Welcome to your CDP Climate Change Questionnaire 2022

C0. Introduction

C0.1

(C0.1) Give a general description and introduction to your organization.

With €44 160M in sales in 2021, 165 871 employees, and an industrial presence in 75 countries through around 800 manufacturing facilities (and 3 500 distribution outlets), Saint-Gobain is a worldwide leader in light and sustainable construction. 87% of the Group's sales occur in construction markets, including new construction, renovation, civil engineering and infrastructure, with our products made of flat glass, mineral wool, plasterboard, pipes, exterior walls and floor coating mortars. We help to make buildings more energy efficient for the end user. The exponential growth in infrastructure needs, alongside increasing demand for energy-efficient solutions, represents valuable opportunities for Saint-Gobain. Our Company's purpose – Making the World a Better Home – illustrates our ambition to improve the lives of all by making the planet a fairer, more harmonious and more sustainable living space. In construction markets where products and services are supplied locally and in those have short distances to cover, the structure of the Group is organized per country and by regions (Northern Europe; Southern Europe, Middle-East, Africa; Americas; Asia-Pacific) so that Saint-Gobain can meet the specific needs of each local market. In addition to construction markets, the Group provides a range of High Performance Solutions through different Business Units (BUs) for Mobility, Life Sciences, Construction Industry, Surface Solutions, Ceramics and Admixture). In order to continuously improve its processes and products, Saint-Gobain invests heavily in R&D. For the past ten years, the Group has been ranked in the Top 100 Innovators by Clarivate. In 2019, the Group announced its carbon neutrality objective for 2050, setting interim validated Science-Based Targets (SBT) for 2030 covering our direct (scope 1) and indirect (scope 2 and 3) emissions. Please see our 2021 Universal Registration Document (URD) for more details: https://www.saint-gobain.com/sites/saint-gobain.com/files/media/document/SGO_URD_2021_EN_220330_MEL.pdf.

C0.2

(C0.2) State the start and end date of the year for which you are reporting data.

	Start date	End date	Indicate if you are providing emissions data for past reporting years

Reporting year	January 1, 2021	December 31, 2021	No

C0.3

(C0.3) Select the countries/areas in which you operate.

Albania
Algeria
Angola
Argentina
Australia
Austria
Belgium
Bhutan
Botswana
Brazil
Bulgaria
Canada
Chile
China
Colombia
Côte d'Ivoire
Czechia
Denmark
Egypt
Estonia
Ethiopia
Finland
France
Germany
Ghana
Greece
Hungary
India
Indonesia
Ireland
Italy
Japan
Jordan
Kazakhstan
Kenya
Kuwait
Latvia
Lebanon
Lithuania
Luxembourg
Malaysia

Mauritius
Mexico
Morocco
Netherlands
New Zealand
Norway
Oman
Peru
Philippines
Poland
Portugal
Qatar
Republic of Korea
Romania
Russian Federation
Saudi Arabia
Serbia
Singapore
Slovakia
Slovenia
South Africa
Spain
Sri Lanka
Sweden
Switzerland
Thailand
Turkey
United Arab Emirates
United Kingdom of Great Britain and Northern Ireland
United Republic of Tanzania
United States of America
Venezuela (Bolivarian Republic of)
Viet Nam
Zimbabwe

C0.4

(C0.4) Select the currency used for all financial information disclosed throughout your response.

EUR

C0.5

(C0.5) Select the option that describes the reporting boundary for which climate-related impacts on your business are being reported. Note that this option should align with your chosen approach for consolidating your GHG inventory.

Operational control

C0.8

(C0.8) Does your organization have an ISIN code or another unique identifier (e.g., Ticker, CUSIP, etc.)?

Indicate whether you are able to provide a unique identifier for your organization	Provide your unique identifier
Yes, an ISIN code	FR0000125007

C1. Governance

C1.1

(C1.1) Is there board-level oversight of climate-related issues within your organization?

Yes

C1.1a

(C1.1a) Identify the position(s) (do not include any names) of the individual(s) on the board with responsibility for climate-related issues.

Position of individual(s)	Please explain
Board-level committee	The role of the Board of Directors is to determine the Company's strategic direction and monitor its implementation and proper management. Climate change is regularly monitored by the Board of Directors and the Board has full oversight of it. In February 2018, the Board of Directors participated in a seminar organized specifically for their attention by the Chief Sustainability Officer that was devoted to climate change and its consequences for businesses, with the support of external internationally recognized experts. This seminar intended to enable each director to better understand the issues related to climate change for the Saint-Gobain Group and the consequences on its strategy. In April 2019, training sessions were pursued on the topic of circular economy, with a specific point addressed related to the link between circular economy and climate change. In April 2020, a session was devoted to the transformation of energy and industrial systems into a "zero carbon economy" with the support of the Energy Transition Commission (ETC) and the International Energy Agency (IEA). Example of climate-related decision: In September 2019, during the Climate Action Summit conveyed by the Secretary General of the United Nations, our President, Member of the Board, signed the Global Compact pledge on "Business ambition for 1.5°C", committing Saint-Gobain to reach net-zero emissions by no later than 2050 in line with 1.5°C scenarios. The Board subsequently decided to

	discuss climate-related issues in several sessions: in April 2021, the Board held a session devoted to biodiversity, with a specific focus on the link between climate change and biodiversity; in September 2021, the Board approved an update of our decarbonisation roadmap in preparation of the Capital Market Day on October 6, 2021; finally, in April 2022, the Board held a specific session on the "city of tomorrow", considering in particular towards the challenges of resilience and adaptation to climate change.
Board Chair	Starting 1st July 2021, the governance of Saint-Gobain was changed to separate the role of Chairman of the Board and that of the CEO, where the current Chairman was the former CEO before this date. The Chairman of the Board has a deep knowledge and longstanding commitment to climate change. He published two books related to climate change and sustainability: "Our fight for the climate" in 2015, and in 2021 "The urban challenge". In 2016, he was awarded the World Green Building Council (WorldGBC) David Gottfried prize. This award, created in 2011, acknowledges persons who have made a unique, innovative and entrepreneurial contribution to the global cause of sustainable building development. Example of climate-related decision: In September 2019, during the Climate Action Summit conveyed by the Secretary General of the United Nations, the Board Chair signed the Global Compact pledge on "Business ambition for 1.5°C", committing Saint-Gobain to reach net-zero emissions by no later than 2050, in line with 1.5°C scenarios. Saint-Gobain is also part of the "Race to zero" campaign from the UNFCCC.
Chief Executive Officer (CEO)	Starting 1st July 2021, the governance of Saint-Gobain was changed to separate the role of Chairman of the Board and that of the CEO, where the current CEO was deputy CEO before this date. Under the chairmanship of the CEO, the Saint-Gobain Executive Committee is responsible for managing the Group and makes strategic decisions according to the guidelines defined by the Board of Directors . In 2021, the Committee defined a new strategy to "Grow and Impact", which was presented during Capital Market Day on October 6, putting sustainability and in particular climate change at its core.
Other C-Suite Officer	Senior Vice President in charge of Human Resources and Corporate Social Responsability starting July 1st, 2021 . She is is responsible for the CSR policy by ensuring its integration in different Group's management processes and the deployment of the roadmaps in countries.
Chief Sustainability Officer (CSO)	Directly in charge of defining and implementing the climate change policy of the Group

C1.1b

(C1.1b) Provide further details on the board's oversight of climate-related issues.

Frequency with which climate-	Governance mechanisms into	Please explain

related issues are a scheduled agenda item	which climate-related issues are integrated	
Scheduled – some meetings	Reviewing and guiding strategy Reviewing and guiding major plans of action Reviewing and guiding risk management policies Setting performance objectives Monitoring implementation and performance of objectives Monitoring and overseeing progress against goals and targets for addressing climate-related issues	The role of the Board of Directors is to determine the Company's strategic direction and to monitor its implementation and proper management. In April 2021, the Board held a session devoted to biodiversity, with a specific focus on the link between climate change and biodiversity, and in September 2021, the Board approved an update of our decarbonisation roadmap in preparation of the Capital Market Day on October 6, 2021. The Corporate Social Responsibility Committee ensures that CSR issues are taken into account in the definition of the Group's strategy and its implementation. The Committee reviews all the elements of the CSR roadmap, particularly regarding climate change. It is composed of four Directors, who met four times in 2021, and regularly tracks the implementation of short-, medium- and long-term programs, covering also risks and opportunities. Leadership for this challenge is provided directly by the Senior Vice President in charge of Human Resources and ESG, who attends the Committee. Please see our 2021 URD (pages 80-81) for a visual climate change organigram of the Group.

C1.1d

(C1.1d) Does your organization have at least one board member with competence on climate-related issues?

