innovate: Acquiring new knowledge, developing things together
o Be agile: Acting proactively and quickly, living digitalization
o Build an open and engaging culture: Be collaborative and constructive within and outside Saint-Gobain

Strategic Report
for the year ended 31 December 2022

SECTION 172(1) STATEMENT - continued

A Strong Compliance Culture:
The Directors have acted in support of the continued development of the strong Saint-Gobain Compliance Culture.

This is built on the following principles:

Sustainable Development - Communication with employees about the Principles of Conduct and Action and importance of Sustainable Development has continued.
Competition law compliance - The roll-out of training for colleagues on competition compliance has continued.
Corruption prevention & Compliance with economic sanctions and embargoes - Training on this importance has continued to be deployed to colleagues during the year with specialized external advice and training.
Internal audit and business control - Directors have continued ensure entities understand and adhere to business control framework and formal risk management planning.
Whistleblowing system - Directors have ensured that the policy and channels, available to colleagues have been promoted across the business to ensure colleagues are aware of how to raise issues of concern.

FINANCIAL INSTRUMENTS
All financing balances are intercompany in nature and there were no financial instruments traded during the year.

KEY PERFORMANCE INDICATORS
The company reviews its performance by using a number of financial and non-financial Key Performance Indicators (KPIs), the most important KPIs are detailed below:

	2022 £'000	2021 £'000
Profit for the year	97,861	74,608
Net assets	3,771,570	3,771,570

ON BEHALF OF THE BOARD:

....
N J Cammack - Director

Date: 29 September 2023

Report of the Directors
for the year ended 31 December 2022

The directors present their report with the financial statements of the company for the year ended 31 December 2022.

DIVIDENDS
In 2022, the company declared and paid an interim dividend of £97,861,000 on 23 May 2022. In 2021, the company declared and paid an interim dividend of £74,600,000 on 25 May 2021.

DIRECTORS
The directors shown below have held office during the whole of the period from 1 January 2022 to the date of this report.

N J Cammack
M S Chaldecott
S M S Billet

ENGAGEMENT WITH SUPPLIERS, CUSTOMERS AND OTHER STAKEHOLDERS
When making key decisions, the director engage with all key stakeholders whilst ensuring that decisions are made in the best interests of the company. During 2022 the following are considered to be key decisions:

Support for subsidiaries following the Covid-19 crisis and subsequent energy price shock, especially to ensure that they have sufficient working capital and liquidity to continue in business.

STATEMENT OF CORPORATE GOVERNANCE ARRANGEMENTS
The company does not follow a public corporate governance code. This is because the company is a 100% subsidiary of Compagnie de Saint-Gobain and is therefore subject to the corporate governance code of the ultimate parent company.

The directors consider that their legal and professional obligations as directors are primarily:
o To promote the success of the company in accordance with the desires of the members, in this case BPB Group Operations Limited and ultimately Compagnie de Saint-Gobain
o To act in accordance with the company's constitution and all other legal requirements
o To exercise reasonable care, skill and diligence
o To avoid conflicts of interest or personal benefits

GOING CONCERN
The financial statements have been prepared on a going concern basis which the directors consider to be appropriate for the following reasons.

The company is profitable, and in a net assets position. The directors have given careful consideration to the forecasts for the 12 months following the signing of these accounts, which show continued profitability and cash generation from operations.

As a member of the Saint-Gobain UK & Ireland group of companies, together referred to as the 'UKI group', the company meets its day-to-day working capital requirements through operating cash flows, access to the group cash pooling arrangement (see note 7). The entity forms an integral part of the wider operation of the UKI group and as such is reliant on the continuation of the UKI group including for funding already provided and for access to the cash pool within debtors (see note 7).

Consequently, the directors are confident that the company will have sufficient funds to continue to meet its liabilities as they fall due for at least 12 months from the date of approval of the financial statements and therefore have prepared the financial statements on a going concern basis.

STATEMENT AS TO DISCLOSURE OF INFORMATION TO AUDITOR
So far as the directors are aware, there is no relevant audit information (as defined by Section 418 of the Companies Act 2006) of which the company's auditor is unaware, and each director has taken all the steps that he or she ought to have taken as a director in order to make himself or herself aware of any relevant audit information and to establish that the company's auditor is aware of that information.

Report of the Directors
for the year ended 31 December 2022

AUDITOR
Pursuant to Section 487 of the Companies Act 2006, the auditor will be deemed to be reappointed and KPMG LLP will therefore continue in office.

ON BEHALF OF THE BOARD:

....
N J Cammack - Director

Date: 29 September 2023

Statement of Directors' Responsibilities
for the year ended 31 December 2022

The directors are responsible for preparing the Strategic Report, the Report of the Directors and the financial statements in accordance with applicable law and regulations.

Company law requires the directors to prepare financial statements for each financial year. Under that law they have elected to prepare the financial statements in accordance with UK accounting standards and applicable law (UK Generally Accepted Accounting Practice), including FRS 101 'Reduced Disclosure Framework'.

Under company law the directors must not approve the financial statements unless they are satisfied that they give a true and fair view of the state of affairs of the company and of the profit or loss of the company for that period. In preparing these financial statements, the directors are required to:

- select suitable accounting policies and then apply them consistently;
- make judgements and accounting estimates that are reasonable and prudent;
- state whether applicable UK accounting standards have been followed, subject to any material departures disclosed and explained in the financial statements;
- assess the company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern; and
- use the going concern basis of accounting unless they either intend to liquidate the company or to cease operations, or have no realistic alternative but to do so.

The directors are responsible for keeping adequate accounting records that are sufficient to show and explain the company's transactions and disclose with reasonable accuracy at any time the financial position of the company and enable them to ensure that the financial statements comply with the Companies Act 2006. They are also responsible for such internal control as they determine is necessary to enable the preparation of financial statements that are free from material misstatements, whether due to fraud or error, and have general responsibility for taking such steps as are reasonably open to them to safeguard the assets of the company and to prevent and detect fraud and other irregularities.

Report of the Independent Auditor to the Members of Saint-Gobain Aldwych Limited

Opinion
We have audited the financial statements of Saint-Gobain Aldwych ("the company") for the year ended 31 December 2022 which comprise the Profit and Loss Account, Other Comprehensive Income, Balance Sheet, Statement of Changes in Equity and Notes to the Financial Statements, including a summary of significant accounting policies in note 1.

In our opinion the financial statements:
- give a true and fair view of the state of the company's affairs as at 31 December 2022 and of its profit for the year then ended;
- have been properly prepared in accordance with UK accounting standards, including FRS 101 Reduced Disclosure Framework; and
- have been prepared in accordance with the requirements of the Companies Act 2006.

Basis for opinion
We conducted our audit in accordance with International Standards on Auditing (UK) ("ISAs (UK)") and applicable law. Our responsibilities are described below. We have fulfilled our ethical responsibilities under, and are independent of the company in accordance with, UK ethical requirements including the FRC Ethical Standard. We believe that the audit evidence we have obtained is a sufficient and appropriate basis for our opinion.

Going concern
The directors have prepared the financial statements on the going concern basis as they do not intend to liquidate the company or to cease its operations, and as they have concluded that the company's financial position means that this is realistic. They have also concluded that there are no material uncertainties that could have cast significant doubt over its ability to continue as a going concern for at least a year from the date of approval of the financial statements ("the going concern period").

In our evaluation of the directors' conclusions, we considered the inherent risks to the company's business model and analysed how those risks might affect the company's financial resources or ability to continue operations over the going concern period.

Our conclusions based on this work:
- we consider that the directors' use of the going concern basis of accounting in the preparation of the financial statements is appropriate;
- we have not identified, and concur with the directors' assessment that there is not, a material uncertainty related to events or conditions that, individually or collectively, may cast significant doubt on the company's ability to continue as a going concern for the going concern period.

However, as we cannot predict all future events or conditions and as subsequent events may result in outcomes that are inconsistent with judgements that were reasonable at the time they were made, the above conclusions are not a guarantee that the company will continue in operation.

Fraud and breaches of laws and regulations - ability to detect

Identifying and responding to risks of material misstatement due to fraud

To identify risks of material misstatement due to fraud ("fraud risks") we assessed events or conditions that could indicate an incentive or pressure to commit fraud or provide an opportunity to commit fraud. Our risk assessment procedures included enquiring of directors and inspection of policy documentation as to the Compagnie de Saint-Gobain's policies and procedures to prevent and detect fraud that apply to this group company as well as enquiring whether the directors have knowledge of any actual, suspected or alleged fraud.

As required by auditing standards, we perform procedures to address the risk of management override of controls, in particular the risk that management may be in a position to make inappropriate accounting entries. On this audit we do not believe there is a fraud risk related to revenue recognition because there are no revenue transactions. We did not identify any additional fraud risks.

We performed procedures including agreeing all accounting entries in the period to supporting documentation.

Identifying and responding to risks of material misstatement due to non-compliance with laws and regulations

We identified areas of laws and regulations that could reasonably be expected to have a material effect on the financial statements from our general commercial and sector experience and through discussion with the directors (as required by auditing standards), and discussed with the directors the policies and procedures regarding compliance with laws and regulations.

The company is subject to laws and regulations that directly affect the financial statements including financial reporting legislation (including related companies legislation), distributable profits legislation and taxation legislation and we assessed the extent of compliance with these laws and regulations as part of our procedures on the related financial statement items.

Fraud and breaches of laws and regulations - ability to detect - continued

Identifying and responding to risks of material misstatement due to non-compliance with laws and regulations

This company, as a holding company, is not subject to other laws and regulations where the consequences of non-compliance could have a material effect on amounts or disclosures in the financial statements.

Context of the ability of the audit to detect fraud or breaches of law or regulation

Owing to the inherent limitations of an audit, there is an unavoidable risk that we may not have detected some material misstatements in the financial statements, even though we have properly planned and performed our audit in accordance with auditing standards. For example, the further removed non-compliance with laws and regulations is from the events and transactions reflected in the financial statements, the less likely the inherently limited procedures required by auditing standards would identify it.

In addition, as with any audit, there remained a higher risk of non-detection of fraud, as these may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal controls. Our audit procedures are designed to detect material misstatement. We are not responsible for preventing non-compliance or fraud and cannot be expected to detect non-compliance with all laws and regulations.

Strategic report and directors' report
The directors are responsible for the strategic report and the directors' report. Our opinion on the financial statements does not cover those reports and we do not express an audit opinion thereon.

Our responsibility is to read the strategic report and the directors' report and, in doing so, consider whether, based on our financial statements audit work, the information therein is materially misstated or inconsistent with the financial statements or our audit knowledge.

Based solely on that work:
- we have not identified material misstatements in the strategic report and the directors' report;
- in our opinion the information given in those reports for the financial year is consistent with the financial statements; and
- in our opinion those reports have been prepared in accordance with the Companies Act 2006.

Matters on which we are required to report by exception
Under the Companies Act 2006 we are required to report to you if, in our opinion:
- adequate accounting records have not been kept, or returns adequate for our audit have not been received from branches not visited by us; or
- the financial statements are not in agreement with the accounting records and returns; or
- certain disclosures of directors' remuneration specified by law are not made; or
- we have not received all the information and explanations we require for our audit.

We have nothing to report in these respects.

Directors' responsibilities
As explained more fully in their statement set out on page 7, the directors are responsible for: the preparation of the financial statements and for being satisfied that they give a true and fair view; such internal control as they determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error; 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 they either intend to liquidate the company or to cease operations, or have no realistic alternative but to do so.

Auditor's responsibilities
Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue our opinion in an auditor's report. Reasonable assurance is a high level of assurance, but does not guarantee that an audit conducted in accordance with ISAs (UK) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the financial statements.

A fuller description of our responsibilities is provided on the FRC's website at www.frc.org.uk/auditorsresponsibilities.

Report of the Independent Auditor to the Members of Saint-Gobain Aldwych Limited

The purpose of our audit work and to whom we owe our responsibilities

This report is made solely to the company's members, as a body, in accordance with Chapter 3 of Part 16 of the Companies Act 2006. Our audit work has been undertaken so that we might state to the company's members those matters we are required to state to them in an auditor's report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the company and the company's members, as a body, for our audit work, for this report, or for the opinions we have formed.

Mark Flanagan (Senior Statutory Auditor)
for and on behalf of KPMG LLP
Chartered Accountants
4th Floor
East West
Tollhouse Hill
Nottingham
NG1 5FS

Date: 29 September 2023

Profit and Loss Account
for the year ended 31 December 2022

	Notes	2022 £'000	2021 £'000
TURNOVER		-	-
OPERATING PROFIT		-	-
Dividend income from subsidiaries		97,861	74,608
PROFIT BEFORE TAXATION	3	97,861	74,608
Tax on profit	4	-	-
PROFIT FOR THE FINANCIAL YEAR		97,861	74,608

The accompanying notes form part of these financial statements

Other Comprehensive Income
for the year ended 31 December 2022

	2022 £'000	2021 £'000
PROFIT FOR THE YEAR	97,861	74,608
OTHER COMPREHENSIVE INCOME	-	-
TOTAL COMPREHENSIVE INCOME FOR THE YEAR	97,861	74,608

The accompanying notes form part of these financial statements

Balance Sheet
31 December 2022

	Notes	2022 £'000	2021 £'000
FIXED ASSETS			
Investments	6	3,771,564	3,771,564
CURRENT ASSETS			
Debtors	7	7	7
CREDITORS			
Amounts falling due within one year	8	(1)	(1)
NET CURRENT ASSETS		6	6
TOTAL ASSETS LESS CURRENT LIABILITIES		3,771,570	3,771,570
CAPITAL AND RESERVES			
Called up share capital	9	3,394,408	3,394,408
Retained earnings	10	377,162	377,162
SHAREHOLDERS' FUNDS		3,771,570	3,771,570

The financial statements were approved by the Board of Directors and authorised for issue on 29 September 2023 and were signed on its behalf by:

N J Cammack

....

N J Cammack - Director

Statement of Changes in Equity
for the year ended 31 December 2022

	Called up share capital £'000	Retained earnings £'000	Total equity £'000
Balance at 1 January 2021	3,394,408	377,154	3,771,562
Total comprehensive income			
Profit for the year	-	74,608	74,608
Transactions with shareholders recorded directly in equity:			
Dividends	-	(74,600)	(74,600)
Balance at 31 December 2021	3,394,408	377,162	3,771,570
Changes in equity			
Total comprehensive income			
Profit for the year	-	97,861	97,861
Transactions with shareholders recorded directly in equity:			
Dividends	-	(97,861)	(97,861)
Balance at 31 December 2022	3,394,408	377,162	3,771,570

The accompanying notes form part of these financial statements

Notes to the Financial Statements
for the year ended 31 December 2022

1. ACCOUNTING POLICIES

Basis of preparation
Saint-Gobain Aldwych Limited is a private company incorporated, domiciled and registered in England, in the UK. The registered number is 05405478 and the registered address is Saint-Gobain House, East Leake, Loughborough, Leicestershire LE12 6JU.

These financial statements were prepared in accordance with Financial Reporting Standard 101 "Reduced Disclosure Framework" (FRS 101).

The company is exempt by virtue of s401 of the Companies Act 2006 from the requirement to prepare group financial statements. These financial statements present information about the company as an individual undertaking and not about its group.

In preparing these financial statements, the company applies the recognition, measurement and disclosure requirements of International Financial Reporting Standards as adopted by the EU ("Adopted IFRSs"), but makes amendments where necessary in order to comply with Companies Act 2006 and has set out below where advantage of the FRS 101 disclosure exemptions has been taken.

In these financial statements, the company has applied the exemptions available under FRS 101 in respect of the following disclosures:

- A Cash Flow Statement and related notes;
- Disclosures in respect of transactions with wholly owned subsidiaries;
- Disclosures in respect of capital management;
- The effects of new but not yet effective IFRSs;
- Disclosures in respect of the compensation of Key Management Personnel.

As the consolidated financial statements of Compagnie de Saint-Gobain include the equivalent disclosures, the company has also taken the exemptions under FRS 101 available in respect of the following disclosures:

- IFRS 2 Share Based Payments in respect of group settled share based payments;
- Certain disclosures required by IAS 36 Impairment of Assets in respect of the impairment of goodwill and indefinite life intangible assets;
- Disclosures required by IFRS 5 Non-current Assets Held for Sale and Discontinued Operations in respect of the cash flows of discontinued operations;
- Certain disclosures required by IFRS 3 Business Combinations in respect of business combinations undertaken by the Company in the current and prior periods including the comparative period reconciliation for goodwill;
- Certain disclosures required by IFRS 13 Fair Value Measurement and the disclosures required by IFRS 7 Financial Instrument Disclosures.

The company proposes to continue to adopt the reduced disclosure framework of FRS 101 in its next financial statements.

The accounting policies set out below have, unless otherwise stated, been applied consistently to all periods presented in these financial statements.

Judgements made by the directors, in the application of these accounting policies that have significant effect on the financial statements and estimates with a significant risk of material adjustment in the next year are discussed in note 12.

Measurement convention
The financial statements are prepared on the historical cost basis.

Notes to the Financial Statements - continued
for the year ended 31 December 2022

1. **ACCOUNTING POLICIES - continued**

Going Concern
The financial statements have been prepared on a going concern basis which the directors consider to be appropriate for the following reasons.

The company is profitable, and in a net assets position. The directors have given careful consideration to the forecasts for the 12 months following the signing of these accounts, which show continued profitability and cash generation from operations.

As a member of the Saint-Gobain UK & Ireland group of companies, together referred to as the 'UKI group', the company meets its day-to-day working capital requirements through operating cash flows, access to the group cash pooling arrangement (see note 7). The entity forms an integral part of the wider operation of the UKI group and as such is reliant on the continuation of the UKI group including for funding already provided and for access to the cash pool within debtors (see note 7).

Consequently, the directors are confident that the company will have sufficient funds to continue to meet its liabilities as they fall due for at least 12 months from the date of approval of the financial statements and therefore have prepared the financial statements on a going concern basis.

Investments in debt and equity securities
Investments in associates and subsidiaries are carried at cost less impairment.

Taxation
Tax on the profit or loss for the period comprises current and deferred tax. Tax is recognised in the profit and loss account except to the extent that it relates to items recognised directly in equity, in which case it is recognised in equity.

Current tax is the expected tax payable on the taxable income for the period, using tax rates enacted or substantively enacted at the balance sheet date, and any adjustment to tax payable in respect of previous years.

Deferred tax is provided on temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes. The following temporary differences are not provided for: the initial recognition of goodwill; the initial recognition of assets or liabilities that affect neither accounting or taxable profit except in a business combination, and differences relating to investments in subsidiaries to the extent that they will probably not reverse in the foreseeable future. The amount of deferred tax provided is based on the expected manner of realisation or settlement of the carrying amount of assets and liabilities, using tax rates enacted or substantively enacted at the balance sheet date.

A deferred tax asset is recognised only to the extent that it is probable that future taxable profits will be available against which the asset can be utilised.

Foreign currencies
Transactions in foreign currencies are translated at the foreign exchange rate ruling at the date of the transaction. Monetary assets and liabilities denominated in foreign currencies at the balance sheet date are translated at the foreign exchange rate ruling at that date. Foreign exchange differences arising on translation are recognised in the profit and loss account. Non-monetary assets and liabilities that are measured in terms of historical cost in a foreign currency are translated using the exchange rate at the date of the transaction. Non-monetary assets and liabilities denominated in foreign currencies that are stated at fair value are translated at foreign exchange rates ruling at the dates the fair value was determined.

Financing income and expenses
Interest income and interest payable is recognised in profit or loss as it accrues, using the effective interest method. Dividend income is recognised in the profit and loss account on the date the entity's right to receive payments is established.

1. ACCOUNTING POLICIES - continued

Impairment
The carrying amounts of the company's assets are reviewed at each balance sheet date to determine whether there is any indication of impairment. If any such indication exists, the asset's recoverable amount is estimated.

An impairment loss is recognised whenever the carrying amount of an asset or its cash-generating unit exceeds its recoverable amount. Impairment losses are recognised in the profit and loss account.

Impairment losses recognised in respect of cash-generating units are allocated first to reduce the carrying amount of any goodwill allocated to cash-generating units and then to reduce the carrying amount of the other assets in the unit on a pro rata basis. A cash-generating unit is the smallest identifiable group of assets that generates cash inflows that are largely independent of the cash inflows from other assets or groups of assets.

When a decline in the fair value of an available-for-sale financial asset has been recognised directly in equity and there is objective evidence that the asset is impaired, the cumulative loss that had been recognised directly in equity is recognised in profit or loss even though the financial asset has not been derecognised. The amount of the cumulative loss that is recognised in profit or loss is the difference between the acquisition cost and current fair value, less any impairment loss on that financial asset previously recognised in profit or loss.

Calculation of recoverable amount
The recoverable amount of the company's investments in held-to-maturity securities and receivables carried at amortised cost is calculated as the present value of estimated future cash flows, discounted at the original effective interest rate (i.e., the effective interest rate computed at initial recognition of these financial assets). Receivables with a short duration are not discounted.
The recoverable amount of other assets is the greater of their net selling price and value in use. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. For an asset that does not generate largely independent cash inflows, the recoverable amount is determined for the cash-generating unit to which the asset belongs.

Reversals of impairment
An impairment loss in respect of a held-to-maturity security or receivable carried at amortised cost is reversed if the subsequent increase in recoverable amount can be related objectively to an event occurring after the impairment loss was recognised.
An impairment loss in respect of an investment in an equity instrument classified as available for sale is not reversed through profit or loss. If the fair value of a debt instrument classified as available-for-sale increases and the increase can be objectively related to an event occurring after the impairment loss was recognised in profit or loss, the impairment loss is reversed through profit or loss.

An impairment loss is reversed when there is an indication that the impairment loss may no longer exist and there has been a change in the estimates used to determine the recoverable amount.

An impairment loss is reversed only to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined, net of depreciation or amortisation, if no impairment loss had been recognised.

Dividends
Dividend payable is recognised on the date the entity's board of directors approve payment.

2. EMPLOYEES AND DIRECTORS

There were no employees of Saint-Gobain Aldwych Limited in the year (year ended 31 December 2021: nil).

Directors' remuneration

The directors of the company are also directors of several other companies within the Saint-Gobain Group, and their emoluments are borne by these other companies. They do not consider that their duties in respect of the company take up a significant proportion of their time. No directors receive any emoluments from the company, nor are they members of any pension scheme in which the company has an interest. Accordingly, the directors do not believe that it is practicable to apportion the amount of their remuneration between their services as directors of the company and their services to other companies in the group.

Notes to the Financial Statements - continued
for the year ended 31 December 2022

3. AUDITOR'S REMUNERATION

Auditor's remuneration has been recorded within the financial statements of another group company, BPB Limited.

4. TAXATION

Analysis of tax expense
No liability to UK corporation tax arose for the year ended 31 December 2022 nor for the year ended 31 December 2021.

Factors affecting the tax expense

	2022	2021
	£'000	£'000
Profit before income tax	97,861	74,608
Profit multiplied by the standard rate of corporation tax in the UK of 19% (2021 - 19%)	18,594	14,176
Effects of:		
UK Dividend income	(18,594)	(14,176)
Tax expense	-	-

Factors that may affect future tax charges
The UK government has announced that corporation tax rates will increase to 25% from 1 April 2023. The company's main sources of income are expected to continue to be exempt from tax, so this is not expected to have a material impact on the company's profitability.

5. DIVIDENDS

	2022	2021
	£'000	£'000
Ordinary shares of 90p each		
Interim	97,861	74,600

The company declared and paid an interim dividend of £97,861,000 on 23 May 2022. In 2021, the company declared and paid an interim dividend of £74,600,000 on 25 May 2021. The directors do not recommend the payment of a final dividend for the year ended 31 December 2022.

Notes to the Financial Statements - continued
for the year ended 31 December 2022

6. INVESTMENTS

	Shares in group undertakings £'000
COST	
At 1 January 2022 and 31 December 2022	3,771,564
NET BOOK VALUE	
At 31 December 2022	3,771,564

	Shares in group undertakings £'000
COST	
At 1 January 2021 and 31 December 2021	3,771,564
NET BOOK VALUE	
At 31 December 2021	3,771,564

Notes to the Financial Statements - continued
for the year ended 31 December 2022

6. INVESTMENTS - continued

The company's investments in subsidiaries and associates are as follows:

	Registered Office	Ownership of shares and voting rights	
	see key below	2022	2021
BPB Limited †	1	100.00%	100.00%
BPB Finance (No.4) Limited	1	100.00%	100.00%
BPB Group Finance Limited	1	100.00%	100.00%
BPB Group Operations Limited	1	100.00%	100.00%
BPB Finance (No.2) Limited	1	100.00%	100.00%
BPB Investments Overseas Limited	1	100.00%	100.00%
Commatone Limited	1	100.00%	100.00%
BPB Finance (No.6)	1	100.00%	100.00%
BPB India Limited	1	100.00%	100.00%
Gypsum Investments Limited	1	100.00%	100.00%
Skiptex Limited	1	100.00%	100.00%
Radcliffe Paper Tubes Limited	1	100.00%	100.00%
Saint-Gobain Construction Products UK Limited	1	100.00%	100.00%
Artex Limited	1	100.00%	100.00%
Artex-Blue Hawk Limited	1	100.00%	100.00%
Blue Hawk Limited	1	100.00%	100.00%
British Gypsum Limited	1	100.00%	100.00%
Celotex Limited	1	100.00%	100.00%
Saint-Gobain Isover UK Limited	1	100.00%	100.00%
Saint-Gobain PAM UK Limited	1	100.00%	100.00%
Saint-Gobain Weber Limited	1	100.00%	100.00%
Nutbrook Canal Navigation	1	100.00%	100.00%
Chambers Packaging Limited	1	100.00%	100.00%
Saint-Gobain Denmark A/S	2	37.75%	37.75%
LECA Danmark A/S	2	37.75%	37.75%
Saint-Gobain (Thailand) Company Limited (previously BPB Asia Limited)	3	95.87%	95.87%
BPB (Shanghai) Management Co Limited	4	100.00%	100.00%
BPB Gypsum BV	5	100.00%	100.00%
Allied Manufacturing Industries (Private) Limited	6	100.00%	100.00%
Allied Industrial Investments (Private) Limited	7	100.00%	100.00%
Saint-Gobain Construction Products Zimbabwe (Pvt) Limited	8	100.00%	100.00%
BPB Asia Pte Ltd	9	100.00%	100.00%
Asia Gypsum Company Limited	10	100.00%	100.00%
Saint-Gobain India Private Limited	11	22.00%	22.00%
Saint-Gobain Industries India Private Limited	11	22.00%	22.00%
Inversiones BPB Chile Ltda	12	100.00%	100.00%
CIA Industrial El Volcan SA	13	30.28%	30.17%
Inversiones Volcan Internacional SPA	13	30.28%	30.17%
Placo Do Brasil Ltda	14	68.62%	68.58%
Thai Gypsum Products PLC	15	83.48%	83.48%
Saint-Gobain Sekurit (Thailand) Co Lt	16	66.60%	66.60%
PT central Saint-Gobain Sekurit Indonesia	17	31.20%	30.20%
PT Saint-Gobain Sekurit Indonesia	18	63.30%	63.30%
Saint-Gobain Development Mozambique Limitada (formerly BPB Gypsum Ltda)	19	99.00%	99.00%
Gypsum Industries (Pty) Ltd	20	100.00%	100.00%
SAGEX	21	100.00%	100.00%

Notes to the Financial Statements - continued
for the year ended 31 December 2022

6. **INVESTMENTS - continued**

	Registered Office	Ownership of shares and voting rights	
	see key below	2022	2021
SG Isover South Africa (Pty) Limited	22	100.00%	100.00%
Saint-Gobain Mining (Pty) Ltd	22	100.00%	100.00%
Saint-Gobain Weber South Africa (Pty) Ltd	22	100.00%	100.00%
Selcotrade 35 (Pty) Limited	22	100.00%	100.00%
Spunbond Insulation (Pty) Ltd	22	100.00%	100.00%
Saint-Gobain Construction Products South Africa (PTY) Ltd	22	100.00%	100.00%
Yesos Maria Morales SA	23	100.00%	100.00%
Saint-Gobain High-Tech Innovation Materials (Shanghai) Co., Ltd (previously Saint-Gobain Gypsum (Shanghai) Co. Ltd	24	99.70%	99.70%
Placo Argentina SA	25	68.62%	68.62%
Saint-Gobain Gyproc Middle East FZE	26	100.00%	100.00%
Saint-Gobain Construction Products Belgium	27	100.00%	100.00%
Saint-Gobain Gyproc Emirates Industries LLC	28	49.00%	49.00%
Saint-Gobain Al Rafah LLC	29	70.00%	70.00%
Saint-Gobain Innovation Materials (Chang Zhou) Co Ltd(previously Saint-Gobain Gypsum (Chang Zhou) Co Limited)	30	100.00%	100.00%
Protenna AB	31	25.00%	25.00%
Gyproc Business Park (Erith) Limited	32	51.00%	51.00%
Transportes Yeso LTDA (dissolved 03/06/2022)	33	0.00%	30.00%
STAC - SWYS Tile Adhesive CY	34	100.00%	100.00%
Stanton Limited (Liquidation)	35	100.00%	100.00%
Thaigips Holdings Limited	36	100.00%	100.00%
Gypsum Metropolitan Company Limited	36	44.54%	44.54%
Saint-Gobain Sekurit India LTD	37	6.00%	6.00%
Fiberglass Colombia	38	13.60%	13.60%
Fibras Fiverglass SA (sold on 27/09/2022)	39	0.00%	13.60%
Solcrom S.A	40	13.60%	13.60%
Saint-Gobain Formula GMBH	41	6.00%	6.00%
Technokarton GMBH	42	1.74%	1.74%
Tecnokarton Beteiligungs OHG (shares allotted 01/01/2019)	42	1.74%	1.74%
Tecnokarton GMBH&Co Fabrikation Technischen Kartons KG	42	1.74%	1.74%
Saint-Gobain Rigips GMBH	43	6.00%	6.00%
PG Group Holdings Proprietary Limited	44	20.00%	20.00%
PG Group (Proprietary) LTD	44	20.00%	20.00%
BPB Paperboard Limited	45	100.00%	100.00%
Cantones S.A.U	46	30.28%	30.28%
Omnex SA	47	10.00%	10.00%
Sunstreet Solar Private Limited	48	6.09%	6.09%

† Direct holding

Notes to the Financial Statements - continued
for the year ended 31 December 2022

6. INVESTMENTS - continued

Registered office address key:

1 Saint-Gobain House East Leake, Loughborough, Leicestershire, United Kingdom, LE12 6JU
2 Robert Jacobsens Vej 62A 2300, Copenhagen S, Denmark
3 539/2 Gypsum Metropolitan Tower, Si Ayutthaya Road, Thanon, Phayatai Sub-district Ratchathewi District, Bangkok Metropolis
4 No.968 WangQiao Road, Pudong New District, Shanghai, China
5 Huifakkerstraat 18, 4815 PN, Breda, Netherlands
6 C/o Ernst & Young, 2ème étage, Manica Chambers, Herbert Chitepo Street, Mutare, Zimbabwe
7 Delport Road, Cleveland Park, Msasa, Harare, Zimbabwe
8 Delport Road, Cleveland Park, Msasa, Harare, Zimbabwe
9 1 Coleman Street, #10-07, The Adelphi, Singapore 179803
10 21/F Far East Finance Centre, 16 Harcourt Road, Hong Kong
11 Sigapi Aachi Building, Floor No. 7, 18/3, Rukmini Lakshmipathy Road, Egmore, Chennai, Tamil Nadu, 600008, India
12 C/o Carey Y Cia Ltda, Miraflores 222, Piso 24, Santiago, Chile
13 Agustinas 1357, 10 Piso, Santiago, Chile
14 AV. Valentina Mello Freire Borenstein, Dona Loloya 333 Jardim Sao Francisco, 08735-270 Mogi Das Cruzes, Sao Paulo SP, Brazil
15 539/2 Sri Ayudhya Road, Rajathewee District, Bangkok 10400
16 64/8 Moo 4 Eastern Seaboard Industrial Estates, T.Pluakdaeng, A.Pluakdaeng, Rayong, 21140, Thailand
17 Kawasan Industri MM2100, Ji Anu Blok AE8, Kel. Jatiwangi, Kec, Cikarang Barat, Kabupaten Bekasi, Jawa Barat, Indonesia
18 Alamanda Tower, Jl. TB. Simatupang Kav. 23-24, 20th Floor, Cilandak Barat, Jakarta, 12430, Indonesia
19 1st Floor, Millenium Park Building, Ave. Vladamire Lenine, 146, Maputo, Mozambique
20 300 Janadel Avenue, Halfway House, Midrand, 1685, South Africa
21 2 Eglin Road, Sunninghill, Gauteng, 2157, South Africa
22 300 Janadel Avenue, Halfway House, Midrand, 1685, South Africa
23 132 Principe De Vergara, 28002, Madrid, Spain
24 968 Wang Qiao Road Wang Qiao, Industrial Zone Pu-Dong New Area, Shangai, 201201, China
25 556, Lavalle, Piso 3° E, Buenos Aires, Argentina
26 Saba 1, Suite 3302 PO Box 261107 Jumeirah Lake Towers, Dubai, United Arab Emirates
27 9 Sint Jansweg, Haven 1602, B-9130 Beveren-Kallo, Belgium
28 P.O Box 38983, Abu Dhabi, United Arab Emirates
29 PO Box 6 Postal Code 222, Raoyah, Thumrait Sultanate of Oman, Oman
30 No.25, Tongjiang Road(N), Chunjiang Town, Xinbei District, Chang Zhou, Jiang Su Province, China
31 C/O Heibelberg Cement Sweden AB, Box 47055, 10074, Stockholm, Sweden
32 40-50 Windmill Street, Gravesend, Kent, DA12 1BG
33 Concha y Toro, N° 0602, Puente Alto, Santiago, Chile
34 Suite 125, 90 kingbolt Crescent Wapadrand, Pretoria 0050, South Africa
35 Tower Bridge House, St Katharine's Way, London, E1W 1D
36 539/2 Sri Ayudhya Road, Rajathewee District, Bangkok 10400
37 Plot No. 616 & 617, Village Kuruli, Pune-Nashik Road, Chakan, Pune, Maharashtra, 410501, India
38 Calle 3 3-49 Este, Mosquera, Cudinamarca, Colombia
39 Calle Norte, Local Fibras Fivenglass, Zona Industrial Soco, La Victoria, Venezuela
40 To be confirmed with Company Secretary
41 Kutzhuette, 37445, Walkenried, Germany
42 Polcher Strasse 113, D-56727 Mayen, Germany
43 Schanzenstrasse 84, 40549, Dusseldorf, Germany
44 18 Skeen Boulevard, Bedfordview, Johannesburg, 2007, South Africa
45 300 Crownpoint Road, Glasgow, West Central Lowlands, G40 2UJ
46 Suipacha 1111, Piso 18, Ciudad Autónoma de Buenos Aires, Buenos Aires, Argentina
47 Avenue Alexander Fleming 1, 1348 Ottignies-Louvain-la-Neuve, Belgium
48 Flat 401A, Shree Guru Harkrishna Bhavan, Dr. Charat Singh, Colony, A.K. Road, Andheri East, Mumbai, Mumbai, 400093, India

7. DEBTORS: AMOUNTS FALLING DUE WITHIN ONE YEAR

	2022	2021
	£'000	£'000
Amounts owed by group undertakings	7	7

Cash pooling balances are repayable on demand and interest is charged/credited at a variable arms-length value.

8. CREDITORS: AMOUNTS FALLING DUE WITHIN ONE YEAR

	2022	2021
	£'000	£'000
Tax	1	1

9. CALLED UP SHARE CAPITAL

Allotted, issued and fully paid:

Number:	Class:	Nominal value:	2022 £'000	2021 £'000
3,771,563,904	Ordinary	90p	3,394,408	3,394,408

10. RESERVES

	Retained earnings £'000
At 1 January 2022	377,162
Profit for the year	97,861
Dividends	(97,861)
At 31 December 2022	377,162

	Retained earnings £'000
At 1 January 2021	377,154
Profit for the year	74,608
Dividends	(74,600)
At 31 December 2021	377,162

Dividend policy and distributable reserves

The company's distributable reserves are represented by retained earnings on the balance sheet. The company does not follow an agreed dividend policy.

11. ULTIMATE CONTROLLING PARTY

The ultimate and controlling party parent company is Compagnie de Saint-Gobain, which is incorporated in France and listed on the Paris, London, Frankfurt and other major European stock exchanges.

The largest group in which the results of the company are consolidated is that headed by Compagnie de Saint-Gobain. The consolidated financial statements are prepared in accordance with the International Financial Reporting Standards as adopted by the EU. No other group financial statements include the results of the company.