	Board member(s) have competence on climate-related issues	Criteria used to assess competence of board member(s) on climate-related issues
Row 1	Yes	Various board members have a strong track record on climate change. Our chairman wrote two books on sustainability, "Our fight for the climate" in 2015, and "The urban challenge" in 2021, and he was chairman of the French WBCSD between 2012 and 2016. Our Lead Director also was chairman of the French WBCSD, between 2016 and 2019. More globally, all board members have been trained on climate change issues during yearly training seminars of the Board.

C1.2

(C1.2) Provide the highest management-level position(s) or committee(s) with responsibility for climate-related issues.

Name of the position(s) and/or committee(s)	Responsibility	Frequency of reporting to the board on climate-related issues
Other C-Suite Officer, please specify Senior Vice President on Human Resources and ESG	Other, please specify General ESG oversight	More frequently than quarterly
Chief Sustainability Officer (CSO)	Both assessing and managing climate-related risks and opportunities	More frequently than quarterly
Corporate responsibility committee	Other, please specify General ESG oversight (see point below)	More frequently than quarterly

C1.2a

(C1.2a) Describe where in the organizational structure this/these position(s) and/or committees lie, what their associated responsibilities are, and how climate-related issues are monitored (do not include the names of individuals).

The Sustainable Development Department, led by the CSO, oversees the management of climate-related issues, which represent both a risk and an opportunity for the Group. The CSO reports to the Senior Vice President in charge of Human Resources and ESG, who has general oversight on ESG and is member of the Executive Committee and reports to the CEO. The Corporate Social Responsibility Committee of the Executive Committee, which ensures that CSR issues are taken into account in the definition of the Group's strategy and its implementation, meets four times per year to review all sustainability-related policies and initiatives of the Group. The Committee, composed of four Directors, regularly tracks the implementation of short-, medium- and long-term programs, covering also risks and opportunities. Leadership is provided by the Senior Vice President in charge of Human Resources and ESG, who attends the Committee. There equally is a CSR committee at the Board level, in addition to the one of the Executive Committee.

Climate-related issues are managed by several working groups. A "Carbon Roadmap 2030" working group, which is a response to the Group's commitment to achieve carbon neutrality by 2050, is managed at the Group level by several departments (Strategy, Finance, R&D, Innovation, Technology and Industrial Efficiency, Purchasing). A working group on "Sustainable Solutions for Growth", which strives to improve the solutions offered by Saint-Gobain by considering the expectations of various stakeholders as well as potential changes in regulatory requirements, is managed at Group level by several departments (Strategy, Marketing and CSR). A "Risk Management" working group is responsible for identifying, assessing and mitigating potential risks that could impact the Group's business, where several

departments are involved at Group level (e.g., Strategy, Audit and Internal Control, and Risk and Insurance).

Please see our 2021 URD (pages 80-81) for a visual climate change organigram of the Group.

C1.3

(C1.3) Do you provide incentives for the management of climate-related issues, including the attainment of targets?

	Provide incentives for the management of climate-related issues	Comment
Row 1	Yes	

C1.3a

(C1.3a) Provide further details on the incentives provided for the management of climate-related issues (do not include the names of individuals).

Entitled to incentive	Type of incentive	Activity incentivized	Comment
Chief Executive Officer (CEO)	Monetary reward	Emissions reduction target	One third of the CEO's total bonus in 2021 was based on four qualitative targets, one of them being the implementation of the CSR policy (including for sustainability and climate change). This included the definition of a non-financial performance barometer, with the presentation of a dashboard of KPI's at the board's strategic seminar and at the Group's investor day, and finalisation of a methodology to quantify the benefits of the Group's solutions in order to assess the overall contribution of the Group's sustainable solution portfolio. See page 189 of our 2021 URD for reference.
Other, please specify 2512 Group officers and employees	Monetary reward	Emissions reduction target	People entitled to monetary reward in the form of long-term incentives are: managers with outstanding performance and high-potential managers (2 429 grantees), the main functional and operational heads of the Entities and Regions (68 grantees), Executive Committee members (15 grantees) and the CEO. Since 2017, the following performance conditions are considered for CSR: the total recordable accident rate (more than 24 hours of lost and non-lost time), the reduction rate of CO2 emissions, and the senior executives diversity index. The weight of CO2 in this calculation was doubled in 2021. For all employees having a short-term incentive

			(annual), this must include 5% of the compensation based on a carbon reduction objective.
All employees	Non-monetary reward	Emissions reduction project	Saint-Gobain launched an internal Carbon Fund in 2021. First implemented in a pilot region (Northern Europe) and now deployed in various other regions, it aims to accelerate the reduction of non-industrial CO2 emissions through the everyday actions of employees and via targeted investments on sites. The areas covered by these investments are mainly related to sustainable employee mobility, renewable energies and improving well-being and energy efficiency at Saint-Gobain sites. Projects, proposed and selected by employees, concern their professional environment.
All employees	Non-monetary reward	Emissions reduction project	The annual Emerald Awards reward Saint-Gobain sites around the world that carry out projects contributing to the reduction of their environmental impacts including energy and climate change as well as those of their manufactured products. The objectives with this competition are to raise the employee awareness on environmental stakes, enforce best practices and incentivize managers to launch and share their environmental projects. As example, in 2020, the two sites of glass production at Chennai (India) and Pisa (Italy) were awarded for their installation of ORC turbine producing utilities from recovered heat.
Chief Operating Officer (COO)	Monetary reward	Emissions reduction target	The annual Emerald Awards reward Saint-Gobain sites around the world that carry out projects contributing to the reduction of their environmental impacts, including energy and climate change as well as those of their manufactured products. The objectives of this competition are to raise employee awareness on environmental stakes, enforce best practices and incentivize managers to launch and share their environmental projects. For example, two projects were awarded in 2021: one being a 12-year Power Purchase Agreement that Saint-Gobain arranged in 2021 with Invenergy, a leading privately held global developer and operator of sustainable energy solutions, for 120 megawatts (MWp) from the Blooming Grove Wind Farm, Illinois. The second project was related to a smart compressor program in Brazil. They have deployed in several s the state of art solution/technologies on compressed air generation (new technologies and I4.0 solutions). Industrial IOT sensors has been installed to make easier and faster

			the management of machine health, energy efficiency and other parameters.

C2. Risks and opportunities

C2.1

(C2.1) Does your organization have a process for identifying, assessing, and responding to climate-related risks and opportunities?

Yes

C2.1a

(C2.1a) How does your organization define short-, medium- and long-term time horizons?

	From (years)	To (years)	Comment
Short-term	0	4	Our environment short-term targets, including CO2 scope1+2, are in 2025, compared to 2010 at iso-production. Our principal risks are assessed and tested annually for publication within the annual report.
Medium-term	4	9	Our medium-term validated CO2 Science-Based Target, including scopes 1+2 and 3, is in absolute value in 2030 compared to 2017. Associated to those medium-term targets are our sustainability projects, such as shifting our mix to green electricity and developing technologies to transition away from fossil fuels, from example using biogas or by increasing electrification of our processes.
Long-term	9	29	In September 2019, during the Climate Action Summit conveyed by the Secretary General of the United Nations, Saint-Gobain signed the Global Compact pledge on “Business ambition for 1.5°C”, committing the Group to reach net-zero emissions by no later than 2050, in line with 1.5°C scenarios. We have applied for validation of this target following the new standard being released by SBTi end of 2021. As part of our emerging risks and opportunities horizon scanning, we assess long-term climate-related risks and opportunities toward 2050 within a range of potential climate futures, in line with the recommendations of TCFD. Saint-Gobain has built three qualitative climate scenarios that incorporate a range of political, technological, economic and societal assumptions. These scenarios range from 1.5°C to 4.8°C before the end of the century and help business units and the countries in which the Group operates to anticipate the impacts of climate change on their markets.

C2.1b

(C2.1b) How does your organization define substantive financial or strategic impact on your business?

The identification and assessment of risks and opportunities related to climate change is an integral part of our global risk management and innovation processes in line with wider business practice. This includes assessment of non-financial risks and opportunities linked to Corporate Social Responsibility, carried out in accordance with French legal and regulatory provisions for the Group's Extra-Financial Performance Declaration (see page 50 of our 2021 URD).

i) Definition of 'substantive financial impact: When assessing climate-related risks, a substantive financial or strategic impact is defined by an impact having a considerable or relatively significant effect on the Group at corporate level. It can include operational, financial and strategic effects that undermine the entire business or part of it. Such impact could threaten our company's business model, our future performance, and our solvency or liquidity in the short to long-term horizons. Our assessment includes for each impact an analysis of the proportion of business units affected, size of the impact on those business units, dependency of the organization on each unit, and potential risk at shareholder/customer. In addition, whilst the current legal environment in various countries in which the Group operates does not tax tons of CO2 emitted, the Group has carried out sensitivity analyses, in line with its emissions reduction strategy, on the value of its CGUs assuming a carbon price of €75 per ton as of 2022, as well as the maintenance or development of government support mechanisms such as the allocation of CO2 emissions allowances. If these assumptions were to prove accurate, no significant additional impairment would need to be recognised against fixed assets.

ii) Description of the quantifiable indicator used to define substantive financial or strategic impact: When quantifying climate-related risks, the indicators used to define substantive financial or strategic impact are where impact is in excess of a threshold of €50M. Saint-Gobain identified several risks and strategic opportunities related to climate change, which affect each segment of the Group's value chain differently, from the extraction of raw materials to their end of life. As an example, the CSR Committee (attended by the Chief Sustainability Officer) produced a study in 2020 that led to the table on pages 83-84 of our 2021 URD, which shows how opportunities and risks impact each stage of the value chain, whilst being part of global market dynamics and meeting consumer expectations. This approach has been aligned with TCFD recommendations, and where required, the study has been specifically reviewed for Saint-Gobain's business and integrated in our annual risk assessment.

In addition, Saint-Gobain is driving forward risk assessment: in 2020, the Group led the response to TCFD by participating in a working group of six companies in the construction value chain brought together by WBCSD. The project resulted in the Construction and Building Materials TCFD Preparer Forum report, issued in July 2020, as a guide for construction entities on how to approach TCFD recommendations (note: the working group's commentary was also designed to support investors' understanding of climate risks and opportunities across the construction value chain, including how connections and points of influence within the value chain can support the low-carbon transition).

Each year, the assessment of our main risks looks to evaluate such risks in terms of impact, control and criticality levels. Regarding the impact level, the definition includes financial as well as human, environmental and reputational implications. For the control level, it includes existing controls and foreseen action plans to address risks together with all necessary training and employee awareness initiatives. Lastly, on criticality, it refers to the plausibility of occurrence of the risk, with a pragmatic view on the contextual background of the risk. This yearly assessment is done by the Saint-Gobain Audit and Internal Control Department, together with the Chief Sustainability Officer for climate change related issues. It is presented to the Audit and Risks Committee of the Group, one of the three committees established by the Board, with the aim to demonstrate that main risks are identified, evaluated and managed. As such, risks are assumed by the Group, which will validate the adequate action plans in order to mitigate, transfer, accept or control those risks. None of the risks related to climate change was of material financial significance for the Group for 2021; nevertheless, the combined effects of climate change could potentially result in this becoming a principal risk in coming years. For example, the Group includes risks related to the changes in the cost of energy and carbon pricing within its principal risk statement, and we expect to see significant fluctuations in these costs within a range of climate futures.

C2.2

(C2.2) Describe your process(es) for identifying, assessing and responding to climate-related risks and opportunities.

Value chain stage(s) covered

Direct operations
Upstream
Downstream

Risk management process

Integrated into multi-disciplinary company-wide risk management process

Frequency of assessment

More than once a year

Time horizon(s) covered

Short-term
Medium-term
Long-term

Description of process

i) Description of the process identifying, assessing and responding to climate-related risks and opportunities

The identification and assessment of risks and opportunities related to climate change is an integral part of Saint-Gobain's global risk management and innovation processes in line with wider business practice. Risk identification and assessment is undertaken at Group level with input provided on a geographical and divisional basis, representing all

geographies and business units of the Group. The Corporate Social Responsibility Committee is responsible for identifying and assessing emerging sustainability risks and climate-related risks and opportunities over the short, medium and long-term, as well as for ensuring that the Group's strategy is resilient.

In order to ensure that climate risks are adequately included within overall risk management processes in our direct operation but also upstream and downstream, the Group regularly carries out significant stakeholder-wide engagement processes as part of its sustainability strategy.

It also carried out an in-depth TCFD review in 2020, considering three distinct climate futures varying from 1.5-4.8°C warming. From its learnings, the Group contributed to the construction sector's response to TCFD via a WBCSD working group, resulting in the Construction and Building Materials TCFD Preparer Forum report issued in July 2020. A company specific assessment of the Group's climate-related risks and opportunities was undertaken, and our full analysis is included on pages 83-84 of our 2021 URD, which outlines how risks and opportunities impact each stage of the value chain to ensure that Saint-Gobain's strategy is resilient within global market dynamics whilst meeting consumer expectations.

Risks and emerging risks (including climate risks) are accelerated to the principal risk register where they have a substantive financial or strategic impact on the company, i.e., a risk that has operational, financial or strategic effects that undermine the entire business, or part of our business, and that could threaten our company's business model , our future performance, our solvency or liquidity in the short-, medium- or long-term horizons, or risks where the impact is in excess of €50m. Considering this threshold, none of the risks related to climate change was of major financial significance for the Group for 2021; nevertheless, the combined effects of climate change could potentially result in this becoming a principal risk in coming years. In addition, climate change exacerbates many existing risks within the principal risk register.

The Group-wide risk register is reviewed annually by the Audit and Internal Control department, together with the Chief Sustainability Officer for climate-related risks. Key risks are escalated to the Audit and Risks Committee and the Board of Directors for inclusion within the principal risk register. These principal risks are assessed in terms of impact, control and criticality levels as part of the business plan and strategic review, looking at short- and medium-term time-horizons. Impact considers financial, human, environmental and reputational implications. Control considers existing controls and foreseen action places together with training and employee awareness initiatives. Criticality considers the plausibility of occurrence of the risk, with a pragmatic view on the contextual background of the risk. Action plans are put in place to either mitigate, transfer, accept or apply further controls for those risks.

All the material risks that the Board of Directors must be aware of are included in the mapping analysis. As such, the map is reviewed by the Audit and Risks Committee and then validated by the Board of Directors.

ii) Case study that demonstrates how the components of the described process have been used to identify, assess and respond to transitional risks:
The EU Emissions Trading System applies to 42% of our scope 1 emissions. This risk has been identified from the assessment led by both the Corporate Social Responsibility Committee and the Audit and Risks Committee. The impact in 2020 is low because the balance (free allocation, less emissions) is still positive, but it will have a substantial financial impact when our self-sufficiency in quotas will decrease to zero in the medium-term. The average annual impact could amount €100M in 2030 if the unit price rises to €100/tCO2. We chose to mitigate that risk by developing ambitious carbon target (2030 SBT of -33% for 2030 vs 2017 for scope1+2), reducing therefore our exposure to carbon pricing mechanisms, coupled with an envelope of €100M every year over the 10 next years for CAPEX and R&D investments. In addition, an internal shadow carbon price for investment and R&D supports the development of low-carbon technologies at worldwide level in order to reduce our emissions and mitigate the risk of impact linked to the extension of other than EU carbon pricing mechanism.

iii) Case study that demonstrates how the components of the described process have been used to identify, assess and respond to Physical risks:
Flood risk has been identified from the assessment led by both the Corporate Social Responsibility Committee and the Audit and Risks Committee. In 2021, there was one major flood event in Germany that caused a production stoppage having a financial cost of more than €50M. Whilst global climate impacts are expected to increase in our Highway to Hell scenario, Saint-Gobain has circa 800 manufacturing sites which are spread over a large geographical perimeter (75 countries), which by nature, decreases the impact of the risk at corporate level; however, the risk will likely have a substantial financial impact over the short-term because it already happened once and may repeat with the same or higher impact and to an increased frequency.

In order to mitigate that risk, we assess on an annual basis and revise during the year whenever relevant our exposure, inclusive our main suppliers, to acute physical climate-related risks through regular local audits and self-assessments. Facilities must apply the Group Loss Prevention Manual, and Business Continuity Plans are defined for each one of them. Business Continuity Plans cover also our main components of the value chain. At corporate level, the Risk and Insurance department manages risks of property damage and related business interruption (loss prevention and loss management).

There is significant uncertainty over our long-term climate risk assessments due to the inherent uncertainty of climate scenarios, the velocity over which risks can take place, and the impact of potential impacts as and when they occur. The risks and uncertainties could therefore be different from described.

C2.2a

(C2.2a) Which risk types are considered in your organization's climate-related risk assessments?