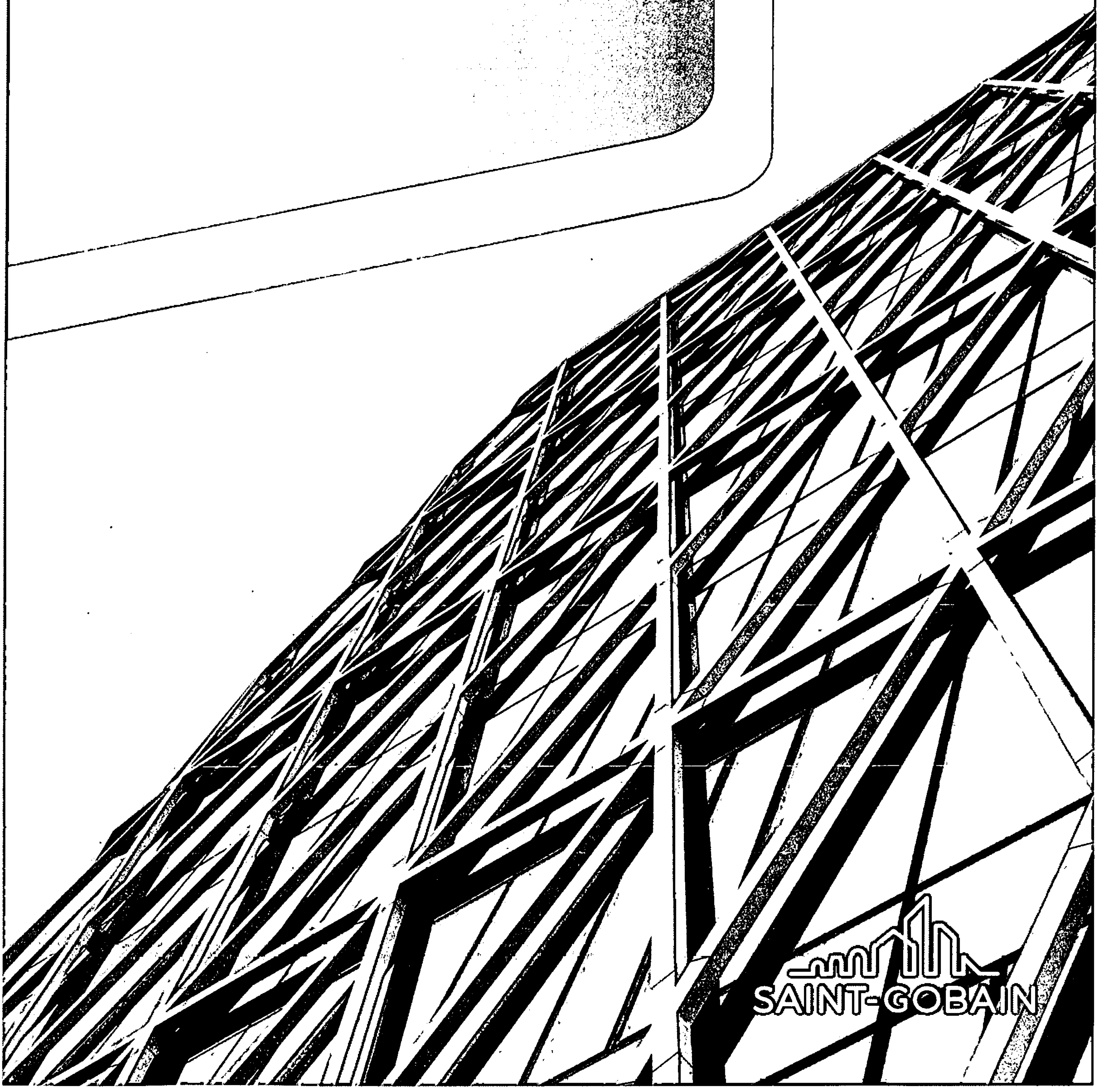
Copies of the Compagnie de Saint-Gobain Group financial statements may be obtained from the Corporate Secretary at the company's registered address, Tour Saint-Gobain, 12 Place de l'Iris, 92400 Courbevoie, France.

12. ACCOUNTING ESTIMATES AND JUDGEMENTS

The carrying amounts of the company's investment is reviewed at each balance sheet date. In testing for impairment management have made certain assumptions concerning the future development of the underlying business that is consistent with the five year plan for the entity. The future cash flows have been discounted to provide a net present value for the business based on a rate of 6.85%.

CONSOLIDATED FINANCIAL STATEMENTS

December 31, 2022



Compagnie de Saint-Gobain

Société Anonyme

Tour Saint-Gobain

12, place de l'Iris

92400 Courbevoie

Statutory auditors' report on the consolidated financial statements

For the year ended December 31, 2022

This is a translation into English of the statutory auditors' report on the financial statements of the Compagnie de Saint-Gobain issued in French and it is provided solely for the convenience of English speaking users.

This statutory auditors' report includes information required by French law, such as information about the appointment of the statutory auditors or verification of 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

Société Anonyme

Tour Saint-Gobain

12, place de l'Iris

92400 Courbevoie

Statutory auditors' report on the consolidated financial statements

For the year ended December 31, 2022

To the annual general meeting of Compagnie de Saint-Gobain Company

Opinion

In compliance with the engagement entrusted to us by your annual general meeting, we have audited the accompanying consolidated financial statements of the Compagnie de Saint-Gobain *Company* for the year ended on December 31, 2022.

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, 2022, and of the results of its operations for the year then ended in accordance with International Financial Reporting Standards as adopted by the European Union.

The audit opinion expressed above is consistent with our report to the Audit 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, 2022, to the date of our report, and specifically we did not provide any prohibited non-audit services referred to in Article 5(1) of Regulation (EU) No 537/2014.

Justification of Assessments – Key Audit Matters

In accordance with the requirements of Articles L. 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, approved in the conditions mentioned above, and in forming our opinion thereon, and we do not provide a separate opinion on specific items of the consolidated financial statements.

<u>Valuation of goodwill, intangible assets and property, plant & equipment</u>

Description of risk

The net carrying amounts of goodwill, others intangible assets and property, plant & equipment were material at December 31, 2021, representing €12,858 million, €4,026 million, and €12,163 million, respectively that is to say 52% of total asset.

These assets may present a risk of impairment 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 and changes in legislation or regulations. These changes are likely to have an impact on the Group's forecast cash flow and, consequently, the recoverable amount of assets.

The impairment tests performed by Management using the method described in Note 7.5 to the consolidated financial statements led to book an impairment losses of €299 million in the year ended December 31, 2021 (mainly including an impairment on assets held for sale related to the distribution activity in UK), as indicated in Note 4.3 to the consolidated financial statements.

The valuation of these assets is a key audit matter, particularly for the cash generating units presenting a risk of impairment, given the materiality of their amount in the consolidated balance sheet and the high level of judgment required by Management in assessing impairment losses. Judgements include multiples of a normative basis of performance and assumptions regarding future changes in revenue in volume and value, profitability, investments and other cash flows related to the operation of these assets, as well as the determination of an appropriate discount rate applied 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 the impacts of the Group's commitments to carbon neutrality and exercised our professional judgment to assess the position adopted by Management. We tested the effectiveness of the controls implemented by the Group to ensure the quality and reliability of these 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 determining 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, the average perpetual growth rate or multiples of a normative performance basis deemed appropriate to the valuation of cash-generating units, by referring to both external market data and comparable company analyses.

For the most sensitive cash-generating units presenting a risk of impairment, 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 Businesses. We paid particularly close attention to the calculation of the normalized amount of terminal cash flows projected to perpetuity. We performed our own sensitivity analyses of certain key variables of the measurement model, particularly with regard to the inclusion of CO_2 emissions when assessing the materiality of potential impacts on the recoverable amounts of the most high-risk assets

For the cash-generating unit of the UK distribution for which the Group has retained the fair value less costs to sell, we verified the consistency of the fair value adopted with signed sales agreements and reviewed the method of calculating the impairment loss resulting from the transaction.

We verified that the disclosures provided in the notes 5.1.4, 7.1, 7.2, 7.3 et 7.5 to the consolidated financial statements on the valuation of goodwill, intangible assets and property, plant & equipment, the underlying assumptions and sensitivity analyses were appropriate.

<u>Measurement of provisions related to asbestos litigations in the United-State of America</u>

Description of risk

As indicated in Note 9 to the consolidated financial statements, the risk of being called upon to finance the costs of the bankruptcy proceedings of DBMP, an affiliate of CertainTeed LLC which holds the historical assets of the former entity CertainTeed Corporation, is subject to a provision amounting to $410m (€385m) at December 31, 2022.

With regard to this funding risk, determining and measuring the provision 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 this provision. 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): 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 verifications required by laws and regulations of the information pertaining to the Group presented in the management report of Board of Directors.

We have no matters to report as to its fair presentation and its 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 Group management report [in the information pertaining to the Group presented in the management report], it being specified that, in accordance with the provisions of Article L.823-10 of the 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 on by an independent third party.

Other Legal and Regulatory Verifications or Information

Format of 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 under the responsibility of the General Manager, complies with the single electronic format defined in the European Delegated Regulation No 2019/815 of 17 December 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.

Due to the technical limitations inherent to the block-tagging of the consolidated financial statements according to the European single electronic format, the content of certain tags of the notes may not be rendered identically to the accompanying consolidated financial statements.

Moreover, 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 as statutory auditors of Compagnie de Saint-Gobain by the annual general meeting held on June 10, 2004, for KPMG and on June 2, 2022 for Deloitte & Associés.

As at December 31, 2022, KPMG and Deloitte & Associés were in the 19th year and 1st year of total uninterrupted engagement.

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 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.

Paris-La Défense, February 23, 2023

KPMG S.A. Deloitte & Associés

The Statutory Auditors

French original signed by

Pierre-Antoine DUFFAUD Laurent CHILLET Frédéric GOURD Bénédicte MARGERIN

CONSOLIDATED BALANCE SHEET

Assets

(in EUR millions)	Notes	Dec. 31, 2022	Dec. 31, 2021
Goodwill	(7.1)	12,858	11,181
Other intangible assets	(7.2)	4,026	2,705
Property, plant and equipment	(7.3)	12,163	11,663
Right-of-use assets	(7.4)	2,752	2,959
Investments in equity-accounted companies	(8.1) (8.2)	639	536
Deferred tax assets	(12.2)	382	576
Pension plan surpluses	(6.3)	569	894
Other non-current assets	(8.3)	537	528
NON-CURRENT ASSETS		**33,926**	**31,042**
Inventories	(5.4)	7,219	6,598
Trade accounts receivable	(5.4)	5,178	5,104
Current tax receivable	(5.4) (12.1)	76	166
Other receivables	(5.4)	1,450	1,504
Assets held for sale	(4.3)	1,394	227
Cash and cash equivalents	(10.3)	6,134	6,943
CURRENT ASSETS		**21,451**	**20,542**
TOTAL ASSETS		**55,377**	**51,584**

Liabilities

(in EUR millions)	Notes	Dec. 31, 2022	Dec. 31, 2021
EQUITY AND LIABILITIES			
Shareholders' equity	(11.1)	22,711	20,715
Non-controlling interests		443	411
TOTAL EQUITY		**23,154**	**21,126**
Non-current portion of long-term debt	(10.3)	8,964	9,194
Non-current portion of long-term lease liabilities	(10.3)	2,324	2,474
Provisions for pensions and other employee benefits	(6.3)	1,712	2,014
Deferred tax liabilities	(12.2)	768	555
Other non-current liabilities and provisions	(9.1)	1,092	1,066
NON-CURRENT LIABILITIES		**14,860**	**15,303**
Current portion of long-term debt	(10.3)	1,841	1,336
Current portion of long-term lease liabilities	(10.3)	597	681
Current portion of other liabilities and provisions	(9.1)	693	479
Trade accounts payable	(5.4)	7,266	6,903
Current tax liabilities	(5.4) (12.1)	263	236
Other payables	(5.4)	5,078	4,808
Liabilities held for sale	(4.3)	985	167
Short-term debt and bank overdrafts	(10.3)	640	545
CURRENT LIABILITIES		**17,363**	**15,155**
TOTAL EQUITY AND LIABILITIES		**55,377**	**51,584**

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

CONSOLIDATED INCOME STATEMENT

(in EUR millions)	Notes	2022	2021
Sales	(5.1)	51,197	44,160
Cost of sales	(5.1)	(38,006)	(32,440)
General expenses including research	(5.1)	(7,915)	(7,265)
Share in net income of core business equity-accounted companies	(8.1)	61	52
OPERATING INCOME		**5,337**	**4,507**
Other business income	(5.1)	245	176
Other business expense	(5.1)	(1,000)	(747)
BUSINESS INCOME		**4,582**	**3,936**
Borrowing costs, gross		(250)	(240)
Income from cash and cash equivalents		54	7
Borrowing costs, net, excluding lease liabilities		**(196)**	**(233)**
Interest on lease liabilities		(66)	(54)
Other financial income and expense		(142)	(120)
NET FINANCIAL EXPENSE	**(10.2)**	**(404)**	**(407)**
Share in net income of non-core business equity-accounted companies	(8.1)	5	4
Income taxes	(12.1) (12.2) (12.3)	(1,082)	(919)
NET INCOME		**3,101**	**2,614**
GROUP SHARE OF NET INCOME		**3,003**	**2,521**
Non-controlling interests		98	93

	Notes	2022	2021
EARNINGS PER SHARE, GROUP SHARE (in EUR)	**(11.2)**	**5.84**	**4.79**
Weighted average number of shares in issue		514,372,413	526,244,506
DILUTED EARNINGS PER SHARE, GROUP SHARE (in EUR)	**(11.2)**	**5.80**	**4.76**
Weighted average number of shares assuming full dilution		517,595,809	529,905,261

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

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME AND EXPENSE

(in EUR millions)	Notes	2022	2021
NET INCOME		**3,101**	**2,614**
Items that may be subsequently reclassified to profit or loss			
Translation adjustments and restatement for hyperinflation		323	910
Changes in fair value of financial instruments	(10.4)	23	21
Tax on items that may be subsequently reclassified to profit or loss		(4)	(8)
Items that will not be reclassified to profit or loss			
Changes in actuarial gains and losses	(6.3)	(12)	802
Tax on items that will not be reclassified to profit or loss	(12.1) (12.2)	(10)	(142)
Changes in assets at fair value through equity and other items	(8.3)	(9)	37
OTHER ITEMS OF COMPREHENSIVE INCOME (EXPENSE)		**311**	**1,620**
COMPREHENSIVE INCOME (EXPENSE)		**3,412**	**4,234**
Group share		3,327	4,139
Non-controlling interests		85	95

Translation adjustments in 2022 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 EUR millions)	Notes	2022	2021
NET INCOME		**3,101**	**2,614**
Share in net income (loss) of equity-accounted companies, net of dividends received	(8.1)	(58)	(23)
Depreciation, amortization and impairment of assets (including right-of-use assets)	(5.1) (7)	2,442	2,174
Gains and losses on disposals of assets	(5.3)	42	7
Unrealized gains and losses arising from changes in fair value and share-based payments		21	33
Restatement for hyperinflation		18	13
Changes in inventory	(5.4)	(855)	(1,179)
Changes in trade accounts receivable and payable, and other accounts receivable and payable	(5.4)	785	912
Changes in tax receivable and payable	(5.4)	51	50
Changes in deferred taxes and provisions for other liabilities and charges	(6.3) (9.1) (12.2) (12.3)	164	(162)
NET CASH FROM OPERATING ACTIVITIES		**5,711**	**4,439**
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)	(1,889)	(1,441)
Acquisitions of shares in controlled companies, net of cash acquired		(3,413)	(913)
Increase in investment-related liabilities	(9.1)	57	45
Decrease in investment-related liabilities	(9.1)	(21)	(5)
Acquisitions of other investments	(8.3)	(99)	(33)
Investments		**(5,365)**	**(2,347)**
Disposals of property, plant and equipment and intangible assets	(7.2) (7.3)	89	207
Disposals of shares in controlled companies, net of cash divested		416	(120)
Disposals of other investments	(8.3)	6	4
(Increase) decrease in amounts receivable on sales of fixed assets	(5.4)	(32)	(20)
Divestments		**479**	**71**
Increase in loans and deposits	(8.3)	(70)	(76)
Decrease in loans and deposits	(8.3)	118	153
NET CASH FROM (USED IN) INVESTMENT AND DIVESTMENT ACTIVITIES		**(4,838)**	**(2,199)**

(in EUR millions)	Notes	2022	2021
Issues of capital stock	(a)	222	199
(Increase) decrease in treasury stock	(a)	(781)	(854)
Dividends paid	(a)	(833)	(697)
Transactions with shareholders of the parent company		**(1,392)**	**(1,352)**
Capital increases in non-controlling interests	(a)	15	13
Acquisitions of minority interests without gain of control		(2)	(9)
Disposals of minority interests without loss of control		39	12
Changes in investment-related liabilities following the exercise of put options of minority shareholders	(9.1)	0	(21)
Dividends paid to non-controlling interests and change in dividends payable	(a)	(77)	(31)
Transactions with non-controlling interests		**(25)**	**(36)**
Increase (decrease) in bank overdrafts and other short-term debt		(46)	(107)
Increase in long-term debt	(b) (10.3)	1,624	52
Decrease in long-term debt	(b) (10.3)	(1,286)	(1,584)
Decrease in lease liabilities	(b)	(725)	(762)
Change in debt		**(433)**	**(2,401)**
NET CASH FROM (USED IN) FINANCING ACTIVITIES		**(1,850)**	**(3,789)**
Net effect of exchange rate changes on cash and cash equivalents		175	31
Net effect of changes in fair value on cash and cash equivalents		5	1
Cash and cash equivalents classified within assets held for sale		(12)	17
INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS		**(809)**	**(1,500)**
CASH AND CASH EQUIVALENTS AT BEGINNING OF PERIOD		**6,943**	**8,443**
CASH AND CASH EQUIVALENTS AT END OF PERIOD		**6,134**	**6,943**

(a) Please refer to the consolidated statement of changes in equity.
(b) Including bond premiums, prepaid interest, issue costs and interest on lease liabilities.

In 2022, income tax paid represented €1,001 million (€793 million in 2021), total rental expenses paid €974 million (€905 million in 2021), including €66 million in interest paid on lease liabilities (€54 million in 2021), and interest paid net of interest received €210 million (€244 million in 2021).