	Relevance & inclusion	Please explain
Current regulation	Not relevant, included	Justification of the decision on the relevance and inclusion of this risk type in our risk assessment: Current regulation is included in our risk assessment but is considered as not relevant as current regulation is appropriately managed and does not lead to unexpected substantive financial or strategic impact on our business. The regulatory environment is continuously reviewed in all businesses and geographies and requires continuous monitoring and assessment of policy actions. The impact of those risks may require changes to annual reporting or changes to business practice and could impact our cash flow, operating results, financial position, business and reputation. There is therefore a continual screening for current policy and legislation (including climate) that may impact the reporting requirements (such as TCFD) for the Group or that may result in climate/environmental standards to adhere to. Example of specific risk considered in our assessment and how it is included in climate-related risk assessments: At the local level, monitoring and compliance programs are implemented in the countries by the Environment, Health and Safety (EHS) managers. At corporate level, the Legal department monitors current and emerging environmental regulations. As Saint-Gobain has many facilities that are energy intensive, we can illustrate this process by the implementation of the European Industrial Emissions Directive (IED), where corporate supports the development of such Directive and exchanges with the local level so that the impact of its implementation can be foreseen and integrated in our investment plans. Specific audits are also carried on. Such an approach is not restricted to the EU, but applies also to other geographies. Our 2021 URD provides an overview of our risks associated with climate change on pages 83-84.
Emerging regulation	Relevant, always included	Justification of the decision on the relevance and inclusion of this risk type in our risk assessment: Emerging regulation is included in our risk assessment and is considered as relevant as it may have a substantive financial or strategic impact on our business. The regulatory environment is continually reviewed in all businesses and geographies and requires continuous monitoring and assessment of policy actions. The impact of those risks could lead to unexpected changes to annual reporting or changes to business practice and could impact our cash flow, operating results, financial position, business and reputation. There is therefore a continual scanning for current policy and legislation (including climate) that may impact the reporting requirements (such as TCFD) for the Group or that may result in climate/environmental standards to adhere

		to. Example of specific risk considered in our assessment and how it is included in climate-related risk assessments: At the local level, monitoring and compliance programs are implemented in the countries by the EHS managers. At corporate level, the Legal department monitors current and emerging environmental regulations. In line with the recommendations of TCFD, emerging regulation is assessed as part of the horizon scanning process within a range of future climate states. A simplifying assumption applied by the Group is that increased legal and regulatory transition risks will arise in a low-temperature future (our “Wind of Change” scenario). As an illustration of specific risk considered in our assessment, we can highlight the increase in the price of GHG emissions that may impact our manufacturing costs and put at risk our business with respect to imported materials from less-regulated countries. More broadly we expect that other geographical areas will follow the already concerned areas. For example, stricter EU-ETS rules reducing the level of free allocation will have an impact for the Group, limited thanks to our self-sufficiency in quotas in the medium-term and the 2030 SBT that we have set, but potentially increasing the impact of this risk in the future together with the increase of price and the extension of similar regulations to other geographical areas. Our 2021 URD provides an overview of our risks associated with climate change on pages 83-84.
Technology	Not relevant, included	Justification of the decision on the relevance and inclusion of this risk type in our risk assessment: Technology is included in our risk assessment but is considered as not relevant as it is considered as an opportunity rather than a risk, even if it does have a substantive financial or strategic impact on our business. The Group acknowledges that technology changes will increase over time and particularly in a “Wind of Change” scenario. A key focus for the Group is to realise opportunities from technological change. Technology advances are key to mitigating our carbon impact and also are important in ensuring our product mix and operations are environmentally friendly. In particular, energy efficiency, resource efficiency, development and use of low-impact materials and renewable energy production are strongly reliant on technology improvements. Example of specific risk considered in our assessment and how it is included in climate-related risk assessments: As an illustration of specific risk considered in our assessment, we can highlight the implementation of new low-carbon technologies within our facilities as well as over our value chain (raw materials supply and

		transportation), as these will help to develop low-carbon products for our customers. This opportunity is managed at Group level by several departments: Strategy, Marketing, CSR and R&D. Answers are linked to the need of new raw materials and new increased R&D spending to develop low-carbon solutions. The Sustainable Development department is also involved with the development of circular economy (e.g., logistics have been optimized for glass products to promote the recovery of cullet (glass debris) across the entire value chain where the Group is present and especially between glass processing sites). The Sustainable Development department also is involved in the communication of the carbon intensity of our products through the Environmental Product Declaration. Our 2021 URD provides an overview of our risks and opportunities associated with climate change on pages 83-84.
Legal	Not relevant, included	Justification of the decision on the relevance and inclusion of this risk type in our risk assessment: Legal is included in our risk assessment but is considered as not relevant as it is considered as not having a substantive financial or strategic impact on our business. Legal risks are systematically included in our risk mapping exercises in order to reduce our exposure to litigation, including litigation around climate and environmental law. Legal risks are also considered alongside our regulatory and policy risks. Saint-Gobain's principal risk register includes risks relating to industrial and environmental risks (i.e., exposure to environmental liabilities and risks associated with legal and administrative procedures). Saint-Gobain expects legal risks relating to environmental and climate change to be exacerbated in a low-temperature climate scenario (Saint-Gobain's "Wind of Change" scenario), where the world is increasingly focused on minimizing environmental harm. Regarding the liability related to our products, it is considered as an opportunity rather than a risk. Example of specific risk considered in our assessment and how it is included in climate-related risk assessments: While we may face a legal risk due to disruption of certain supplies, disruption of operations that could threaten our company's reputation and even expose us to claims from our customers, resulting in financial costs, the impact of this risk is mitigated by prevention on both our facilities and suppliers. We assess on an annual basis our exposure to that risk through regular local audits and self-assessments. Facilities must apply the Group Loss Prevention Manual and Business Continuity Plans are defined for each. At corporate level, the Risk and Insurance department manages risks of property damage and related business interruption (loss prevention and loss management). As part of its responsible purchasing program, the Group also relies on a diversity of

		suppliers and supply sources to reduce the risk of transportation difficulties and supply chain disruptions. Our 2021 URD provides an overview of our risks associated with climate change on pages 83-84.
Market	Relevant, always included	Justification of the decision on the relevance and inclusion of this risk type in our risk assessment: Market is included in our risk assessment and is considered as relevant as it may have a substantive financial or strategic impact on our business. Market risks are related to the principal risks of the changes in the cost of energy and raw materials. This risk is expected to increase in a low-temperature future for low-carbon energies that are not yet fully developed. Example of specific risk considered in our assessment and how it is included in climate-related risk assessments: Risks associated with economic cycles and risks associated with changes in the cost and supply of energy and raw materials are monitored and assessed as part of the Group-wide risk review. As an illustration, we may face risk related to the increase of energy utilities cost in the frame of the worldwide energy transition. Our purchasing managers develop long-term contracts with suppliers whenever interesting and possible, where some energies considered in our carbon roadmaps are not affordable today (e.g., biogas or green hydrogen). Issues are technical (e.g., amount of supply and distribution network), financial and linked to local regulation. For example, an additional cost of €20/MWh for biogas relative to natural gas would lead to an additional cost of more than €590M for the Group for present consumption of natural gas. The war in Ukraine could further change this context: in effect, the Russo-Ukrainian war has exposed the risk in gas supply and energy vulnerability. This has led us to reduce our dependence on fossil fuels and to accelerate our renewable energy agenda, notably by installing solar panels at our industrial sites . For example in 2021 , Saint-Gobain and ENGIE Romania signed a partnership to build the largest on-site photovoltaic park in Romania (8.6 MWp) to meet around 20% of the energy needed for a glass plant in Călărași, avoiding more than 2,400 tons of CO2 per year. In line with the recommendations of the TCFD, market risks are also assessed as part of the horizon scanning process within a range of future climate scenarios. A simplifying assumption applied by the Group is that increased market transition risks will arise in a low-temperature future (out “Wind of Change” scenario).

		Our 2021 URD provides an overview of our risks associated with climate change on pages 83-84.
Reputation	Not relevant, included	Justification of the decision on the relevance and inclusion of this risk type in our risk assessment: Reputation is included in our risk assessment but is considered as not relevant as it is considered as appropriately managed without substantive financial or strategic impact on our business. Exposure to litigation and claims may have a detrimental impact on the Group's reputation and is linked to risks associated with legal and administrative procedures. Failure to mitigate climate change or act in an environmentally responsible manner may also result in a reputational risk, if not appropriately managed. This may result in reduced demand for products from customers or a lack of support from investors. Saint-Gobain undertakes a regular materiality assessment to determine key issues relating to CSR that are focus areas for the Group. This takes into account risks and opportunities, outlining the potential impacts for stakeholders and to the Group. The identification of these risks and opportunities is a central step in the construction of our CSR roadmap and assists the Group in meeting stakeholder expectations. Example of specific risk considered in our assessment and how it is included in climate-related risk assessments: The Group made a simplifying assumption that increased legal and regulatory transition risks will arise in a low-temperature future (our "Wind of Change" scenario), as it is expected there will be more market and consumer focus on sustainable companies and increasing policy and legal requirements relating to environmental and climate needs. Regarding our manufacturing impact, we set up several objectives to mitigate that risk: 2030 SBT and 2050 net-zero carbon targets as well as a 2030 target to increase circular economy by reducing the use of non-renewable virgin materials. In addition, our products, such as the ones used for building insulation, avoid carbon emissions over their lifetime. Throughout 2021, all our businesses worked on their carbon roadmaps to minimize use of fossil fuel. For example, our Aniche Float in France became the first player in the world to achieve zero-carbon production of flat glass in 2021 using 100% recycled material and biogas. Other facilities are testing or implementing fossil fuel alternatives. For instance, the Group announced the first net-zero gypsum plant in Norway for a start up in 2023. Our 2021 URD provides an overview of our risks associated with climate change on pages 83-84.