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

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

(in EUR millions)	Capital stock	Additional paid-in capital and legal reserve	Retained earnings and consolidated net income	Cumulative translation adjustments	Fair value reserves	Treasury stock	Share-holders' equity	Non-controlling interests	Total equity
AT JANUARY 1, 2021	**2,131**	**5,104**	**13,687**	**(2,857)**	**(48)**	**(125)**	**17,892**	**311**	**18,203**
Income and expense recognized directly in equity			678	908	32		1,618	2	1,620
Net income for the period			2,521				2,521	93	2,614
Total income and expense for the period			**3,199**	**908**	**32**		**4,139**	**95**	**4,234**
Issues of capital stock									
Group Savings Plan	22	177					199		199
Other								13	13
Dividends paid			(698)				(698)	(31)	(729)
Shares purchased and sold			19			(873)	(854)		(854)
Shares canceled	(57)	(737)				794			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**
Income and expense recognized directly in equity			(26)	335	15		324	(13)	311
Net income for the period			3,003				3,003	98	3,101
Total income and expense for the period			**2,977**	**335**	**15**		**3,327**	**85**	**3,412**
Issues of capital stock									
Group Savings Plan	20	202					222		222
Other								15	15
Dividends paid			(833)				(833)	(78)	(911)
Shares purchased and sold			8			(789)	(781)		(781)
Shares canceled	(53)	(617)				670			0
Share-based payments			43				43		43
Changes in Group structure and other			18				18	10	28
AT DECEMBER 31, 2022	**2,063**	**4,129**	**18,457**	**(1,614)**	**(1)**	**(323)**	**22,711**	**443**	**23,154**

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

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

NOTE 1	**Accounting principles and policies**	**9**
1.1	Standards applied	9
1.2	Estimates and assumptions	10
NOTE 2	**Impact of the Russia-Ukraine conflict**	**10**
NOTE 3	**Climate issues**	**11**
3.1	The commitment to carbon neutrality is at the heart of the Group's strategy	11
3.2	The commitment to carbon neutrality is taken into account when preparing the Group's financial statements	11
NOTE 4	**Scope of consolidation**	**14**
4.1	Accounting principles related to consolidation	14
4.2	Changes in Group structure	15
4.3	Assets and liabilities held for sale	18
4.4	Changes in the number of consolidated companies	18
4.5	Off-balance sheet commitments related to companies within the scope of consolidation	19
NOTE 5	**Information concerning the Group's operating activities**	**20**
5.1	Income statement items	20
5.2	Segment information	21
5.3	Performance indicators	22
5.4	Working capital	24
5.5	Off-balance sheet commitments related to operating activities	25
NOTE 6	**Employees, personnel expenses and employee benefit obligations**	**27**
6.1	Employees of fully consolidated companies	27
6.2	Management compensation	27
6.3	Provisions for pensions and other employee benefits	27
6.4	Share-based payments	31
NOTE 7	**Intangible assets, property, plant and equipment, and right-of-use assets**	**34**
7.1	Goodwill	34
7.2	Other intangible assets	34
7.3	Property, plant and equipment	35
7.4	Right-of-use assets linked to leases	37
7.5	Impairment review	39
NOTE 8	**Investments in equity-accounted companies and other non-current assets**	**41**
8.1	Changes in investments in equity-accounted companies	41
8.2	Transactions with equity-accounted companies – related parties	42
8.3	Other non-current assets	42
NOTE 9	**Other current and non-current liabilities and provisions, contingent liabilities and litigation**	**43**
9.1	Provisions for other liabilities and charges	43
9.2	Contingent liabilities and litigation	44
NOTE 10	**Shareholders' equity and earnings per share**	**48**
10.1	Financial risks	48
10.2	Net financial income (expense)	50
10.3	Net debt	50
10.4	Financial instruments	54
10.5	Financial assets and liabilities	56
NOTE 11	**Shareholders' equity and earnings per share**	**58**
11.1	Equity	58
11.2	Earnings per share	59
NOTE 12	**Tax**	**60**
12.1	Income taxes	60
12.2	Deferred tax	60
12.3	Tax loss carry-forwards	61
NOTE 13	**Subsequent events**	**61**
NOTE 14	**Fees paid to the Statutory Auditors**	**61**
NOTE 15	**Information on the issuer**	**62**
NOTE 16	**Principal consolidated companies**	**63**

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 23, 2023 by the Board of Directors and will be submitted to the Shareholders' Meeting of June 8, 2023 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, 2021, 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, 2022. 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, 2022

The following standards and amendments, effective since January 1, 2022, were applied where necessary to the 2022 consolidated financial statements:

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

The main IFRIC decisions published in 2022 concern:

- IFRS 9 and IAS 20, "TLTRO III Transactions";
- IAS 7, "Demand Deposits with Restrictions on Use arising from a Contract with a Third Party";
- IFRS 15, "Principal versus Agent: Software Reseller";
- IAS 37, "Negative Low Emission Vehicle Credits";
- IFRS 17, "Transfer of Insurance Coverage under a Group of Annuity Contracts";
- IAS 32, "Special Purpose Acquisition Companies (SPAC): Classification of Public Shares as Financial Liabilities or Equity";
- IFRS 9 and IFRS 16, "Lessor Forgiveness of Lease Payments";
- IFRS 2 and IAS 32, "Special Purpose Acquisition Companies (SPAC): Accounting for Warrants at Acquisition";
- IFRS 17 and IAS 21, "Multi-currency Groups of Insurance Contracts".

The annual improvements to IFRSs - 2018-2020 Cycle applicable at January 1, 2022 concern the following standards:

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

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, 2022

The new standards, interpretations and amendments to existing standards applicable to accounting periods starting on or after January 1, 2023 were not early adopted by the Group at December 31, 2022. These are:

- Amendment to IAS 1 and IFRS Practice Statement 2, "Classification of Liabilities as Current or Non-current" along with significant information on accounting policies;
- Amendment to IFRS 17, "Initial Application of IFRS 17 and IFRS 9 - Comparative Information";
- Amendment to IFRS 17, "Insurance Contracts", including amendments published in June 2020;
- Amendment to IAS 8, "Definition of Accounting Estimates";
- Amendment to IAS 12, "Deferred Tax related to Assets and Liabilities arising from a Single Transaction".

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);
- Amendment to IFRS 16, "Leaseback Liability in a Sale and Leaseback".

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 payments (see note 6, p. 27), 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 (see note 7, p.34), provisions for other liabilities (see note 9, p. 43), the measurement of financial instruments (see note 10,, p. 48), and taxes (see note 12, p. 60).

NOTE 2 IMPACT OF THE RUSSIA-UKRAINE CONFLICT

Amid the fast-changing, complex environment of the Russia/Ukraine conflict, the Group's first priority has been to affirm its support for and solidarity with Ukraine and the Ukrainian people, and to ensure the safety of all its Ukrainian employees and their families throughout the world.

The Group's teams in Poland and Romania stepped up to provide humanitarian and financial aid to refugees in their countries. This was in addition to the financial support provided by the Group, in particular to the International Committee of the Red Cross.

The main impacts of the conflict on the Group's strategy and financial performance were analyzed from various standpoints, as discussed below.

Group operating activities

Since the outbreak of the conflict between Russia and Ukraine, in addition to the Group's application of the sanctions imposed against Russia, Saint-Gobain has decided to halt all its exports to customers in Russia and Belarus, and all its imports from these two countries, and has shelved all new investment projects in these countries.

Nevertheless, its local Russian operations, which represent around 0.7% of the Group's worldwide sales and do not involve any local partnerships, continue to operate autonomously, with locally produced solutions sold exclusively on local construction markets.

In Ukraine, Saint-Gobain does not have any industrial operations, and its sales office in Kyiv has been closed.

In organizational terms, Ukraine is now included in a Poland-Ukraine cluster falling under the direct responsibility of the management team in Poland.

One of the indirect consequences of the conflict is the steep rise in inflation. As a result, the Saint-Gobain Group recorded a year-on-year rise of around €3 billion in its energy and raw materials costs. Inflation concerns in particular the cost of energy, especially in Europe.

Thanks to its policy of hedging energy costs, its efforts in terms of pricing, and the value-added delivered by its solutions, the Saint-Gobain Group was able to generate a positive sale price/cost (raw materials and energy) differential in 2022. The Group has hedges in place for 2023 covering around 70% of its natural gas and over 60% of its electricity purchases in Europe.

More specifically, the countries most sensitive to Russian gas supplies for Saint-Gobain are Germany, Poland and Czechia. The Group has drawn up various plans for continuing its operations in these countries, enabling it to significantly mitigate the impact of a scenario in which all or some supplies of Russian gas are terminated. Various levers can be used by the Group, such as the classification of priority industries, using alternative energy sources prepared at certain sites, and increasing flexibility of its production capacities.

Scope of consolidation

Insofar as the Group continues to produce and sell in Russia for the local market, and to ensure its local business can continue to operate with complete autonomy of management and control of returns, Saint-Gobain still controls its Russian subsidiaries.

In accordance with IFRS 10, its Russian and Ukrainian companies have not therefore been deconsolidated, and continue to be included in the Group's scope of consolidation for the preparation of the 2022 consolidated financial statements.

Impairment review in light of the Russia/Ukraine conflict

Total non-current assets in Russia represent €207 million, or 0.6% of the Group's total non-current assets.

No evidence of impairment was identified for these companies. Consequently, no impairment losses related to the Russia/Ukraine conflict were recognized in 2022.

Financial risks (credit, liquidity, forex)

Given the Group's limited presence in Russia and Ukraine, the conflict has not generated any credit or liquidity risks, and forex exposure is also being managed effectively.

Since March 2, 2022, the Group has been using the Russian ruble exchange rate published by Reuters for the translation of its consolidated financial statements.

While the Russia/Ukraine conflict has not had a direct material impact on the financial statements for 2022, the situation remains unstable and complex. The Group therefore remains vigilant in analyzing the potential future impacts of the conflict.

NOTE 3 CLIMATE ISSUES

Sustainability is essential in supporting the growth of the Saint-Gobain Group and sustainability issues are therefore an integral part of its growth outlook.

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 UN Global Compact's "Business ambition for 1.5°C" pledge on September 23, 2019 in New York, thereby affirming its commitment to achieving carbon neutrality by 2050.

In order to achieve this by 2050, Saint-Gobain defined a 2030 roadmap in November 2020. The roadmap identifies the levers and action plans that will enable the Group to meet its goal of a 33% reduction in scope 1 and 2 carbon emissions in absolute terms compared to a 2017 baseline, and a 16% reduction for scope 3 emissions.

The Group's capital expenditure is aligned with the investment requirements identified in this CO_2 roadmap.

Saint-Gobain's roadmap and commitment to carbon neutrality by 2050 apply to all of its activities. To date, no activity has been identified as being incompatible with this target.

As well as its commitments to reduce its emissions through to 2030, the Group seeks to develop and propose solutions to help decarbonize the construction sector and its customers' markets.

- After validating its 2030 greenhouse gas emissions reduction targets in 2020, in September 2022 the Science-Based Targets initiative (SBTi) approved the Group's commitment to being net-zero-carbon by 2050, considering its roadmap to be consistent with the new net-zero standard and the Paris climate agreement.
- In 2022, Saint-Gobain was once again recognized for its leadership in the fight against climate change by the CDP, a global environmental non-profit organization. In 2022, for the second time in a row, the Group was included in the CDP's "Climate Change A List" comprising 283 companies out of the more than 15,000 that responded to the CDP's 2022 climate change questionnaire.
- The innovative solutions developed by Saint-Gobain to improve the energy performance of buildings help reduce both the negative impact of construction on the environment and their occupants' energy bills, while also enhancing occupant well-being. Saint-Gobain's solutions play an important role in the fight against climate change, since they reduce the amount of greenhouse gas emissions by reducing energy use. The Group's thermal insulation and insulating glass solutions provide benefits in terms of energy performance and greenhouse gas emissions that significantly outweigh the carbon footprint associated with their production. In 2021, Saint-Gobain estimated that the solutions produced and sold by the Group in one year had helped avoid nearly 1,300 million tonnes of CO_2 emissions over their lifespan.
- In 2022, the Group further strengthened its position in the construction chemicals market by acquiring GCP Applied Technologies Inc., a company operating 50 production sites in 38 countries whose products play a significant role in helping to decarbonize construction through innovative admixtures that reduce the carbon footprint of cement.
- In order to increase the percentage of sales represented by its sustainable solutions, Saint-Gobain has developed a method for evaluating the environmental benefits of its solutions for all stakeholders. It aims to generate 75% of its sales from sustainable solutions by 2025.

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.

A Group-wide commitment

All Regions and High Performance Solutions (HPS) have drawn up dynamic CO_2 roadmaps through to 2030, based on the principle of a yearly review and consistent with the main financial deadlines (three-year business plan and budget).

These CO_2 roadmaps are broken down by country or entity, plant and project, and together, will be used to justify the Group's 2030 emissions reduction target. Specific projects have been identified and evaluated in all countries and are part of an investment plan set out in the 2030 CO_2 roadmap, with an average budget of €100 million per year between 2020 and 2030.

These roadmaps focus on improving operating efficiency, changing the energy mix, rolling out new technologies, and investing to reduce CO_2 emissions.

Marketing teams are also involved, adapting product design to reduce environmental impact.

2022 was shaped by:

- An acceleration in the delivery of technological developments and projects set out in the Group's roadmap to carbon neutrality:
  - On May 16, 2022, Saint-Gobain became the first company in the world to achieve zero-carbon production (scopes 1 and 2) of flat glass, using 100% recycled glass (cullet) and 100% green energy, produced from biogas and decarbonized electricity. It was implemented at Saint-Gobain's flat glass manufacturing plant in Aniche, Northern France.
  - In Sweden in the first half of 2022, the Balsta plant carried out a zero-carbon plasterboard campaign (scopes 1 and 2) powered by biogas and 100% green electricity, with up to 30% recycled content. Elsewhere, the Group is building two fully-electric plants in Norway and Canada with net-zero-carbon production (scopes 1 and 2), powered by hydroelectricity. More than €90 million in investments are needed to electrify these plants, while more energy efficient processes enable energy savings of up to 30%.
  - In line with the Group's objectives to accelerate the transition to a circular economy, Saint-Gobain was the first manufacturer in France to produce and

market a plasterboard made from more than 50%-recycled gypsum.

- The signature of new renewable power purchase agreements (PPA - scope 2) in North America (10-year PPA for 200MW of solar energy, which should reduce electricity-related CO_2 emissions by 33% for its 145 industrial sites in North America), in Poland (15-year contract for the purchase of wind and solar power, covering nearly 45% of electricity requirements), and in Spain (11-year contract for the purchase of wind, solar and hydroelectric power, covering 55% of electricity requirements).

Basis of measurement applicable to assets incorporating the cost of emissions per tonne of CO_2

The Group's commitments to carbon neutrality were taken into account when carrying out the sensitivity tests as part of the annual impairment testing of its cash-generating units (CGUs).

Based on information on current CO_2 emissions from production sites, and factoring in projections and assumptions as regards business trends and CO_2 emissions reductions (scopes 1 and 2), validated by each of the Regions and by High Performance Solutions, a projection of future CO_2 emissions was determined for each site up to 2030.

These projections take into account planned investments to:

- Maximize energy efficiency by exploring all energy switching options (biofuel, hydrogen or synthetic fuel, green electricity);
- Make products lighter, replace them with low-carbon alternatives, increase recycled content and significantly rethink formulations and processes.

For the European Union scope, the Group has calculated projected CO_2 emissions reductions up to 2030 based on detailed roadmaps by activity, taking into account historical business levels, a factor reflecting exposure to the risk of carbon leakage, and a cross-sector adjustment factor, as well as the stock of CO_2 emissions allowances held at the end of December 2022.

It should be noted that the annual sensitivity tests for 2022 also factored in the assumption dated December 18, 2022 put forward by the European Council and Parliament regarding carbon market reform, according to which free CO_2 emissions allowances granted to industry under the European Union Emissions Trading Scheme (EU ETS) would be gradually phased out between 2026 and 2034 (100%), with 2.5% phased out by 2026, 5% by 2027, 10% by 2028, 22.5% by 2029 and 48.5% by 2030.

These CO_2 emissions were valued on the basis of a euro price per tonne resulting from a panel of 11 analysts as of November 11, 2022 (source: Carbon Market Pulse Limited, an independent private company based in London).

(in euros/tonne)	2023	2024	2025	2026	2030
Average (11 analysts)	77	90	103	120	140

For the non-Europe scope, tonnes of CO_2 emitted were priced in the tests as from 2023 assuming a fixed price of €75 per tonne until 2030 and no government support schemes such as CO_2 emissions allowances.

This assumption of €75 per tonne is consistent with the application of an internal carbon price set by Saint-Gobain, and is conservative in that few countries outside Europe have so far defined a price per tonne of carbon.

In addition to the action plans rolled out at its production sites, the Group has set two internal carbon prices:

- €75 per tonne for major industrial investment projects and investments related to a change in energy source;
- €150 per tonne for R&D investment in breakthrough technology, particularly "low carbon" projects.

A similar approach has been adopted for major acquisitions, and includes the work that may be required to ensure that the carbon impact of these acquisitions is compatible with Saint-Gobain's roadmap.

Sensitivity tests were carried on the Group's assets across all of its industrial activities (excluding Distribution and the recent Chryso/GCP and Kaycan acquisitions).

The discounted future cash flows, calculated on the basis of the three-year business plan (2023-2025) were extrapolated to 2029 and then impacted by the projected cost of CO2 emissions net of the free emissions allowances received. These discounted cash flows were compared with the net value of the assets at December 31, 2022 (property, plant and equipment, intangible assets and working capital).

As a result of the sensitivity tests performed based on the aforementioned assumptions, no impairment would be recognized against the Group's non-current assets, since the headroom (€20.4 billion), i.e., the difference between discounted future cash flows and the net value of the assets tested (€20.9 billion) is significantly positive.

It should be noted that any increase in carbon prices will result in higher demand for Saint-Gobain's solutions, which is a driver of growth in business volumes and cash generation.

CO_2 emissions allowances

At the end of 2022, the Saint-Gobain Group had 4.4 million tonnes of greenhouse gas emissions allowances from the European Commission. Accordingly, it believes that its current level of allowances will continue to cover its emissions for at least five years.

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

Investments to reduce CO2 emissions are reported monthly by each Group company in the Group's financial reporting.

To help accelerate progress towards carbon-neutral production, €1 billion has been set aside over the ten years from 2021 to 2030 (i.e., an average of €100 million per year) for investments and R&D.

In 2022, the Group set aside €128 million in capital expenditure (€55 million in 2021) and €63 million in research and development expenditure (€44 million in 2021) to further its CO_2 emissions reduction strategy.

Sustainability-linked bond

In August 2022 Saint-Gobain completed a debt issue which included a 10-year €500 million Sustainability-Linked Bond (SLB) tranche paying a 2.625% coupon. The SLB is linked to two 2030 targets in relation to the 2017 baseline year: (i) reduce scope 1 and 2 CO_2 emissions by 33%, and (ii) reduce non-recovered production waste by 80%. A 0.375% step-up would apply on the 2032 coupon if either of these targets is not met.

Executive compensation policy

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

Consideration of future changes in regulations

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. In this respect, Saint-Gobain closely monitors international and European projects on sustainability reporting.

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.

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).

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.

The Group's exposure to Lebanon is not material, as sales and total non-current assets in the country represent less than 1% of the Group's consolidated data.

Turkey

Since February 2022, Turkey has had a three-year cumulative inflation rate above 100% and was therefore included in the list of hyperinflationary economies in March 2022. The Group's exposure to Turkey is not material, as sales and total non-current assets in the country represent less than 1% of the Group's consolidated data.

4.2 Changes in Group structure

Significant changes in the Group's structure during 2022 and 2021 are presented below and a list of the main consolidated companies at December 31, 2022 is provided in note 16, p.63.

4.2.1 Transactions carried out in 2022

In 2022, Saint-Gobain acquired 36 consolidated companies for a total purchase price of €3,712 million. The Group also sold 19 consolidated companies for a net sale price of €539 million.

Main acquisitions in 2022

In 2022, acquisitions represented full-year sales of €1,866 million and EBITDA of approximately €300 million.

- On January 2, 2022, Saint-Gobain completed the acquisition of Igland Industrier AS, a manufacturer of prefabricated garages for villas, which also has an assembly services network in Norway.
- On January 7, 2022, Saint-Gobain completed the acquisition of Fischer Ag, a Swiss kitchen and household appliance installation and repair company.
- On February 4, 2022, Saint-Gobain completed the acquisition of Rockwool India Pvt Ltd, a major player in the production of stone wool in India. This followed the announcement on December 21, 2021 of the agreement signed by Saint-Gobain with the Alghanim group.
- On April 1, 2022, Saint-Gobain finalized the acquisition of Impac, a leading player in the construction chemicals market in Mexico. This acquisition consolidates the Group's leadership in Latin America while accelerating its growth in the region by enriching its range of solutions for light and sustainable construction.
- On May 12, 2022, Saint-Gobain announced the acquisition of Global SFC, a major player in nano-ceramic window film coatings located in South Korea. The acquisition, which closed on April 22, 2022, will enhance the insulating properties of the Solar Gard® film line, a world leader in innovative solar control and surface protection film technologies for the sustainable construction and mobility markets.
- On the same date, Saint-Gobain announced the acquisition of Monofrax LLC, a leading regional player in fused cast refractories in the United States. This acquisition, which closed on April 20, 2022, will enhance Saint-Gobain's global footprint and enable further localization of refractory production close to the end-customer. It will enable the development of high-end glass melting applications and further decarbonization of light metal smelting processes.
- On August 1, 2022, Saint-Gobain announced that it had completed the acquisition of Kaycan on July 29, 2022. Kaycan is a family-owned manufacturer and distributor of exterior building materials in Canada and the United States. Thanks to its leading position on siding in Canada, this acquisition reinforces Saint-Gobain's worldwide leadership in light and sustainable construction by becoming the top siding player in

Canada and enlarging its vinyl offer across the United States.

The acquisition of Kaycan represents pro forma full-year sales of €409 million and €70 million in EBITDA for 2022.

- On September 27, 2022, Saint-Gobain completed the acquisition of GCP Applied Technologies, a major global player in construction chemicals. 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.

The acquisition of GCP Applied Technologies represents pro forma full-year sales of €952 million and €162 million in EBITDA for 2022.

- Saint-Gobain completed the acquisition of Matchem in Brazil on December 22, 2022. Together with Quartzolit, a leading mortars company, TekBond, a specialist in sealants and adhesives, and the recently acquired GCP Applied Technologies, Matchem rounds out Saint-Gobain's construction chemicals line-up with a Brazilian market leader boasting 24 production sites. This acquisition will allow Saint-Gobain to strengthen its position in construction chemicals, in particular concrete admixtures which play a key role in the decarbonization of the construction industry. Matchem will be consolidated in 2023.

The process of identifying and measuring at fair value the assets acquired and liabilities assumed within the scope of the acquisitions carried out in 2022 began during the year and will be finalized within 12 months of each acquisition date.

The Group completed the fair value measurement of each major category of Chryso assets acquired and liabilities assumed in the first half of 2022. The amounts allocated to customer relationships and brands represent €326 million and €174 million, respectively, bringing goodwill to €493 million following allocation of the purchase price.

The table below shows the fair value measurement of each major category of assets acquired and liabilities assumed at December 31, 2022:

(in EUR millions)	**GCP Applied Technologies**	**Kaycan**	**Other newly-consolidated companies**	**Total at the acquisition date**
Intangible assets	811	505	375	1,691
Property, plant and equipment, and right-of-use assets	264	5	98	367
Financial assets and other non-current assets	51	1	24	76
NON-CURRENT ASSETS	**1,126**	**511**	**497**	**2,134**
Inventories	165	138	47	350
Trade accounts receivable	190	78	36	304
Other receivables	30	4	14	48
Cash and cash equivalents	213	27	24	264
CURRENT ASSETS	**598**	**247**	**121**	**966**
Non-current portion of long-term debt and lease liabilities	53		14	67
Non-current portion of provisions and other liabilities	261	140	104	505
NON-CURRENT LIABILITIES	**314**	**140**	**118**	**572**
Current portion of long-term debt and lease liabilities	7		8	15
Current portion of provisions and other liabilities	19			19
Trade accounts payable	109	49	43	201
Other payables	176	21	39	236
Short-term debt and bank overdrafts	155	17	14	186
CURRENT LIABILITIES	**466**	**87**	**104**	**657**
TOTAL FAIR VALUE OF NET ASSETS ACQUIRED	**944**	**531**	**396**	**1,871**
Acquisition cost of shares	2,430	886	313	3,629
Minority interests	4		4	8
GOODWILL	**1,490**	**355**	**(79)**	**1,766**

Main disposals in 2022

In 2022, disposals represent full-year sales of €1,043 million.

The main companies deconsolidated in 2022 are summarized below:

- On January 10, 2022, Saint-Gobain completed the sale of Glassolutions, its regional glass processing business in Denmark, to German glassmaker Semcoglas Holding GmbH.
- On February 4, 2022, Saint-Gobain announced the sale of its regional glass processing business Baltiklaas Oü in Estonia to Polar Glass Oü, a subsidiary of Barrus AS.
- On February 17, 2022, Saint-Gobain signed an agreement for the sale of CTD Tile Group, its specialist tiling distributor in the United Kingdom, to Aurelius Investments, and an agreement for the sale to Wolseley UK of Ideal Bathrooms, the Group's remaining United Kingdom distribution brand specialized in plumbing, heating and sanitaryware.
- On February 28, 2022, Saint-Gobain completed the sale of three of its remaining four United Kingdom distribution brands specializing in plumbing, heating and sanitaryware (Neville Lumb, DHS and Bassetts) to Wolseley UK.
- On May 12, 2022, Saint-Gobain announced the sale of International Decorative Surfaces (IDS), its specialist flooring, worktop and laminate distribution business in the United Kingdom, to Chiltern Capital.
- On the same date, Saint-Gobain signed binding agreements for the divestment of two glass processing facilities specialized in the manufacture of double glazing in the United Kingdom.
- On May 27, Saint-Gobain announced the sale of its Austrian glass processing subsidiaries, Eckelt Glas and Glas Ziegler, to the privately-owned German group Aequita, as well as the sale of its holding in the joint venture Glaskontor Erfurt - a glass processing business in Germany - to the Caleoglas group.
- On September 2, 2022, Saint-Gobain announced that it had closed the sale of the Saint-Gobain Glassolutions Grand Ouest glass processing business to a group of private investors, led by former Saint-Gobain managers.
- On September 30, 2022, Saint-Gobain finalized the sale of Protrae, its wood processing and distribution business in Denmark, to its main customer Jem & Fix.
- On the same date, Tadmar, a distribution brand specialized in plumbing, heating and sanitaryware products in Poland, was sold to Polish company 3W.
- On December 1, 2022, Saint-Gobain completed the sale of its worldwide Crystals and Detectors business to a consortium led by SK Capital Partners associated with Edgewater Capital Partners, both US private equity funds with expertise in advanced materials.
- On December 29, 2022, the Group finalized the sale of certain ceramic activities for the traditional steel market. These activities, comprising the Vinhedo site in Brazil and the Latrobe site in the United States, were sold to the Japanese group Shinagawa Refractories Corporation.

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 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.

The main transactions 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 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 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 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 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.

- 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.
- 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.

At December 31, 2021, acquisitions represented full-year sales of around €816 million and €123 million in EBITDA. Disposals represented full-year sales of around €1,856 million, of which €641 million relates to the disposal of Lapeyre.

4.3 Assets and liabilities held for sale

On December 12, 2022, Saint-Gobain announced that it had signed an agreement to sell all of its United Kingdom merchanting brands - including the builders and timber merchant Jewson - to the Stark group. The transaction, which is not subject to any external conditions, is expected to close in the first quarter of 2023, following which Saint-Gobain will no longer have any distribution businesses in the United Kingdom.

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, p. 14), the United Kingdom distribution companies' balance sheets were combined and measured as assets and liabilities held for sale in the consolidated balance sheet at December 31, 2022, in accordance with IFRS 5.

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, all companies classified as assets and liabilities held for sale in 2021 were disposed of in 2022.

Assets and liabilities held for sale break down as follows:

(in EUR millions)	Dec. 31, 2022	Dec. 31, 2021
Intangible assets, property, plant and equipment, right-of-use assets and other non-current assets	529	66
Inventories, trade accounts receivable and other receivables	851	159
Cash and cash equivalents	14	2
ASSETS HELD FOR SALE	**1,394**	**227**
Provisions for pensions and other employee benefits	(1)	3
Other current and non-current liabilities and provisions	50	11
Trade accounts payable, other payables and other current liabilities	603	98
Debt and bank overdrafts	333	55
LIABILITIES HELD FOR SALE	**985**	**167**
NET ASSETS (LIABILITIES) HELD FOR SALE	**409**	**60**

4.4 Changes in the number of consolidated companies

At December 31, 2022, the number of consolidated companies was as follows:

	France	Outside France	Total
Fully consolidated companies			
At December 31, 2021	**126**	**634**	**760**
Newly consolidated companies	10	108	118
Merged companies	(15)	(20)	(35)
Deconsolidated companies	(3)	(16)	(19)
At December 31, 2022	**118**	**706**	**824**
Equity-accounted companies and joint arrangements			
At December 31, 2021	**3**	**85**	**88**
Newly consolidated companies		6	6
Deconsolidated companies		(6)	(6)
At December 31, 2022	**3**	**85**	**88**
TOTAL AT DECEMBER 31, 2021	**129**	**719**	**848**
TOTAL AT DECEMBER 31, 2022	**121**	**791**	**912**

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

Non-cancelable purchase commitments represented approximately €50 million at December 31, 2022 and include the acquisition of IDP Chemicals in Egypt and Tèrmica San Luis in Argentina.

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 EUR millions)	2022	2021
SALES	**51,197**	**44,160**
Personnel expenses:		
Salaries and payroll taxes (1)	(8,995)	(8,296)
Share-based payments (2)	(43)	(58)
Pensions and employee benefit obligations (2)	(189)	(249)
Depreciation and amortization of property, plant and equipment, intangible assets and right-of-use assets (3)	(2,048)	(1,934)
Share in net income of core business equity-accounted companies	61	52
Other (4)	(34,646)	(29,168)
OPERATING INCOME	**5,337**	**4,507**
Other business income	245	176
Other business expense (3)	(1,000)	(747)
OTHER BUSINESS INCOME AND EXPENSE	**(755)**	**(571)**
BUSINESS INCOME (EXPENSE)	**4,582**	**3,936**

(1) The year-on-year increase in salaries and payroll taxes in 2022 is attributable to bullish trading during the year and an unfavorable exchange rate effect.

(2) Share-based payments (IFRS 2 expense) and changes in employee benefit expenses are detailed in note 6 p27.

(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 €2,164 million in 2022 versus €1,986 million in 2021.

(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 expenditure recorded under operating expenses, amounting to €520 million in 2022 (2021: €447 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 EUR millions)	2022	2021
Impairment of assets [1]	(299)	(213)
Amortization of intangible assets related to PPA [2]	(116)	(52)
Other business expense [3]	(323)	(243)
Impairment of assets and other business expenses	**(738)**	**(508)**
Gains on disposals of non-current assets	245	176
GAINS AND LOSSES ON DISPOSALS, ASSET IMPAIRMENT, IMPACT OF CHANGES IN GROUP STRUCTURE	**(493)**	**(332)**
NON-OPERATING INCOME AND EXPENSE [4]	**(262)**	**(239)**
OTHER BUSINESS INCOME AND EXPENSE	**(755)**	**(571)**

(1) The "Impairment of assets" line includes the impairment of goodwill, other intangible assets, property, plant and equipment, right-of-use assets, assets held for sale and other assets and mostly concerns the Distribution activities in the United Kingdom in 2022.
(2) 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.
(3) As in 2021, other business expense mainly includes capital losses on assets divested or scrapped, acquisition fees and contingent consideration incurred in connection with business combinations;
(4) Non-operating income and expense mainly include claims-related expenses and restructuring costs.

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 2022 and 2021 is as follows:

2022

(in EUR millions)	High Performance Solutions [2]	Northern Europe	Southern Europe [2] - ME & Africa	Americas [2]	Asia-Pacific	Other [1]	Group Total
Sales	9,648	16,413	15,198	9,064	2,132	(1,258)	51,197
Operating income (loss)	1,155	1,279	1,219	1,462	257	(35)	5,337
Business income (loss)	1,047	951	1,145	1,281	249	(91)	4,582
Share in net income of equity-accounted companies	2	13	12	30	6	3	66
Operating depreciation and amortization	383	620	587	305	104	49	2,048
Impairment of assets	4	215	7	52	7	0	285
EBITDA	1,371	1,872	1,761	1,740	360	19	7,123
Acquisitions of property, plant and equipment and intangible assets [3]	406	445	434	430	198	27	1,940
Goodwill, net [4]	3,162	4,207	2,067	3,130	292	0	12,858
Brands, customer relationships and intellectual property [4]	1,014	1,048	503	1,058	0	0	3,623
Total segment assets and liabilities [4]	8,165	9,006	7,441	7,221	1,431	258	33,522

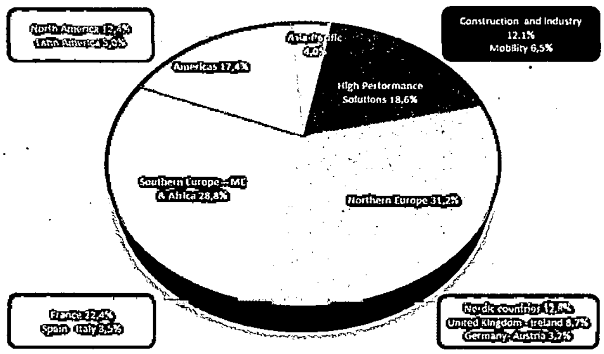
(1) "Other" corresponds to the elimination of intragroup transactions for internal sales, and holding company transactions for the other captions.
(2) France and United States sales represent €12,341 million and €8,135 million, respectively. Segment assets for France and the United States represent €8,333 million and €7,535 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").

2021

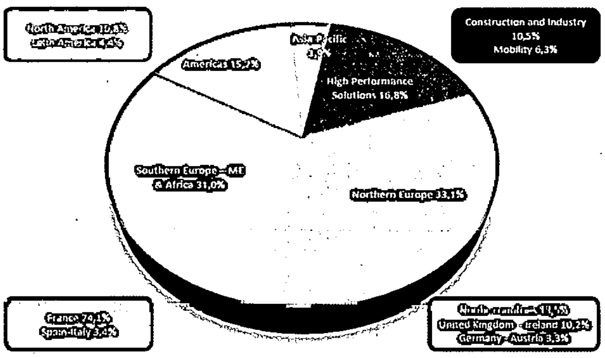
(in EUR millions)	High Performance Solutions (2)	Northern Europe	Southern Europe (2) – ME & Africa	Americas (2)	Asia-Pacific	Other (1)	Group Total
Sales	7,511	15,028	14,044	6,815	1,787	(1,025)	44,160
Operating income (loss)	931	1,100	1,166	1,123	211	(24)	4,507
Business income (loss)	712	966	1,019	1,012	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	0	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").*

In 2022, the breakdown of sales by segment and for the Group's main countries is as follows:



In 2021, 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 €7,123 million in 2022 (2021: €6,202 million), calculated as follows:

(in EUR millions)	2022	2021
Operating income	5,337	4,507
Depreciation/amortization of property, plant and equipment and intangible assets	1,332	1,255
Depreciation of right-of-use assets	716	679
Non-operating income and expense	(262)	(239)
EBITDA	**7,123**	**6,202**

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, customer relationships and land.

5.3.5 Recurring net income

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

Recurring net income totaled €3,335 million in 2022 (2021: €2,815 million). Based on the weighted average number of shares outstanding at December 31 (514,372,413 shares in 2022 and 526,244,506 shares in 2021), recurring earnings per share amounted to €6.48 in 2022 and €5.35 in 2021.