Acute physical	Relevant, always included	Justification of the decision on the relevance and inclusion of this risk type in our risk assessment: Acute physical is included in our risk assessment and is considered as relevant as it may have a substantive financial or strategic impact on our business. Our approximatively 800 manufacturing sites are spread over 75 countries, which decreases the risk impact. They still could be separately impacted by acute physical risks such as storms and floods, potential resulting in closing down of operations, loss of revenue and reputational risks. To manage industrial and distribution risks arising from climate change, the Group has a risk prevention policy to minimize the seriousness of such events if they materialize. This policy, applied to all sites and led by the Risk and Insurance department, is rolled out by prevention coordinators. A risk prevention manual with applicable standards and technical files is the Group's reference base. Concerning natural disasters, the Group uses a mapping tool to establish the exposure levels of sites depending on the region and business line. There is a special focus on sites with high exposure to natural disasters. Example of specific risk considered in our assessment and how it is included in climate-related risk assessments: The Group assumes that acute physical risks will be exacerbated in a high-temperature future (Saint-Gobain's "Highway to Climate Hell" scenario), as it is expected that temperature changes will have a higher impact on changes to weather systems. We consider that acute physical events may have a substantive financial or strategic impact on our business. For example, in 2021, we were particularly impacted by a flood event in Germany that caused production stoppage having a cost of more than €50M. To mitigate such risks, we assess annually our exposure to acute physical climate-related risks through regular local audits and self-assessments. Those reviews are updated during the year whenever relevant. Facilities must apply the Group Loss Prevention Manual and Business Continuity Plans are defined for each. At corporate level, the Risk and Insurance department manages risks of property damage and related business interruption (loss prevention and loss management). Our 2021 URD provides an overview of our risks associated with climate change on pages 83-84.
Chronic physical	Not relevant, included	Justification of the decision on the relevance and inclusion of this risk type in our risk assessment: Chronic physical is included in our risk assessment but is considered as not relevant as it is considered as not having a substantive financial or strategic impact on our business. The

		Group could be impacted by the chronic risks of climate change, such as sea level rise, increases in temperature and water availability. Impact could particularly include disruption to operations and its consequences. Our facilities are several, around 800, and spread over a large geographical perimeter (75 countries), which by nature, decreases the impact of the risk and makes that we consider that risk as not having a substantive financial or strategic impact on our business. Example of specific risk considered in our assessment and how it is included in climate-related risk assessments: The Group has made the simplifying assumption that chronic physical risks will be exacerbated in a high-temperature future (Saint-Gobain's "Highway to Climate Hell" scenario), as it is expected that the changes to temperature will have a higher impact on changes to weather systems and sea level rise. This may have several consequences, particularly for our facilities requiring some water for their manufacturing process (continuous activities such as glass and pipe production that need water for cooling furnaces) and that are in water stressed areas. The mitigation of this risk is reflected in the development and implementation of specific policies supporting the Group's environmental commitments, such as the water management with the objective to reduce our industrial withdrawals by 50% in 2030 compared to 2017. Our 2021 URD provides an overview of our risks associated with climate change on pages 83-84.

C2.3

(C2.3) Have you identified any inherent climate-related risks with the potential to have a substantive financial or strategic impact on your business?

Yes

C2.3a

(C2.3a) Provide details of risks identified with the potential to have a substantive financial or strategic impact on your business.

Identifier

Risk 1

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Emerging regulation

Carbon pricing mechanisms

Primary potential financial impact

Increased indirect (operating) costs

Company-specific description

The EU-Emissions Trading System is the largest carbon market in the world. Around 60 Saint-Gobain facilities located in 16 countries are included, covering more than 40% of our scope 1 emissions. The principle is that any industrial installation receives a certain number of free credits each year. If its annual verified emissions are lower than the free credits allocation, it can sell the surplus in the EU-ETS market; otherwise, the shortage must be bought on the market. This is the « cap and trade » principle, aiming at decreasing the emissions of the European Industry.

It is expected that, in a lower temperature scenario (Saint-Gobain's "Wind of Change" scenario), cap and trade systems may become more ubiquitous, and the underlying carbon price may increase. This is therefore a key emerging risk for the Group. In 2021, we entered the 4th period (2021-2030) of the EU-ETS. For that period, all allocation rules are now defined, and we expect a decrease of the number of free allocations that we will receive, which will lead to increased operational costs. As an example, our plasterboard product is no longer considered as being part of the so-called "carbon leakage list", which means that in 2030, no allocation shall be received for this product. Our estimated shortage is directly considered for evaluating the financial impact. Thanks to our self-sufficiency in quotas in the medium term and the 2030 SBT that we have set (-33% for 2030 vs 2017 for scope1+2), the impact is limited, but we expect it to increase in the future as unit price is also likely to increase in the future and similar regulations likely to appear into other geographical areas where we are located, such as in North America and Asia. We already face some carbon mechanisms for our plants located in Beijing, Shanghai, Korea, California, Quebec, Ontario, Alberta and British Colombia.

The emerging risk of carbon pricing mechanisms is monitored by a specific CO2 committee including several Departments such as Purchasing, Finance and Sustainable Development. This committee has also a continuous monitoring of EU-ETS impact for the Group including the follow-up of EU allowance carbon price scenario analysis coming from external finance experts.

Time horizon

Medium-term

Likelihood

Virtually certain

Magnitude of impact

Medium-high

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

75,000,000

Potential financial impact figure – maximum (currency)

95,000,000

Explanation of financial impact figure

Considering the lack of free credits in phase IV under the last update of EU-ETS phase IV rules, the Group will have an annual shortage for of 1MtCO2/year, with a minimal cost of €75/tCO2 for EU allowance (price in May 2020) for the minimum and €95/tCO2 for the maximum figure.
The calculation is therefore as follows: 1MtCO2 multiplied by €75-95/tCO2 for respectively the minimum and maximum, or respectively €75M and €95M.

Cost of response to risk

100,000,000

Description of response and explanation of cost calculation

Emerging regulation relating to cap-and-trade schemes is monitored by a specific CO2 committee including several Departments such as Purchasing, Finance and Sustainable Development, in particular for our European glass, gypsum and insulation and pipe plants. This committee has also a continuous monitoring of EU-ETS impact for the Group including the follow-up of EU allowance carbon price scenario analysis coming from external finance experts. Key projects are being developed, such as our Norwegian net-zero carbon plasterboard project that will start in 2023. In addition, an internal worldwide shadow carbon price of €75/tCO2 for investments supports the development of low-carbon technologies in order to reduce the potential financial risk.

Explanation of cost calculation:
In order to support the achievement of our 2030 SBT that we have set (-33% for 2030 vs 2017 for scope1+2), and therefore reduce our exposure to carbon pricing mechanisms, the Group has budgeted an envelope of €1bn for CAPEX and R&D investments over the next ten years, which represents in average around €100M per year through: €1bn/10: €100M (our cost of response to risk).

Comment

Identifier

Risk 2

Where in the value chain does the risk driver occur?

Upstream

Risk type & Primary climate-related risk driver

Market

Increased cost of raw materials

Primary potential financial impact

Increased direct costs

Company-specific description

The Group could face increases in costs of energy supplies due to the future energy mix evolution. Our industry, particularly the production of glass and pipe, requires high levels of energy consumption. We can expect increased direct costs linked to energy for scarcity of present resources and for the development of future resources (e.g., renewable electricity, green hydrogen and biogas). Issues may be technical, financial or linked to local regulation.

Saint-Gobain expects this transition market risk to have a higher likelihood of occurring in a low-temperature future (Saint-Gobain's "Wind of Change" climate scenario), where low-carbon energies are not yet fully developed. For example, the Group may be required to purchase biogas rather than natural gas, due to the requirement to use lower-carbon alternatives to drive down carbon emissions of the Group. At today's price, with a hypothesis of biogas being €20/MWh more expensive than natural gas, it would result in an additional cost to the Group of €590M.