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

(in EUR millions)	2022	2021
GROUP SHARE OF NET INCOME	**3,003**	**2,521**
Less:		
Gains and losses on disposals of assets	(42)	(7)
Impairment of assets and other	(333)	(272)
Changes in provisions for non-recurring items	(16)	0
Impact of non-controlling interests	2	(1)
Tax on disposal gains and losses, asset impairment, non-recurring provisions and write-downs of deferred taxes on tax loss carry-forwards	57	(14)
GROUP SHARE OF RECURRING NET INCOME	**3,335**	**2,815**

5.4 Working capital

Working capital can be analyzed as follows:

(in EUR millions)	Dec. 31, 2022	Dec. 31, 2021
INVENTORIES, NET	**7,219**	**6,598**
TRADE ACCOUNTS RECEIVABLE, NET	**5,178**	**5,104**
Other operating receivables	1,337	1,424
Other non-operating receivables	113	80
OTHER RECEIVABLES, NET	**1,450**	**1,504**
CURRENT TAX RECEIVABLE	**76**	**166**
TRADE ACCOUNTS PAYABLE	**7,266**	**6,903**
Other operating payables	4,428	4,153
Other non-operating payables	650	655
OTHER PAYABLES	**5,078**	**4,808**
CURRENT TAX LIABILITIES	**263**	**236**
Operating working capital	2,040	2,070
Non-operating working capital (including current tax receivable and liabilities)	(724)	(645)
WORKING CAPITAL	**1,316**	**1,425**

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, 2022 and 2021, inventories were as follows:

(in EUR millions)	Dec. 31, 2022	Dec. 31, 2021
Gross value		
Raw materials	2,152	1,726
Work in progress	446	367
Finished goods	5,246	5,033
GROSS INVENTORIES	**7,844**	**7,126**
Provisions for impairment		
Raw materials	(233)	(191)
Work in progress	(17)	(16)
Finished goods	(375)	(321)
TOTAL PROVISIONS FOR IMPAIRMENT	**(625)**	**(528)**
INVENTORIES, NET	**7,219**	**6,598**

The net value of inventories was €7,219 million at December 31, 2022 compared with €6,598 million at December 31, 2021. Impairment losses on inventories recorded in the 2022 income statement totaled €332 million (2021: €279 million). Reversals of impairment losses on inventories amounted to €222 million in 2022 (2021: €219 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 note 10.3.8 p. 53 and 10.3.10, p. 53).

Trade and other accounts receivable

Trade and other accounts receivable can be analyzed as follows:

(in EUR millions)	Dec. 31, 2022	Dec. 31, 2021
Gross value	5,597	5,449
Provisions for impairment	(419)	(345)
TRADE ACCOUNTS RECEIVABLE, NET	**5,178**	**5,104**
Discounts obtained from and advances granted to suppliers	529	636
Prepaid payroll taxes	32	35
Other prepaid and recoverable taxes (other than income tax)	484	470
Miscellaneous operating receivables	299	289
Other non-operating receivables	113	81
Provision for impairment of other receivables	(7)	(7)
OTHER RECEIVABLES, NET	**1,450**	**1,504**

Receivables at December 31, 2022 were stable compared to end-2021.

The impact of movements in provisions and bad debt write-offs represented an expense of €119 million in 2022 versus an expense of €55 million in 2021.

Bad debt write-offs fell to €56 million from €78 million in 2021.

Trade accounts receivable at December 31, 2022 and 2021 are analyzed below by maturity:

	Gross value		Impairment		Net value	
(in EUR millions)	Dec. 31, 2022	Dec. 31, 2021	Dec. 31, 2022	Dec. 31, 2021	Dec. 31, 2022	Dec. 31, 2021
TRADE ACCOUNTS RECEIVABLE NOT YET DUE	**4,612**	**4,616**	**(81)**	**(62)**	**4,531**	**4,554**
Less than 1 month	417	350	(38)	(29)	379	321
1-3 months	173	148	(42)	(30)	131	118
More than 3 months	395	335	(258)	(224)	137	111
TRADE ACCOUNTS RECEIVABLE PAST DUE	**985**	**833**	**(338)**	**(283)**	**647**	**550**
TRADE ACCOUNTS RECEIVABLE	**5,597**	**5,449**	**(419)**	**(345)**	**5,178**	**5,104**

Trade and other accounts payable

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

(in EUR millions)	Dec. 31, 2022	Dec. 31, 2021
TRADE ACCOUNTS PAYABLE	**7,266**	**6,903**
Downpayments received and rebates granted to customers	1,788	1,636
Payables to suppliers of non-current assets	472	439
Grants received	88	91
Accrued personnel expenses	1,497	1,439
Accrued taxes other than on income	442	403
Other operating payables	701	675
Other non-operating payables	90	125
OTHER PAYABLES	**5,078**	**4,808**

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 EUR millions)	Total 2022	Due within 1 year	Due in 1 to 5 years	Due beyond 5 years	Total 2021
Property, plant and equipment and intangible assets	115	39	19	57	129
Raw materials and energy	1,786	659	882	245	1,550
Services	324	121	192	11	155
TOTAL	**2,225**	**819**	**1,093**	**313**	**1,834**

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 €75 million at December 31, 2022 (December 31, 2021: €56 million).

5.5.3 Commercial commitments

The Group's commercial commitments are shown below:

		Commitment amounts by period			
(in EUR millions)	**Total 2022**	**Due within 1 year**	**Due in 1 to 5 years**	**Due beyond 5 years**	**Total 2021**
Security for borrowings	69	39	14	16	51
Other commitments given	255	58	50	147	224
TOTAL	**324**	**97**	**64**	**163**	**275**

Guarantees given to the Group in respect of receivables amounted to €81 million at December 31, 2022 (December 31, 2021: €75 million). At December 31, 2022, pledged assets represented €1,054 million (December 31, 2021: €1,095 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 4.4 million tonnes of greenhouse gas emissions allowances at December 31, 2022, which will cover its actual CO_2 emissions for 2022. 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

	2022	2021
Managerial-grade employees	30,372	29,007
Administrative employees	69,623	69,398
Other employees	69,437	68,475
TOTAL AVERAGE NUMBER OF EMPLOYEES	**169,432**	**166,880**

Closing headcount

The total number of Group employees for fully consolidated companies was 170,714 employees at December 31, 2022 and 167,816 employees at December 31, 2021.

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 2022 and 2021:

(in EUR millions)	2022	2021
Directors' compensation	1.1	1.1
Direct and indirect compensation (gross)		
Fixed portion	9.6	8.7
Variable portion	5.7	5.5
Share-based payment expense (IFRS 2)	9.2	16.2
TOTAL EXCLUDING ESTIMATED COST OF PENSIONS AND OTHER EMPLOYEE BENEFIT OBLIGATIONS (IAS 19)	**25.6**	**31.5**
Estimated cost of pensions and other employee benefit obligations (IAS 19)*	7.2	5.7
TOTAL	**32.8**	**37.2**

* *The 2021 expense took into account 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 2022 to Saint-Gobain management by the French and foreign companies in the Group (excluding any long-term cash settled compensation) amounted to €15.3 million (2021: €14.2 million), including €5.7 million in gross variable compensation (2021: €5.5 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 €29.2 million at December 31, 2022 (December 31, 2021: €31 million). The decrease in this item reflects changes during 2021 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.

Since 2021, the Group has applied the IFRIC agenda decision, "Attributing Benefit to Periods of Service", which changes the method for calculating obligations under certain defined benefit plans.

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. In 2021, the legal structure of the plans was altered, resulting in the closure of the Building Distribution Section to future accrual as of 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

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, 2022.

For the Eurozone (including France), two discount rates were calculated for first-half 2022 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 15 years or less and one for plans with a term of over 15 years (2021: 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 2022 for the Group's main plans are the following:

	France		Eurozone (excluding France)		United Kingdom	United States
(in %)	Short-term plans	Long-term plans	Short-term plans	Long-term plans		
Discount rate	4.16%	4.23%	4.16%	4.23%	4.85%	5.20%
Salary increases	1.90% to 5.50%		2.70% to 3.00%		2.00%	3.00%
Inflation rate	2.20%		2.20%		2.50%	2.50%

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

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

	France		Eurozone (excluding France)		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.*

As the above three regions account for substantially all of the Group's pension obligation, the revised actuarial assumptions (in particular discount and inflation rates) contributed to a decrease in the obligation, and therefore in the provision, by an amount of €3,589 million.

The actual return on plan assets for almost all plans was lower than expected, at €3,506 million, leading to an increase in the provision of the same amount. In addition, a €95 million rise in the asset ceiling, mainly in Switzerland, generated an increase in the provision in the same amount.

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 €140 million for the United States plans, €100 million for the Eurozone plans and €270 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 €320 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 5.99% per year (under 65 years of age), and between 2.26% 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 €13 million in the related projected benefit obligation.

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

Carrying amount of provisions

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

(in EUR millions)	Dec. 31, 2022	Dec. 31, 2021
Pension obligations	1,110	1,263
Length-of-service awards	290	361
Post-employment healthcare benefits	183	255
TOTAL PROVISIONS FOR PENSIONS AND OTHER POST-EMPLOYMENT BENEFIT OBLIGATIONS	**1,583**	**1,879**
Healthcare benefits	27	26
Long-term disability benefits	8	8
Other long-term benefits	94	101
PROVISIONS FOR PENSIONS AND OTHER EMPLOYEE BENEFITS	**1,712**	**2,014**

Provisions for all other long-term benefits totaled €129 million at December 31, 2022 (€135 million at December 31, 2021).

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

(in EUR millions)	Dec. 31, 2022	Dec. 31, 2021
Provisions for pensions and other post-employment benefit obligations – liabilities	1,583	1,879
Pension plan surpluses – assets	(569)	(894)
NET PENSION AND OTHER POST-EMPLOYMENT BENEFIT OBLIGATIONS	**1,014**	**985**

Analysis of obligations

At December 31, 2022, pension obligations and provisions for other post-employment benefit obligations break down by major geographic region as follows:

(in EUR millions)	France	Eurozone (excluding France)	United Kingdom	United States	Rest of the world	Net total
AVERAGE DURATION (in years)	**12**	**13**	**14**	**11**	**14**	**13**
Defined benefit obligations – funded plans	432	1,086	3,256	2,423	945	8,142
Defined benefit obligations – unfunded plans	225	39	0	162	194	620
Fair value of plan assets	(203)	(684)	(3,764)	(2,123)	(1,104)	(7,878)
DEFICIT (SURPLUS)	**454**	**441**	**(508)**	**462**	**35**	**884**
Asset ceiling	0	9	0	0	121	130
NET PENSION AND OTHER POST-EMPLOYMENT BENEFIT OBLIGATIONS	**454**	**450**	**(508)**	**462**	**156**	**1,014**

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

(in EUR millions)	France	Eurozone (excluding France)	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**

Changes in provisions

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

(in EUR millions)	Pension obligations	Fair value of plan assets	Asset ceiling	Net pension and other post-employment benefit obligations
AT JANUARY 1, 2022	**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	(31)	(1)		(32)
Assets / 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**
Changes during the year				
Service cost	188			188
Interest cost/return on plan assets as per calculations	244	(232)		12
Employee contributions and plan administration costs		(6)		(6)
Past service cost	1			1
Plan curtailments/settlements	(1)			(1)
Pension contributions		(153)		(153)
Benefit payments	(710)	631		(79)
Actuarial gains and losses and asset ceiling	(3,589)	3,506	95	12
Translation adjustments	6	16	4	26
Changes in Group structure	270	(244)		26
Assets / liabilities held for sale	(3)	6		3
TOTAL CHANGES	**(3,594)**	**3,524**	**99**	**29**
AT DECEMBER 31, 2022	**8,762**	**(7,878)**	**130**	**1,014**

Actuarial gains and losses

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

(in EUR millions)	2022	2021
Pension obligations	(3,589)	(597)
Fair value of plan assets	3,506	(222)
Asset ceiling	95	17
TOTAL CHANGES	**12**	**(802)**

Plan assets

Plan assets have been progressively built up by contributions, primarily in the United Kingdom and the United States. Contributions paid by the Group in 2022 totaled €153 million (2021: €492 million).

A 0.5-point increase or decrease in the actual return on plan assets would have an impact of approximately €39 million on equity.

Plan assets mainly comprise:

	Dec. 31, 2022	Dec. 31, 2021
Equities	18%	17%
Bonds	56%	63%
Other	26%	20%
TOTAL	**100%**	**100%**

Contributions to pension plans for 2023 are estimated at around €86 million.

6.3.4 Defined contribution plans

Contributions to defined contribution plans are expensed as incurred.

Contributions to defined contribution plans for 2022 represented an estimated €703 million (2021: €647 million), including €444 million for government-sponsored basic pension schemes (2021: €423 million), €134 million for government-sponsored supplementary pension schemes, mainly in France (2021: €126 million), and €125 million for corporate-sponsored supplementary pension plans (2021: €98 million).

6.4 Share-based payments

6.4.1 Group Savings Plan (PEG)

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 Group also records an IFRS 2 expense reflecting the benefit offered to employees (€9.3 million in 2022, compared with €13.2 million in 2021).

Saint-Gobain implemented a new PEG in the first half of 2022. As approved by the Chief Executive Officer on March 14, 2022, the reference price is €56.48 (€44.76 in 2021), representing a subscription price of €45.19 (€35.81 in 2021) after a 20% discount.

In 2022, 4,916,097 new shares with a par value of €4 were issued to employees under the PEG at an average subscription price of €45.19 (5,562,855 shares at an average price of €35.81 in 2021), representing a share capital increase of €222 million (€199 million in 2021), net of transaction fees.

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, 2022, the 2013, 2015, 2016 and 2017 plans offer stock purchase options. The 2018 plan was classified as a stock subscription option plan further to a decision of the Board of Directors in 2022, prior to the start of the exercise period.

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 EUR)*
OPTIONS OUTSTANDING AT DECEMBER 31, 2020	**844,524**	**40.04**
Options granted		
Options exercised	(151,173)	38.59
Options forfeited	(141,862)	49.38
OPTIONS OUTSTANDING AT DECEMBER 31, 2021	**551,489**	**38.03**
Options granted		
Options exercised	(28,977)	40.97
Options forfeited*	(36,691)	31.71
OPTIONS OUTSTANDING AT DECEMBER 31, 2022	**485,821**	**38.32**

* *Including 15,411 options granted under the 2018 stock option plan that lapsed because the performance conditions were not met and 17,000 that lapsed after they had been withdrawn, as well as 4,280 options that lapsed after the exercise period under the 2012 stock option plan expired.*

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 €0.1 million in 2022 (€0.4 million in 2021).

The table below summarizes information about stock options outstanding at December 31, 2022, after taking into account partial fulfillment of the performance criteria attached to certain plans:

	Exercisable options outstanding			
Grant date	Exercise price (in EUR)	Number of options	Weighted average contractual life (in months)	Type of options
2013	38.80	36,707	11	Purchase
2015	39.47	36,739	35	Purchase
2016	40.43	43,897	47	Purchase
2017	49.38	121,713	59	Purchase
2018	32.24	246,765	71	Subscription
TOTAL		**485,821**		

At December 31, 2022, 485,821 options were exercisable at an average exercise price of €38.32. All options are now exercisable.

6.4.3 Performance share 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. 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.

Performance share plans

At December 31, 2022, there were four outstanding performance share plans, approved by the Board of Directors in 2019, 2020 and 2021 and on November 24, 2022.

The expense recorded for these plans in the 2022 income statement amounted to €33.2 million (2021: €44.4 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 2019, 2020, 2021 and 2022 plans.

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

	Number of rights
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**
Performance share rights granted in November 2022	1,232,792
Shares issued/delivered	(1,076,098)
Lapsed and canceled rights*	(141,921)
NUMBER OF PERFORMANCE SHARE RIGHTS AT DECEMBER 31, 2022	**4,935,532**

* *Including 53,310 rights that lapsed because the performance condition had only been partly met, and 88,611 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. 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, 2022 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, 2022*	Delivery date	Type of shares
November 21, 2019	1,250,920	November 24, 2023	existing
November 26, 2020	1,267,545	November 29, 2024	existing
November 25, 2021	1,184,275	November 28, 2025	existing
November 24, 2022	1,232,792	November 27, 2026	existing
TOTAL	**4,935,532**		

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

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 vesting period of the last plan 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 acquired, liabilities assumed and contingent 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 2022 and 2021 are detailed below:

(in EUR millions)	Dec. 31, 2022	Dec. 31, 2021
At January 1		
Gross value	13,399	12,229
Accumulated impairment	(2,218)	(2,201)
NET VALUE	**11,181**	**10,028**
Changes during the period		
Impairment	(28)	(30)
Translation adjustments and restatement for hyperinflation	(37)	354
Changes in Group structure	1,742	815
Assets held for sale	0	14
TOTAL CHANGES	**1,677**	**1,153**
At December 31		
Gross value	14,304	13,399
Accumulated impairment	(1,446)	(2,218)
NET VALUE	**12,858**	**11,181**

In 2022, changes in scope of consolidation mainly concerned first-time consolidations, in particular following the acquisition of GCP Applied Technologies (see note 4.2.1, p. 15) for €1,490 million; the finalization of the Chryso purchase price accounting, which resulted in a €229 million reduction in goodwill; and the acquisitions of Kaycan and Impac for €355 million and €51 million, respectively.

Impairment losses were recognized for a total of €28 million, mainly against individual assets in the period. The translation adjustments and restatements for hyperinflation primarily reflect the impacts of fluctuations in the pound sterling, US dollar, Norwegian krone, Canadian dollar, Swedish krona, Brazilian real and Argentine peso.

In 2021, changes in Group structure mainly reflected first-time consolidations following the acquisition of Chryso for €722 million and of Equflow and Duraziv for €20 million and €17 million, respectively, as well as adjustments relating to purchase price accounting in progress at the time. Impairment losses were recognized for €30 million, mainly against assets sold in the period. Translation adjustments primarily reflected the impacts of fluctuations in the US dollar, pound sterling, Norwegian krone and Argentine peso.

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 2022 and 2021 are analyzed below:

(in EUR millions)	Brands	Intellectual property and customer relationships	Software	Other	Total intangible assets
At January 1, 2021					
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 period					
Acquisitions			41	69	110
Disposals			(4)	1	(3)
Translation adjustments and restatement for hyperinflation	37	31	8	4	80
Amortization*	(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**
Changes during the period					
Acquisitions			42	63	105
Disposals			(6)	(2)	(8)
Translation adjustments and restatement for hyperinflation	(43)	(85)	(3)	1	(130)
Amortization*	(15)	(105)	(119)	(13)	(252)
Impairment	(6)			(71)	(77)
Transfers			72	(72)	0
Changes in Group structure and other	323	1,355	(3)	8	1,683
Assets held for sale			(49)	49	0
TOTAL CHANGES	**259**	**1,165**	**(66)**	**(37)**	**1,321**
At December 31, 2022					
Gross value	2,190	1,897	1,345	492	5,924
Accumulated amortization and impairment	(226)	(238)	(1,069)	(365)	(1,898)
NET VALUE	**1,964**	**1,659**	**276**	**127**	**4,026**

* *"Amortization" includes amortization charged against intangible assets within the scope of purchase price accounting, representing €116 million in 2022 (2021: €52 million).*

The breakdown of brands, intellectual property and customer relationships by segment is provided in the segment information tables in note 5 p. 20.

In 2022, changes in Group structure correspond mainly to adjustments to the purchase price accounting relating to brands and customer relationships in the Chryso acquisition, representing €16 million and €277 million, respectively. They also include GCP Applied Technologies' brands and customer relationships for a total amount of €811 million, Kaycan's brands and customer relationships for a total amount of €504 million, and Impac's customer relationships for a total amount of €30 million. Impairment losses were recognized for a total of €77 million, mainly against assets held for sale. The translation adjustments and restatements for hyperinflation primarily reflect the impacts of fluctuations in the Canadian and US dollars, and in pound sterling.

In 2021, changes in Group structure related mainly to brands and customer relationships acquired as a result of the Chryso acquisition for €158 million and €48 million, respectively. They also included 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.

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.

Changes in property, plant and equipment in 2022 and 2021 are analyzed below:

(in EUR millions)	Land and quarries	Buildings	Machinery and equipment	Assets under construction	Total property, plant and equipment
At January 1, 2021					
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 period					
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**
Changes during the period					
Acquisitions	35	81	287	1,432	1,835
Disposals	(21)	(30)	(23)	(6)	(80)
Translation adjustments and restatement for hyperinflation	6	23	33	22	84
Depreciation	(37)	(256)	(902)	(1)	(1,196)
Impairment	(2)	(129)	(38)		(169)
Transfers		267	943	(1,210)	0
Changes in Group structure and other	35	76	126	17	254
Assets held for sale	(93)	(73)	(36)	(26)	(228)
TOTAL CHANGES	**(77)**	**(41)**	**390**	**228**	**500**
At December 31, 2022					
Gross value	2,329	8,085	20,896	1,841	33,151
Accumulated depreciation and impairment	(703)	(4,963)	(15,304)	(18)	(20,988)
NET VALUE	**1,626**	**3,122**	**5,592**	**1,823**	**12,163**

In 2022, changes in Group structure relate mainly to adjustments to the purchase price accounting for the Chryso acquisition and the first-time consolidation of GCP Applied Technologies and Impac. Impairment losses were recognized for a total of €169 million, mainly against assets held for sale. The translation adjustments and restatements for hyperinflation primarily reflect the impacts of fluctuations in the US dollar, Mexican peso, Brazilian real, pound sterling, Indian rupee, Egyptian pound, Argentine peso and Swedish krona.

In 2021, changes in Group structure related mainly to the first-time consolidation of Chryso. Translation adjustments and restatement for hyperinflation primarily reflected 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.

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.

In 2022, right-of-use assets linked to leases relate mainly to land and buildings for €2,336 million (€2,419 million at December 31, 2021) and to machinery and equipment for €416 million (€540 million at December 31, 2021).

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 €195 million in 2022 (€169 million in 2021).

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

(in EUR millions)	Land and buildings	Machinery and equipment	Total
At January 1, 2021			
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 period			
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**
Changes during the period			
New leases	570	194	764
Disposals		(4)	(4)
Translation adjustments	(38)	(4)	(42)
Depreciation	(491)	(225)	(716)
Impairment	(10)		(10)
Changes in Group structure and other	54	(8)	46
Assets held for sale	(168)	(77)	(245)
TOTAL CHANGES	**(83)**	**(124)**	**(207)**
At December 31, 2022			
Gross value	5,521	901	6,422
Accumulated depreciation and impairment	(3,185)	(485)	(3,670)
NET VALUE	**2,336**	**416**	**2,752**

7.5 Impairment review

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

The Group carries out impairment tests on property, plant and equipment, right-of-use assets, goodwill and other intangible assets whenever there is any indication of impairment. 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 disposal costs and its value in use.

Goodwill and other unamortized intangible assets (including brands with indefinite useful lives) are tested for impairment annually by comparing the asset's carrying amount to its recoverable amount using the EBITDA multiple approach.

If the resulting recoverable amount is below the asset's carrying amount, the Group determines the value in use at the level of the relevant cash-generating unit (CGU).

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

In 2022, the number of CGUs was reduced from 23 to 18, following various disposals and reorganizations within the Group.

The value in use is calculated using 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 are then projected to perpetuity using an annual growth rate (between 1.5% and 2% barring exceptional cases).

The average cost of capital was 7.2% in 2022 versus 6.85% in 2021. This rate corresponds to the Group's average cost of capital, plus a country risk premium where applicable.

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 a 0.5-point decrease for Distribution activities.

On the basis of the sensitivity tests carried out at December 31, 2022 (i.e., sensitivity to changes in the discount rate, perpetuity growth rate and profitability rate), three CGUs were identified as sensitive: the Brazil Distribution CGU and the two Pipe CGUs (Europe and Latin America).

In 2022, the average cost of capital plus a country risk premium for the CGUs identified as sensitive is 7.8% for Pipe Europe, 13.4% for Pipe Latin America and 14.0% for Brazil Distribution.

At December 31, 2022, a 0.5-point increase in the discount rate would have led the Group to recognize approximately €1 million in additional impairment against the Latin America Pipe CGU's non-current assets.

Furthermore, no impairment would have been recognized against non-current assets in the event of a 0.5-point decrease in the average annual cash flow growth rate projected to perpetuity for the three CGUs.

The impact of a 1-point decrease in the operating income rate for the two Pipe CGUs would have led the Group to recognize an impairment loss of approximately €78 million (of which €69 million in Europe and €9 million in Latin America), while a 0.5 point decrease in the rate for the Brazil Distribution CGU would not have generated material additional impairment.

The breakdown of asset impairment by region for 2022 and 2021 is provided in the segment information tables in note 5, p. 20.

In 2022 the Group reviewed its impairment tests in light of the current situation and the outlook for certain businesses and countries.

2022 saw significant increases in sales prices for the Pipe Europe CGU in order to offset inflation experienced in 2021 and 2022, along with strong volume momentum in the first half of the year, which led to a significant improvement in operating income. The challenges for 2023 will be to remain responsive to market conditions, to streamline and scale back product listings, and to continue to improve operating income.

For the Latin America Pipe CGU, 2022 was shaped by significant price increases and political instability in Brazil. The outlook for 2023 is for moderate growth with the aim of maintaining sales prices.

For the Brazil Distribution CGU, 2022 saw the closure of five stores in a declining market. An impairment loss of €30 million was recognized in 2022. The restructuring, alongside the new sales policy aimed at optimizing margins and developing new concepts ("TelhaNorte Já" and "Boutique") explains the expected improvement in performance in 2023.

The Group's commitments to carbon neutrality were taken into account when carrying out sensitivity tests as part of its impairment testing. Details of these sensitivity tests are provided in note 3 on climate issues (see p. 11).

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 2022 and 2021 can be analyzed as follows:

(in EUR millions)	2022	2021
At January 1		
Group share in:		
Associates	221	185
Joint ventures	283	246
TOTAL	**504**	**431**
Goodwill	32	31
INVESTMENTS IN EQUITY-ACCOUNTED COMPANIES	**536**	**462**
Changes during the period		
Group share in net income of associates	27	31
Group share in net income of joint ventures	39	25
Dividends paid	(8)	(33)
Translation adjustments and restatement for hyperinflation	40	27
Acquisitions and capital increases	1	4
Changes in Group structure, transfers and other variations	4	20
TOTAL CHANGES	**103**	**74**
At December 31		
Group share in:		
Associates	249	221
Joint ventures	350	283
TOTAL	**599**	**504**
Goodwill	40	32
INVESTMENTS IN EQUITY-ACCOUNTED COMPANIES	**639**	**536**

Investments in non-core business equity-accounted companies represented €67 million at December 31, 2022 (€62 million at end-2021).

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

	2022			2021		
(in EUR millions)	Associates	Joint ventures	Total	Associates	Joint ventures	Total
Sales	1,613	886	2,499	1,182	781	1,963
Net income	98	79	177	107	50	157
Non-current assets	663	610	1,273	536	514	1,050
Current assets	919	352	1,271	785	285	1,070
Non-current liabilities	1,120	800	1,920	959	673	1,632
Current liabilities	462	162	624	362	126	488
Shareholders' equity	885	729	1,614	754	597	1,351

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 EUR millions)	Dec. 31, 2022	Dec. 31, 2021
Financial receivables	33	33
Inventories	2	2
Short-term receivables	18	15
Cash and cash equivalents	0	0
Short-term debt	10	8
Cash advances	0	0

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

(in EUR millions)	2022	2021
Purchases	111	63
Sales	53	38

8.3 Other non-current assets

Changes in other non-current assets in 2022 and 2021 are analyzed below:

(in EUR millions)	Equity investments and other	Loans, deposits and surety	Total
At January 1, 2021			
Gross value	92	446	538
Provisions for impairment	(22)	(5)	(27)
NET VALUE	**70**	**441**	**511**
Changes during the period			
Increases (decreases)	30	(77)	(47)
Provisions for impairment	(1)		(1)
Translation adjustments and restatement for hyperinflation	3	10	13
Transfers and other movements	17	2	19
Changes in Group structure	(1)	22	21
Changes in fair value	12		12
TOTAL CHANGES	**60**	**(43)**	**17**
At December 31, 2021			
Gross value	152	403	555
Provisions for impairment	(22)	(5)	(27)
NET VALUE	**130**	**398**	**528**
Changes during the period			
Increases (decreases)	93	(48)	45
Provisions for impairment		(1)	(1)
Translation adjustments and restatement for hyperinflation	1	11	12
Transfers and other movements	(3)	23	20
Changes in Group structure	(42)	5	(37)
Changes in fair value	(10)	(10)	(20)
Assets held for sale		(10)	(10)
TOTAL CHANGES	**39**	**(30)**	**9**
At December 31, 2022			
Gross value	175	374	549
Provisions for impairment	(6)	(6)	(12)
NET VALUE	**169**	**368**	**537**

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 EUR 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, 2021							
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 period							
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**
Changes during the period							
Additions	203	80	92	144	519		519
Reversals	(6)	(17)	(16)	(35)	(74)		(74)
Utilizations	(69)	(84)	(52)	(59)	(264)		(264)
Changes in Group structure		(1)	(1)	15	13		13
Translation adjustments and reclassifications	10	17	(8)	31	50	28	78
Liabilities held for sale	(27)	(3)		(2)	(32)		(32)
TOTAL CHANGES	**111**	**(8)**	**15**	**94**	**212**	**28**	**240**
At December 31, 2022							
Current portion	253	65	145	179	642	51	693
Non-current portion	207	90	127	495	919	173	1,092
TOTAL PROVISIONS FOR OTHER LIABILITIES AND INVESTMENT-RELATED LIABILITIES	**460**	**155**	**272**	**674**	**1,561**	**224**	**1,785**

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 €251 million at December 31, 2022. These provisions are described in further detail in note 9.2 "Contingent liabilities and litigation".

9.1.2 Provisions for restructuring costs and personnel expenses

Provisions for restructuring costs and personnel expenses amounted to €155 million at December 31, 2022 (December 31, 2021: €163 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, 2022, provisions for other contingencies amounted to €674 million (December 31, 2021: €580 million) and mainly concern the United States (€473 million), France (€60 million) and Brazil (€73 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 2022, 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

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, 2022).

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

Alleged anti-competitive practices in the building insulation products market were notified to Saint-Gobain Isover and Compagnie de Saint-Gobain, which rejected such allegations. The French Competition Authority considered that the alleged anti-competitive practices were not established and dismissed all the objections in January 2021. Actis appealed this decision to the Paris Court of Appeal.
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.
At the end of 2022, Actis withdrew these two actions. Saint-Gobain Isover and Compagnie de Saint-Gobain accepted these withdrawals without reservation. The decision of the Paris Court of Appeal noting the withdrawal of Actis and the fact that the actions were removed from the Court was made on January 26, 2023. The judgment of the Paris Civil Court declaring the withdrawal of Actis and the removal of the case is expected in the first half of 2023.

9.2.2 Asbestos-related litigation

Current legal actions related to asbestos are described below.

Asbestos-related litigation in France

Inexcusable fault lawsuits

In France, Everite and Saint-Gobain PAM, which in the past manufactured fiber-cement products containing asbestos fibres, are the subject of actions by former employees of these companies (or persons claiming through them) for recognition of inexcusable fault following diseases recognized as being of occupational origin.

As of December 31, 2022, a total of 850 lawsuits had been issued against the two companies since the outset 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, 826 of these 850 lawsuits had been completed and 24 actions are still pending.

The total amount of compensation paid by Everite and Saint-Gobain PAM since the outset of these litigations in settlement of these lawsuits totaled approximately €9.7 million as of December 31, 2022 (compared to €6.6 million as of December 31, 2021).

In addition, similar suits had been filed against 13 French companies of the Group (excluding suits against companies that are no longer part of the Group) which in the past used equipment containing asbestos to protect their employees and installations against heat from furnaces.

As of December 31, 2022, a total of 282 lawsuits had been filed since the outset against these 13 companies. 240 of these 282 lawsuits had been completed and 42 actions were still pending at the same date.

The total amount of compensation paid since the outset of the litigations by these companies was approximately €11.8 million as of December 31, 2022 (compared to approximately €10.5 million as of December 31, 2021).

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 brought by current or former employees not suffering from an occupational disease due to asbestos - claiming compensation for prejudice of anxiety suffered as a result of their alleged exposure to asbestos.

As of December 31, 2022, a total of 861 lawsuits had been brought against these companies.

At the same date, 824 suits out of 861 have been definitely completed and 37 were still pending.

The total amount of compensation paid since the outset of the litigations was €8.5 million as of December 31, 2022 (unchanged compared to the amount as of December 31, 2021).

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.

Last, the total amount registered as provision for asbestos-related litigations in France - inexcusable faults lawsuits and anxiety claims - amounted to around €8 million as of December 31, 2022 (compared to around €7 million as of December 31, 2021).

Situation in the United States

Measures taken to achieve an 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 matter remains pending. 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 up to approximately five 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.

Certain adversary proceedings have been filed by representatives of current and future asbestos plaintiffs against DBMP LLC, CertainTeed LLC, Saint-Gobain Corporation, Compagnie de Saint-Gobain and various other parties. No decisions on the merits of the claims have been made and such claims do not affect the Company's financial assessment of the Chapter 11 case.

Impact on the 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 $410 million as of December 31, 2022 ($417 million as of December 31, 2021).

The Group's consolidated income for 2022 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 2022 (as in 2021).

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 (Pernambuco state) plants, asking for their medical assistance and compensation to be revised. First and second instance decisions were rendered in connection with the suit related to the São Caetano plant respectively in July 2020 and July 2021, rejecting the claims of the plaintiffs. The latter have nevertheless appealed the second instance decision. First and second instance decisions were rendered in relation to Recife case, respectively in February and October 2022 rejecting the claiming party arguments. The plaintiff has appealed such second instance decision.

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 proceedings 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 are settled.

On December 31, 2022, the provision recorded by the Company in respect of this matter amounts to €201 million (compared to €116 million as of December 31, 2021). This provision covers both remediation and litigation related to PFOA matters.

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 was constituted, 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 has been conducting its work in two phases: its phase 1 report was published on October 30, 2019; phase 2 commenced in January 2020 and public hearings continued until July 2022, with a final report to follow, most likely in 2023. 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 by bereaved, survivors and residents and emergency responders. Those proceedings have been stayed prior to the service of full pleadings on the basis that the parties to the litigation are permitted to engage in a confidential alternative dispute resolution process, which if it succeeds would avoid the need for litigation. Celotex and Saint-Gobain Construction Products UK Limited are engaging with other parties in such processes.

Celotex and Saint-Gobain Construction Products UK Limited are unable to communicate on the status of those confidential processes, which are ongoing. However, the financial statements as at 31 December 2022 include a provision covering the principal financial implications that may arise from the process engaged with bereaved, survivors and residents.

The extent to which Celotex may incur further 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 p. 25, 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. Please refer to note 9 relating to provisions for litigation, p. 43.

NOTE 10 FINANCING AND FINANCIAL INSTRUMENTS

10.1 Financial risks

10.1.1 Liquidity risk

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) programs, and occasionally Euro Commercial Paper and US Commercial Paper programs, 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 positive outlook by Standard & Poor's since April 26, 2022, and Baa1 with a stable outlook by Moody's since June 15, 2022.

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.

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

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.

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, 2022 of pre-tax income and pre-tax equity to fluctuations in the interest rate on the Group's net debt after hedging:

(in EUR millions)	Impact on pre-tax income	Impact on pre-tax equity
Interest rate increase of 50 basis points	21	6
Interest rate decrease of 50 basis points	(21)	(6)

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.

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, 2022, 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, 2022:

(in millions of euro equivalent)	Long	Short
EUR	10	4
USD	8	4
Other currencies	0	4
TOTAL	**18**	**12**

The table below gives an analysis, as of December 31, 2022, 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	0.6
USD	0.4
Other currencies	(0.4)
TOTAL	**0.6**

Assuming that all other variables remained unchanged, a 10% fall in the exchange rates for these currencies at December 31, 2022 would have the opposite impact.

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

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 2022 and 2021 comprises:

(in EUR millions)	2022	2021
Borrowing costs, gross	(250)	(240)
Income from cash and cash equivalents	54	7
BORROWING COSTS, NET, EXCLUDING LEASE LIABILITIES	**(196)**	**(233)**
Interest on lease liabilities	(66)	(54)
TOTAL BORROWING COSTS, NET	**(262)**	**(287)**
Interest cost - pension and other post-employment benefit obligations	(247)	(190)
Return on plan assets	232	160
INTEREST COST - PENSION AND OTHER POST-EMPLOYMENT BENEFIT OBLIGATIONS, NET	**(15)**	**(30)**
Other financial expense*	(139)	(106)
Other financial income	12	16
OTHER FINANCIAL INCOME AND EXPENSE	**(127)**	**(90)**
NET FINANCIAL INCOME (EXPENSE)	**(404)**	**(407)**

* *Including €19 million in premiums paid in 2022 on the partial redemption of a GBP bond issue.*

10.3 Net debt

10.3.1 Long- and short-term debt

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.

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.