Time horizon

Medium-term

Likelihood

Likely

Magnitude of impact

Medium-high

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

590,000,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

The potential financial figure is calculated based on an extra cost of €20/MWh for biogas purchase vs natural gas, considering the full natural gas consumption of the Group (29 505 GWh in 2021) and noting that replacing this would require nearly all the biogas supply currently available globally. The calculation is therefore 29 505 GWh multiplied by €20/MWh = €590M.

Cost of response to risk

100,000,000

Description of response and explanation of cost calculation

The primary method for managing long-term fluctuations in energy price volatility is to reduce the Group's dependence on high-carbon energy sources and to focus more on renewables and other sustainable sources of energy such as renewable energy from wind farms. The key method for limiting exposure to short-term fluctuations is to use swaps and options to hedge part of our fuel oil, natural gas and electricity purchases. These hedges are generally arranged by the Group Treasure and Financing Department in accordance with instructions from the purchasing department.

As an example of how we are reducing our dependence on fossil fuels, Saint-Gobain put in place carbon roadmaps in the frame of our carbon reduction targets (SBT 2030 and Net Zero Carbon 2050). These roadmaps include both energy efficiency improvements to decrease our energy consumption and use of clean energy purchase agreements over a long period (10-15 years) whenever of interest. For example, in March 2021, Saint-Gobain in the US entered into a 12-year Power Purchase Agreement with Invenergy, a leading privately held global developer and operator of sustainable energy solutions, for 120 megawatts (MWp) from the Blooming Grove Wind Farm, Illinois.

Explanation of cost calculation:
In order to support the achievement of our 2030 SBT (-33% for 2030 vs 2017 for scope1+2) and in order to reduce our exposure to higher energy costs, the Group has budgeted an envelope of €1bn for CAPEX and R&D investments over the next ten years, which represents in average around €100M per year (€1bn/10: €100M), or our cost of response to risk. This envelope is managed by the Technology and Industrial efficiency Department in the frame of the "2050 Net-zero carbon emissions program" including also the Strategy, Finance, R&D and Purchasing Departments.

Our 2021 URD provides an overview of our risks associated with climate change on page 83-84.

Comment

Identifier

Risk 3

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Acute physical
Flood (coastal, fluvial, pluvial, groundwater)

Primary potential financial impact

Decreased revenues due to reduced production capacity

Company-specific description

The world is already feeling the impacts of climate change, with significant increases in severe storms and floods and changes to weather patterns. It is likely that the physical impacts of climate change will be felt more in Saint-Gobain's "Highway to Climate Hell" scenario, where temperatures are expected to increase by 4.1-4.8°C. For instance, increased frequency of extreme weather events such as torrential rain could increase the frequency of flooding for our sites. Particularly at risk are the sites situated in floodplains, as well as those situated in areas prone to flash floods after torrential rains. Those sites represent around 15% of our relevant sites. France is a good example of where the risk may happen, as the country represents around one third of the 15% of relevant sites previously mentioned: this is due to a double effect of existing risk and our strong presence in France (30% of our relevant sites are in the country). This could result in delays to operations as a result of an inability for the workforce to arrive at or work on the site, an inability for heavy machinery to carry out work in flood conditions, and destruction to work already undertaken as a result of flood damage. It could also impact operational costs by increasing the number of days required to complete a project or require additional repair costs to address flood damage. For example, in 2021, we were particularly impacted by a flood event in Germany that caused a production stoppage. The last estimated financial cost of the flood event was more than €50M.

Time horizon

Short-term

Likelihood

Very likely

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

50,000,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

Significant weather events such as flooding may result in disruption to our operations leading to lost operational productivity, delays to projects, damage to reputation and lower profitability on projects. As an example of how flood risks could impact our operations, in 2021, we were particularly impacted by a flood event in Germany that caused a production stoppage with a financial cost of €50M which represents our

financial impact figure. Excluding the German event of 2021, we registered around €7M of losses on average due to climate-change physical events over the 3 last years.
The risk of such floods is likely to increase in a “Highway to Climate Hell” scenario, where high warming is likely to contribute to significant changes in weather systems.

Cost of response to risk

80,000

Description of response and explanation of cost calculation

Our facilities are several (around 800) and are spread over a large geography (75 countries), which by nature decreases the impact of the risk. In order to mitigate that risk, we assess on an annual basis our exposure to acute physical climate-related risks through regular local audits and self-assessments. Facilities must apply the Group Loss Prevention Manual, and Business Continuity Plans are defined for each. The Saint-Gobain Loss Prevention policy gives a firm focus to this category of risks, whether in terms of choice of locations, of facility design and layouts, or in terms of risk mitigation in existing locations. At corporate level, the Risk and Insurance department manages risks of property damage and related business interruption (loss prevention and loss management).

We also contract with an external third party for prevention and engineering audits mapping the exposure of sites to natural hazards (floods and storms). The biggest sites are assessed annually, and others a bit less frequently. In addition, each site must fill annually an auto-evaluation risk grading through a 300-question survey covering potential climate risks including the place of location, facility design, etc. An action plan can be derived for each potential risk.

As an illustration, 5 to 15 special flood surveys are carried out every year. The top 3 recommendations from those audits included in the actions plans focus on “flood emergency plans”, “barriers” and “drainage maintenance”.

Axa company supports us in the use of a flood risk mapping tool to identify priority sites and define action plans with those sites. The sites in exposed areas must establish prevention, protection and reinforced Business Continuity Plan to reduce the closing time and to limit the loss of revenue.

Explanation of cost calculation:
The indicated cost of response to risk of €40k is linked to the contract that we have with Axa for accessing their data and improving our risk mapping, for €40k per year, and to the special flood surveys carried out every year, for €40k (2021 data), through €40k+€40k=€80k.

Comment

C2.4

(C2.4) Have you identified any climate-related opportunities with the potential to have a substantive financial or strategic impact on your business?

Yes

C2.4a

(C2.4a) Provide details of opportunities identified with the potential to have a substantive financial or strategic impact on your business.

Identifier

Opp1

Where in the value chain does the opportunity occur?

Direct operations

Opportunity type

Resilience

Primary climate-related opportunity driver

Participation in renewable energy programs and adoption of energy-efficiency measures

Primary potential financial impact

Increased revenues resulting from increased demand for products and services

Company-specific description

In line with our 2030 SBT interim targets and 2050 carbon neutrality target, the Group aims at being more resilient in a worldwide context of fuel mix evolution. We expect that there will be a higher level of operating efficiency and consequently cost savings found in our “Wind of Change” scenario, where the costs of energy increase, with a consequent better positioning of our products thanks to their lower carbon manufacturing impact.

Our investment programs target our operational sites to reduce their carbon emissions and are based on present or future technologies that provide answers to the specificities of our main carbon intensive businesses (glass, pipe, gypsum and insulation). This includes recovery of energy as well as efficiency (optimization of the energy use in our processes for motors, lighting, compressed air, etc.) including use of digital tools, use of alternative energy (hydrogen, biogas, renewable power) and low-carbon raw materials, electrification of processes, and carbon capture, use and storage.

Saint-Gobain anticipates the risk of a scarcity of raw materials by actively promoting the transition towards a circular economy and by reducing its water consumption. The substitution of non-renewable virgin raw materials with renewable or recycled raw materials, the extension of the lifespan or use of our products or systems and the reduction of the intensity of materials are at the heart of the Group’s innovation process

and enable it to ensure the competitiveness of its solutions whilst anticipating changes in the preferences of its end consumers and in legislation.

Our 2021 URD provides an overview of our risks associated with climate change on pages 83-84.

As specific examples:
-In May 2021, Saint-Gobain announced it will create the first net-zero carbon plasterboard plant in Norway through increased electrification of the production process. This project will eliminate more than 20ktCO2 per year. Its start is planned in 2023.
-In April 2022, we made the first worldwide production of zero carbon glass in France, using 100% recycled glass, biogas and renewable electricity.
-Purchasing also plays a key role by pushing participation in sustainable energy programs. In March 2021, Saint-Gobain in the US entered into a 12-year Power Purchase Agreement with Invenergy, a leading privately held global developer and operator of sustainable energy solutions, for 120 megawatts (MWp) from the Blooming Grove Wind Farm in Illinois.

Time horizon

Medium-term

Likelihood

Likely

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

220,000,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

Our potential financial impact is calculated through the hypothesis that our Group annual turnover of around €44 160M will increase by 0,5% thanks to our more sustainable products. The calculation is therefore €44 160M x 0,5%=€220M.

Cost to realize opportunity

100,000,000

Strategy to realize opportunity and explanation of cost calculation

Realizing this opportunity requires capital investment to install energy saving technologies in our float line for example. An investment of 7.2 Me has been made in

2021 in one of our French site to install a preheating equipment for batch and cullet. In order to support the achievement of our 2030 SBT that we have set (-33% for 2030 vs 2017 for scope1+2), and therefore improve the sustainability of our products through low-carbon manufacturing impact, the Group has budgeted an envelope of €1bn for CAPEX and R&D investments over the next ten years, which represents in average around €100M per year through: €1bn/10: €100M (our cost of response to opportunity). This opportunity is managed by both R&D and Technology and Industrial efficiency departments, together with the concerned businesses.