Lease liabilities

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

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 EUR millions)	Dec. 31, 2022	Dec. 31, 2021
Bond issues	8,165	8,521
Perpetual bonds and participating securities	203	203
Long-term securitization	390	280
Other long-term financial liabilities	206	190
NON-CURRENT PORTION OF LONG-TERM DEBT	**8,964**	**9,194**
Bond issues	1,611	1,000
Long-term securitization	110	220
Other long-term financial liabilities	120	116
CURRENT PORTION OF LONG-TERM DEBT	**1,841**	**1,336**
Short-term financing programs (NEU CP, US CP, Euro CP)	0	0
Short-term securitization	148	263
Bank overdrafts and other short-term financial liabilities	492	282
SHORT-TERM DEBT	**640**	**545**
TOTAL GROSS DEBT EXCLUDING LEASE LIABILITIES	**11,445**	**11,075**
Lease liabilities	2,921	3,155
TOTAL GROSS DEBT	**14,366**	**14,230**
Cash at banks	(2,891)	(1,725)
Mutual funds and other marketable securities	(3,243)	(5,218)
CASH AND CASH EQUIVALENTS	**(6,134)**	**(6,943)**
TOTAL NET DEBT	**8,232**	**7,287**

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

	Dec. 31, 2021	Cash impact		No cash impact			Dec. 31, 2022
(in EUR millions)		Increases	Decreases	Changes in Group structure	Translation adjustments	Other	
Non-current portion of long-term debt	9,194	1,607	(279)	9	(58)	(1,509)	8,964
Current portion of long-term debt	1,336	17	(1,007)	6	0	1,489	1,841
TOTAL LONG-TERM DEBT	**10,530**	**1,624**	**(1,286)**	**15**	**(58)**	**(20)**	**10,805**

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 €9.4 billion at December 31, 2022 (carrying amount: €10 billion). The fair value of bonds corresponds to the market price at the last market quotation 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, 2022 is as follows:

(in EUR millions)	Currency	Within 1 year	1 to 5 years	Beyond 5 years	Total
Bond issues	EUR	1,611	4,331	3,423	9,365
	GBP	0	131	280	411
Perpetual bonds and participating securities	EUR	0	0	203	203
Long-term securitization	EUR	110	390	0	500
Other long-term financial liabilities	All currencies	28	80	126	234
Accrued interest on long-term debt	All currencies	92	0	0	92
TOTAL LONG-TERM DEBT		**1,841**	**4,932**	**4,032**	**10,805**
SHORT-TERM DEBT	**All currencies**	**640**	**0**	**0**	**640**
TOTAL GROSS DEBT EXCLUDING LEASE LIABILITIES		**2,481**	**4,932**	**4,032**	**11,445**
Lease liabilities	All currencies	597	1,509	815	2,921
TOTAL GROSS DEBT		**3,078**	**6,441**	**4,847**	**14,366**

At December 31, 2022, 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 EUR millions)	Within 1 year	1 to 5 years	Beyond 5 years	Total
Future interest payments on gross long-term debt	185	557	480	1,222

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:

- €900 million worth of 3.625% bonds on March 28, 2022;
- €100 million worth of 3.6% bonds on October 10, 2022.

On May 18, 2022, Compagnie de Saint-Gobain partially redeemed a bond for a face value of GBP 183.6 million. The amount outstanding under this bond, originally issued for GBP 300 million, represents GBP 116.4 million maturing on November 15, 2024 with a coupon of 5.625%. The difference between the redemption value and the face value of the bonds redeemed (GBP 16.1 million) was recorded in other financial expense.

On August 10, 2022, Compagnie de Saint-Gobain issued a €1.5 billion bond divided into three tranches:

- a €500 million tranche maturing August 10, 2025 and paying a coupon of 1.625%;
- a €500 million tranche maturing June 10, 2028 and paying a coupon of 2.125%;
- a €500 million tranche maturing August 10, 2032 and paying a coupon of 2.625%.

The ten-year tranche is a Sustainability-Linked Bond (SLB) linked to two important indicators of Saint-Gobain's sustainability roadmap, with ambitious 2030 targets in relation to the 2017 base year:

- reduce by 33% the absolute scope 1 and 2 CO_2 emissions;
- achieve an 80% reduction in non-recovered production waste.

A 0.375% step-up would apply on the 2032 coupon for each of these indicators if their respective target was not met.

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, 2022, representing a total face value of €33 million.

The bonds bear interest at a variable rate (average of interbank rates offered by the four reference banks for six-month euro deposits). The amount paid out per bond in 2022 was €0.

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

10.3.5 Non-voting 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, 2022, 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 security in 2022 was €0.45.

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, 2022, 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 2022 was €61.70, settled in two installments (€27.95 and €33.75).

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).

The state of these programs is as follows:

(in EUR millions)	Authorized drawings	Authorized limits at Dec. 31, 2022	Balance outstanding at Dec. 31, 2022	Balance outstanding at Dec. 31, 2021
Medium Term Notes	any duration	15,000	9,879	9,649
NEU CP	up to 12 months	4,000	0	0
US Commercial Paper	up to 12 months	938 *	0	0
Euro Commercial Paper	up to 12 months	938 *	0	0

* *Equivalent of USD 1,000 million based on the exchange rate at December 31, 2022.*

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, 2022.

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, 2022 and December 31, 2021.

Based on observed seasonal fluctuations in receivables included in the program and on the contract's features, €390 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 157 million has been drawn down at December 31, 2022. Its value amounts to an equivalent in euros of €148 million compared to €263 million at December 31, 2021.

10.3.9 Secured debt

At December 31, 2022, €1 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. A total of €644 million in factored receivables were derecognized at December 31, 2022, compared to €492 million at December 31, 2021.

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:

	Fair value			Nominal amount by maturity				
(in EUR millions)	Derivatives recorded in assets	Derivatives recorded in liabilities	Dec. 31, 2022	Dec. 31, 2021	Within 1 year	1 to 5 years	Beyond 5 years	Dec. 31, 2022
FAIR VALUE HEDGES	**0**	**0**	**0**	**0**				**0**
Cash flow hedges								
Currency	3	(7)	(4)	6	268	34	0	302
Interest rate	6	(47)	(41)	(60)	0	95	362	457
Energy and commodities	5	(1)	4	6	42	1	0	43
Other risks: equities	1	0	1	12	4	10	0	14
CASH FLOW HEDGES - TOTAL	**15**	**(55)**	**(40)**	**(36)**	**314**	**140**	**362**	**816**
Derivatives not qualifying for hedge accounting mainly contracted by Compagnie de Saint-Gobain								
Currency	15	(12)	3	14	2,304	0	0	2,304
Interest rate	0	(1)	(1)	0	0	6	0	6
Energy and commodities	0	0	0	0	0	0	0	0
DERIVATIVES NOT QUALIFYING FOR HEDGE ACCOUNTING - TOTAL	**15**	**(13)**	**2**	**14**	**2,304**	**6**	**0**	**2,310**
TOTAL	**30**	**(68)**	**(38)**	**(22)**	**2,618**	**146**	**362**	**3,126**

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, 2022, credit value adjustments were not material.

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

At December 31, 2022, the IFRS cash flow hedge reserve carried in equity had a debit balance of €8 million, consisting mainly of:

- a debit balance of €15 million in relation to cross-currency swaps designated as cash flow hedges that are used to convert a GBP bond issue into euros;
- a credit balance of €6 million corresponding to changes in the fair value of interest rate hedges classified as cash flow hedges;
- a credit balance of €4 million corresponding to changes in fair value of energy hedges qualified as cash flow hedges;
- a debit balance of €3 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 €2 million in 2022 compared to a gain of €14 million in 2021.

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, 2022, 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 2.3% at December 31, 2022, compared with 2.1% at December 31, 2021.

The average internal rate of return for the main component of the Group long-term debt before hedging (bonds) was 2.0% at December 31, 2022, compared with 2.5% at December 31, 2021.

The table below presents the breakdown by interest rate (fixed or variable) of the Group's gross debt at December 31, 2022, taking into account interest rate and cross-currency swaps.

	Gross debt, excluding lease liabilities		
(in EUR millions)	Variable rate	Fixed rate	Total
EUR	861	8,807	9,668
Other currencies	644	999	1,643
TOTAL	**1,505**	**9,806**	**11,311**
(in %)	13%	87%	100%
Accrued interest and other			134
TOTAL GROSS DEBT EXCLUDING LEASE LIABILITIES			**11,445**

10.5 Financial assets and liabilities

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

At December 31, 2022

		Financial instruments				Financial instruments at fair value			
(in EUR millions)	**Notes**	**Fair value through profit or loss**	**Fair value through other comprehensive income**	**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				6,618	6,618				0
Loans, deposits and surety	(8)			368	368				0
Equity investments and other	(8)		169		169			169	169
Derivatives recorded in assets		15	15		30		30		30
Cash and cash equivalents		3,246		2,891	6,137	3,246			3,246
TOTAL FINANCIAL ASSETS		**3,261**	**184**	**9,877**	**13,322**	**3,246**	**30**	**169**	**3,445**
Trade and other accounts payable				(12,335)	(12,335)				0
Long- and short-term debt				(11,409)	(11,409)				0
Long- and short-term lease liabilities				(2,921)	(2,921)				0
Derivatives recorded in liabilities		(13)	(55)		(68)		(68)		(68)
TOTAL FINANCIAL LIABILITIES		**(13)**	**(55)**	**(26,665)**	**(26,733)**	**0**	**(68)**	**0**	**(68)**
FINANCIAL ASSETS AND LIABILITIES - NET		**3,248**	**129**	**(16,788)**	**(13,411)**	**3,246**	**(38)**	**169**	**3,377**

At December 31, 2021

		Financial instruments				Financial instruments at fair value			
(in EUR millions)	**Notes**	**Fair value through profit or loss**	**Fair value through other comprehensive income**	**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**

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, 2022, Saint-Gobain's capital stock was composed of 515,769,082 shares with a par value of €4 (524,017,595 shares at December 31, 2021).

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, 2022, 4,406,990 shares were held in treasury (December 31, 2021: 2,746,687 shares). In 2022, the Group acquired 18,011,705 shares (2021: 16,865,006 shares) directly on the market The number of shares sold in 2022 was 3,174,316 versus 2,525,353 in 2021. 13,177,086 shares were canceled in 2022, compared with 14,243,174 shares in 2021.

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, 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**
Group Savings Plan	4,916,097	4,916,097
Stock subscription option plans	12,476	12,476
Shares purchased		(18,011,705)
Shares sold		3,174,316
Shares canceled	(13,177,086)	
NUMBER OF SHARES AT DECEMBER 31, 2022	**515,769,082**	**511,362,092**

11.1.6 Dividends

The Annual Shareholders' Meeting of June 2, 2022 approved the recommended dividend payout for 2021 representing €1.63 per share. The ex-dividend date was June 6 and the dividend was paid on June 8, 2022.

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:

	2022	2021
Group share of net income (in EUR millions)	3,003	2,521
Weighted average number of shares in issue	514,372,413	526,244,506
BASIC EARNINGS PER SHARE, GROUP SHARE (in EUR)	**5.84**	**4.79**

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:

	2022	2021
Group share of net income (in EUR millions)	3,003	2,521
Weighted average number of shares assuming full dilution	517,595,809	529,905,261
DILUTED EARNINGS PER SHARE, GROUP SHARE (in EUR)	**5.80**	**4.76**

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 113,095 and 3,110,301 instruments, respectively, at December 31, 2022.

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 EUR millions)	2022	2021
CURRENT TAXES	**(1,052)**	**(843)**
France	(164)	(104)
Outside France	(888)	(739)
DEFERRED TAXES	**(30)**	**(76)**
France	4	(13)
Outside France	(34)	(63)
TOTAL INCOME TAX EXPENSE	**(1,082)**	**(919)**

Theoretical tax expense was reconciled with current tax expense using a tax rate of 25.82% in 2022 and 28.41% in 2021, and can be analyzed as follows:

(in EUR millions)	2022	2021
Net income	3,101	2,614
Less:		
Share in net income of equity-accounted companies	66	56
Income taxes	(1,082)	(919)
PRE-TAX INCOME OF CONSOLIDATED COMPANIES	**4,117**	**3,477**
French tax rate	25.82 %	28.41 %
Theoretical tax expense at French tax rate	(1,063)	(988)
Impact of different tax rates	48	117
Asset impairment, capital gains and losses on asset disposals	(100)	(34)
Deferred tax assets not recognized and provisions for deferred tax assets	56	75
Liability method		(106)
Research tax credit and value-added contribution for businesses (CVAE)	(10)	(6)
Deduction of interest not deductible in France		15
Costs related to dividends	(28)	(39)
Other taxes and changes in provisions	15	47
TOTAL INCOME TAX EXPENSE	**(1,082)**	**(919)**

The contribution of countries with low tax rates explains the impact of the different tax rates applicable outside France. The main contributors are Poland, Ireland, Switzerland, Sweden, Czechia, Romania and Norway.

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.

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 EUR millions)	Net deferred tax asset/ (liability)
NET VALUE AT JANUARY 1, 2021	**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)
Changes in Group structure and other	(61)
NET VALUE AT DECEMBER 31, 2021	**21**
Deferred tax (expense)/benefit	(30)
Changes in deferred taxes relating to actuarial gains and losses (IAS 19)	(10)
Translation adjustments and restatement for hyperinflation	57
Assets and liabilities held for sale	2
Changes in Group structure and other	(426)
NET VALUE AT DECEMBER 31, 2022	**(386)**

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

Changes in Group structure in 2022 mainly concern the first-time consolidation of GCP Applied Technologies and Kaycan, as well as the finalization of the Chryso purchase price accounting. In 2021, changes in Group structure related mainly to the first-time consolidation of Chryso.

The table below shows the main deferred tax components:

(in EUR millions)	Dec. 31, 2022	Dec. 31, 2021
Pensions	232	246
Brands, customer relationships and intellectual property	(863)	(512)
Depreciation and amortization, accelerated capital allowances and tax-driven provisions	(717)	(693)
Tax loss carry-forwards	294	410
Other	668	570
NET DEFERRED TAX	**(386)**	**21**
Of which:		
Deferred tax assets	382	576
Deferred tax liabilities	(768)	(555)

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 €382 million were recognized at December 31, 2022 (€576 million at December 31, 2021), primarily in Germany (€93 million), Brazil (€79 million), Italy (€39 million), China (€39 million) and Mexico (€37 million). Deferred tax liabilities of €768 million were recognized at December 31, 2022 (€555 million at December 31, 2021), including €228 million in the United Kingdom, €133 million in Canada, €93 million in France, €56 million in Switzerland, €48 million in the United States, €37 million in India and €37 million in Denmark. Deferred tax liabilities recognized in other countries represented considerably smaller amounts.

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 €294 million at December 31, 2022 and €410 million at December 31, 2021. 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, 2022, deferred tax assets whose recovery is not considered probable totaled €274 million (December 31, 2021: €299 million) and a provision had been accrued for the full amount. Provisions for deferred tax assets chiefly relate to Germany, Spain, the United States, China, France and Belgium.

The improved deferred tax position in France in 2022 led to a reversal of provisions for losses of €59 million, in addition to the €53 million reversal in 2021.

NOTE 13 SUBSEQUENT EVENTS

On January 18, 2023, Compagnie de Saint-Gobain issued a €1.15 billion bond split into two tranches:

- a €500 million tranche maturing July 18, 2024 and paying a floating-rate coupon of 3-month Euribor +0.20%;
- a €650 million tranche maturing January 18, 2029 and paying a coupon of 3.5%.

This issue has no impact on the financial statements at December 31, 2022.

NOTE 14 FEES PAID TO THE STATUTORY AUDITORS

Total fees paid to the Statutory Auditors and recognized in the income statement in 2022 and 2021 break down as follows:

	Deloitte		PWC		KPMG			
	2022		2021		2022		2021	
(in EUR millions)	Amount before tax	%	Amount before tax	%	Amount before tax	%	Amount before tax	%
Accounts certification services								
Issuer	0.8	10%	0.8	6%	0.9	9%	1.0	11%
Fully consolidated subsidiaries	6.4	80%	8.4	65%	8.5	81%	7.3	82%
SUBTOTAL	**7.2**	**90%**	**9.2**	**71%**	**9.4**	**90%**	**8.3**	**93%**
Services other than accounts certification*								
Issuer	0.2	3%	0.2	2%	0.1	1%	0.0	–%
Fully consolidated subsidiaries	0.6	7%	3.5	27%	0.9	9%	0.6	7%
SUBTOTAL	**0.8**	**10%**	**3.7**	**29%**	**1.0**	**10%**	**0.6**	**7%**
TOTAL	**8.0**	**100%**	**12.9**	**100%**	**10.4**	**100%**	**8.9**	**100%**

* *Non-audit services provided by the Statutory Auditors to the parent company and its subsidiaries mainly comprise (i) independent third party verification procedures performed on the consolidated social, environmental and corporate information, (ii) accounting, tax and regulatory advisory services, and (iii) training.*

NOTE 15 INFORMATION ON THE ISSUER

Name or other identification of the reporting entity	**Compagnie de Saint-Gobain**
Company address	Registered office Tour Saint-Gobain 12, place de l'Iris 92400 Courbevoie
Legal form of the entity	French *société anonyme* (joint-stock company)
Country of incorporation	France
Address of the company's registered office	Tour Saint-Gobain 12, place de l'Iris 92400 Courbevoie
Main place of establishment	France
Nature of the company's operations and its main activities	Saint-Gobain aspires to be the worldwide leader in sustainable construction, which improves everyone's daily life with its High Performance Solutions
Company LEI code	NFONVGN05Z0FMN5PEC35

NOTE 16 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%
Saint-Gobain Performance Plastics Isofluor GmbH, Neuss*	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%
Freudenberger Autoglas GmbH, München*	Germany	Full consolidation	99.99%
Freeglass GmbH & Co. KG, Schwaikheim*	Germany	Full consolidation	99.99%
Freeglass Verwaltungsgesellschaft mbH*	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%
SG Join Leader (Hangzhou) New Materials Co.,LTD.	China	Full consolidation	100.00%
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%
GCP Applied Technologies, Inc.	United States	Full consolidation	100.00%
Chryso	France	Full consolidation	100.00%
Saint-Gobain Abrasifs	France	Full consolidation	99.99%
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.	Czechia	Full consolidation	100.00%
Saint-Gobain Sekurit CZ, Spol S.R.O	Czechia	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*	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%
SG Formula GmbH*	Germany	Full consolidation	100.00%
SG Beteiligungen Gmbh*	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%
Optimera Estonia A/S (currently AS Famar-Desi)	Estonia	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	Czechia	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%
SG Construction Products S.R.O.	Slovakia	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%
SG Glass Egypte S.A.E.	Egypt	Full consolidation	70.00%
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%
SG Isover Iberica S.L	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%
SG Eurocoustic	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
SG Innovation Materials (Changxing) Co., Ltd	China	Full consolidation	100.00%
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%
Kaycan Ltd	United States	Full consolidation	100.00%
KP Building Products Ltd	United States	Full consolidation	100.00%
GCP Applied Technologies, Inc.	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).*