Comment

Identifier

Opp2

Where in the value chain does the opportunity occur?

Downstream

Opportunity type

Products and services

Primary climate-related opportunity driver

Development of new products or services through R&D and innovation

Primary potential financial impact

Increased revenues resulting from increased demand for products and services

Company-specific description

The development or expansion of low-carbon products having low impact on the environment, including low-carbon impact, is considered as an opportunity rather than a risk. Implementing new low-carbon technologies within our facilities as well as over our value chain (raw materials supply and transportation) will help to develop low-carbon products for our customers.

As part of Saint-Gobain's "Wind of Change" climate scenario, it is expected that there will be higher consumer awareness and demand for sustainable products, and that there will be higher levels of government regulation, including for sustainable products within building materials, thus driving up demand for these products. Working on our products (e.g., through recycled content, bio-sourced components, less carbonated materials and weight reduction) is one of our key pillars to reach carbon neutrality. For example, logistics have been optimized for glass products to promote the recovery of cullet (glass debris) across the entire value chain where the Group is present and especially between glass processing sites (e.g., manufacturing of windshields or windows) and glass furnaces.

Time horizon

Medium-term

Likelihood

Likely

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

1,000,000,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

In 2021, Saint-Gobain did an assessment of its turnover providing sustainability benefits for its customers (CO2, energy efficiency, health and wellbeing), which is estimated at around 72% of its turnover, or €32Bn. The estimated financial impact assumes that this will increase to 75 % by 2025 (“Grow and Impact” strategy), which could therefore increase Group sales by €1bn.

Cost to realize opportunity

44,000,000

Strategy to realize opportunity and explanation of cost calculation

The strategy to realize opportunity focuses on efforts led by Innovation teams (MKG and R&D) at both corporate and BU level to work on less carbon intensive product formulations (e.g., with increased recycled or bio-sourced content, less carbonated energies and weight reduction). For the past 10 years, the Group has been ranked in the Top 100 Innovators by Clarivate.

As cost to realize opportunity, we spent €443M on R&D expenses in 2021. We have quantified our efforts towards CO2 reduction and towards a more sustainable world. In a first step, we identified all the R&D efforts through which we aim to Reduce Our own CO2 footprint (ROC). The part of this amount dedicated to low-carbon products was of 10%. The calculation is therefore €443M multiplied by 10% = 44 M€.

From a reporting perspective our Sustainable Development department is also involved for the external communication of the carbon intensity of our products through third party verified Environmental Product Declarations.

Since 2013, Saint-Gobain has developed an eco-innovation approach to embark sustainability in innovation projects. We developed a new tool in 2021 to completely mainstream sustainability in the innovation process. This tool builds on the learnings from the SCORE methodology developed in 2017 to assess the sustainability

performance of Saint-Gobain construction products. It identifies 16 key sustainability criteria under 3 main topics: energy & carbon, resources and circularity, health & well-being. Reducing the carbon footprint of our products and systems is a priority target in our innovation strategy, as well as developing solutions to reduce the carbon emissions of constructions, mobility and industry.

In 2021, the Group performed a review of its portfolio of solutions in order to assess their sustainability performance, both in terms of footprint and impact, in particular related to climate change. Altogether, the Group estimates that 72% of its 2020 turnover was made with sustainable solutions. The objective is to increase this figure up to 75% by 2025. In parallel, Saint-Gobain updated its assessment of carbon emissions avoided, thanks to the use of its solutions; in 2021. The updated methodology was developed with the support of EY, and the results were validated by PWC. Over their lifetime, the solutions sold in 2019 by Saint-Gobain will help to avoid 1 300 MtCO2 of emissions by customers of these solutions.

Comment

Identifier

Opp3

Where in the value chain does the opportunity occur?

Downstream

Opportunity type

Products and services

Primary climate-related opportunity driver

Development and/or expansion of low emission goods and services

Primary potential financial impact

Increased revenues resulting from increased demand for products and services

Company-specific description

The development or expansion of low-carbon products avoiding carbon emissions; such as our insulation products leading to energy-efficient buildings, represents an opportunity for the Group. Indeed, our building insulation solutions (e.g., mineral wool and glazing) offset the emissions linked to the whole of their life cycle after an average use of three months.

As part of Saint-Gobain's "Wind of Change" climate scenario, it is expected that there will be higher consumer awareness and demand for sustainable products, and that there will be higher levels of government incentives or regulation around including sustainable/insulating products within buildings, thus driving up demand for these products. Thanks to its strong exposure to the renovation market, the Group is ideally situated to play a decisive role in the national and European green recovery plans for

the energy transition, which should support Saint-Gobain's structural growth.
Another example relates to lighter windshield to reduce CO2 emissions from cars, in addition to adapting our offer to the development of hybrid or 100% electric vehicles.

The Group performed a deep review in 2021 of its portfolios of solutions in order to assess its sustainability benefits, in particular those related to climate change. For example, Saint-Gobain assessed that 1 300 MtCO2 will be avoided over the lifetime of solutions sold in 2019.

Time horizon

Short-term

Likelihood

Very likely

Magnitude of impact

High

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

500,000,000

Potential financial impact figure – maximum (currency)

1,000,000,000

Explanation of financial impact figure

We are expecting increased demand for our wide range of sustainable products, notably for our products relate to sustainable habitat solutions and energy efficiency. We calculated our potential financial figures considering what is forecasted for the renovation market in France, in alignment with French government objectives: hypothesis is that the number of renovations will increase by 70% over the next ten years. Considering a turnover of 44,000M€ for the Groupe, and that this market represents around 16% of it, the potential financial figure is around 500M€ per year over the next ten years. The calculation is therefore (70%/10 years, i.e. 7% per year) multiplied by 44,000M€ multiplied by 16% = 493M€ that we have updated to 500 M€.

Cost to realize opportunity

0

Strategy to realize opportunity and explanation of cost calculation

Explanation of cost calculation:
80% of our sales are linked to habitat (48% renovation, 22% new residential construction and 10% new non-residential construction). Thanks to our strong exposure to the renovation market, the Group is ideally situated to play a decisive role in national and European green recovery plans for the energy transition, which should support

Saint-Gobain's structural growth.
For this reason, the cost to realize opportunity is evaluated at zero.

For example, the residential renovation market in Europe alone accounted for nearly €420Bn in 2021. This major trend is largely due to the need for energy efficiency in buildings, which is considered as essential to achieve carbon neutrality. However, the majority of European buildings of 2050 have already been built. Renovation will therefore be increasingly stimulated by growing energy efficiency requirements, which are appearing in regulatory changes currently being mase, and by energy renovation programs supported by public authorities. The health crisis of 2020 also had a dual impact on this sector: a circumstantial impact, on renovation sites, due to containment measures; and a more structural impact, due to the adoption of recovery plans with a strong "green" component by many countries, which will influence the market for several years to come. At European level, 30% of the recovery plan proposed by the Commission is dedicated to climate action.

Comment

C3. Business Strategy

C3.1

(C3.1) Does your organization's strategy include a transition plan that aligns with a 1.5°C world?

Row 1

Transition plan

Yes, we have a transition plan which aligns with a 1.5°C world

Publicly available transition plan

Yes

Mechanism by which feedback is collected from shareholders on your transition plan

We have a different feedback mechanism in place

Description of feedback mechanism

General presentation of the transition plan was made during the October 2021 Capital Market Day, and feedback from individual shareholders was collected through one-on-one meetings throughout the year.

Frequency of feedback collection

More frequently than annually

Attach any relevant documents which detail your transition plan (optional)

access document : https://www.saint-gobain.com/fr/finance/reunions-investisseurs

CDP CLIMAT_ 12.4_Capital Market Day_2.pdf

C3.2

(C3.2) Does your organization use climate-related scenario analysis to inform its strategy?

	Use of climate-related scenario analysis to inform strategy
Row 1	Yes, qualitative and quantitative

C3.2a

(C3.2a) Provide details of your organization's use of climate-related scenario analysis.

Climate-related scenario	Scenario analysis coverage	Temperature alignment of scenario	Parameters, assumptions, analytical choices
Transition scenarios Customized publicly available transition scenario	Company-wide	1.5ºC	Description of selected scenarios, their construction, time horizons and relevance, considered areas of our organization: we built three qualitative long-term climate scenarios to 2050 ("Wind of change", "The show might go on" and "Highway to climate hell"). Impact is given in terms of general concept, macro-economic framework, mobility, and construction needs, which are of particular relevance for our business. The scenarios were built by our corporate departments (Strategy, Sustainable Development, CSR) using recognized expertise (e.g. IEA and energy suppliers). They confirm our strategy to work on performance and sustainability (including climate) in any of our decisions. Description of the results: The scenarios informed us of the consequences of climate change on our business. For example, "Wind of change" sees more consumer focus on sustainable construction, requiring us to invest in innovation, e.g. in low-carbon products and circular economy. Some details of our "Wind of Change" scenario (see Page 85 of our 2021 URD): - Achievement of the "Global zero carbon" objective: Around 2070 - Sea level rise (compared to 1986-2005): +0.4 meters - Average length of drought periods: 9-11 months

			- Number of tropical nights (compared to 1981-2000): +16 days - % of electric cars in the vehicle fleet in 2050 (2019 = 8%): 75% How the results of the scenarios informed our business objectives and strategy: We identified the need to develop low-carbon products, particularly in response to the challenges of population growth and the need to contribute to construction of resilient cities to ensure the well-being of individuals in a context of resource scarcity and climate change. Case study of how the scenarios directly influenced our business objectives and strategy: With the objective to be at the forefront of innovative solutions for sustainable construction, we accelerated our presence in the construction chemicals sector. Moving towards low-carbon concrete will be made possible by application of additives to reduce concrete's CO2 footprint and address aggregate shortage, aiding in the development of a circular economy. Additives also address urbanization mega-trends and infrastructure needs by providing cost effective speed and productivity gains. Our presence in construction chemicals will increase through the acquisitions of Chryso and Duraviz (announced May 2021) and the inauguration in May 2021 of a new construction chemicals plant in Malaysia.
Physical climate scenarios Customized publicly available physical scenario	Company-wide	2.1ºC - 3ºC	"The show might go on" scenario, Page 85 of our 2021 URD Some parameters : - Achievement of the “Global zero carbon” objective: After 2100 - Construction needs / Sea level rise (compared to 1986-2005): +0.5 meters - Construction needs / Average length of drought periods: 18 months - Construction needs / Number of tropical nights (compared to 1981-2000): +28 days - Mobility / % of electric cars in the vehicle fleet in 2050 (2019 = 8%): 60%
Physical climate	Company-wide	4.1ºC and above	"Highway to climate hell" scenario, Page 85 of our 2021 URD

scenarios Customized publicly available physical scenario			Some parameters : - Achievement of the “Global zero carbon” objective: Not in the near future - Construction needs / Sea level rise (compared to 1986-2005): +0.6 meters - Construction needs / Average length of drought periods: 22 months - Construction needs / Number of tropical nights (compared to 1981-2000): +53 days - Mobility / % of electric cars in the vehicle fleet in 2050 (2019 = 8%): 45%

C3.2b

(C3.2b) Provide details of the focal questions your organization seeks to address by using climate-related scenario analysis, and summarize the results with respect to these questions.

Row 1

Focal questions

What potential future developments in the Saint-Gobain portfolio?

Results of the climate-related scenario analysis with respect to the focal questions

Building and construction accounts for around 40% of greenhouse gas emissions. A 1.5°C scenario implies a quick reduction of both operational carbon as well as embodied carbon for construction and buildings. Retrofitting of existing buildings is the key enabler in developed countries (EU, North America) with significant developments of insulation solutions. Those solutions for energy efficiency in buildings already account for a huge part of Saint-Gobain portfolio. For emerging market, the main challenge is to reduce the embodied carbon for new built, as most of the new buildings will be constructed in those areas. Beyond light weight construction, other solutions were missing to address the key challenge of low-carbon concrete in construction.

In response, the Group made two major steps to include construction chemical solutions in its portfolio, via the acquisition of Chryso in 2021 and the acquisition of GCP that will be finalised end of 2022. Construction chemicals are key enablers of the decarbonisation of concrete. Beyond building and construction, the development of electrical mobility and the overall decarbonisation of the industry are providing huge opportunities for Saint-Gobain.

C3.3

(C3.3) Describe where and how climate-related risks and opportunities have influenced your strategy.

	Have climate-related risks and opportunities influenced your strategy in this area?	Description of influence
Products and services	Yes	i) Description of how our strategy in this area has been influenced, time horizons it covers: Time-horizon covered are short-term (avoidance of emissions) and medium-term (low-carbon products). As part of Saint-Gobain's "Wind of Change" climate scenario, we expect that there will be more demand for sustainable products that improve energy efficiency as consumers become more aware of environmental issues and as governments incentivize such developments, as this is already the case in some European countries for green homes. Opportunities to boost revenue from products relate to: 1) the development of low-carbon products and 2) products leading to avoidance of emissions (e.g.,with our building insulation products or through our performance and lighter automotive windshields, reducing vehicle weight and lowering the CO2 emissions of cars). It is expected that policy and regulatory changes will increase demand in all areas. A "Sustainable Solutions for Growth" working group has been created and strives to improve the solutions offered by the Group whilst considering the expectations of stakeholders and potential changes in regulatory requirements. It is managed at the Group level by Strategy, Marketing and CSR. The purpose of the Group is to do a horizon scan for emerging opportunities and optimize response to demand for sustainable product. We also have processes in place, managed by the Sustainable Development Department, to provide our customers with the carbon intensity of our products through "Environmental Product Declaration" and on the sustainability of our products, so that we can measure and manage progress toward more sustainable solutions. ii) Case study of the most substantial strategic decision: With the objective to be at the forefront of innovative solutions for sustainable construction, Saint-Gobain continuously scans the market for

		sustainable offerings that can be incorporated into the wider Group. With the acquisitions of Chryso and Duraviz in 2021, our presence in the Admixture sector will increase through the acquisition of GCP Applied Technologies (Announced in December 2021).
Supply chain and/or value chain	Yes	i) Description of how our strategy in this area has been influenced and the time horizon(s) it covers: Time-horizon covered: Medium-term The main identified risk related to our supply chain is that of increasing energy costs in a more highly regulated climate future, which may increase our production cost in the medium-term, particularly for our new low-carbon energy supplies that will be needed to reach our 2030 SBT validated targets, as well as to increased costs throughout our supply chain as a result of increased costs of carbon. In order to achieve reductions in carbon emissions across our supply chain, Saint-Gobain is working with suppliers to compare their performance based on CO2 emissions criteria, both in terms of their operations and for the products concerned. In addition, we ask suppliers to sign our Responsible Purchasing Charter, collect detailed information on their commitments in terms of sustainable development, and encourage particularly large emitters to adopt a Science Based Target approach. See https://www.saint-gobain.com/sites/sgcom.master/files/20201112_roadmap_net_zero_carbon_va.pdf ii) Case study of the most substantial strategic decision: We are directly engaging with our suppliers to help them to reduce their own carbon emissions and have set a science-based target to reduce our scope 3 emissions by 16% in absolute terms for all relevant categories in 2030 compared to 2017 data. An online platform called R-Net has been set up to facilitate responsible purchasing. Industrial activity suppliers have access to R-Net to acknowledge receipt of Supplier Charter of Saint-Gobain, electronically transmit essential proofs, answer self-assessment questionnaires, get all the information on Saint-Gobain's responsible purchasing directives and access details of their CSR assessments. At the end of 2021, 38 701 contacts of suppliers were registered on our online platform, and 21 740 supplier subsidiaries were covered by a fulfilled questionnaire. About 57% of all suppliers that answered the questionnaire notified that they have implemented in their production the necessary measurements to limit or even to remove greenhouse gas emissions. Some local events (suppliers green day) have been organized at country level to explain the Saint-Gobain decarbonization strategy and to share best practices between participants.

Investment in R&D	Yes	i) Description of how our strategy in this area has been influenced and the time horizon it covers: Time horizon: Medium-term In Saint-Gobain's "Wind of Change" climate scenario, it is expected that there will be more demand for low-carbon and sustainable product offerings, and there will be a higher focus on sustainability when making large-scale purchasing decisions. In order to ensure that Saint-Gobain remains competitive and meets the needs of a changing consumer base, a significant R&D program is in place. Our enhanced commitment towards carbon neutrality has led Saint-Gobain to update its strategy of R&D investment focusing on several pillars that are developed within our R&D CO2 transversal program. The program is developed in coordination with our business units and our Technology and Industrial efficiency department and covers 5 key areas: 1) working on our products (recycling, weight reduction, less carbonated material,…), 2) energy efficiency in our processes to adapt our consumption to our needs or to recover heat losses, 3) possibility to use future alternative energy such as biogas or hydrogen, 4) possibility to electrify as much as possible our different processes and finally 5) considering Carbon Capture Use or Storage. ii) Case study of the most substantial strategic decision: On 24 May 2021, Saint-Gobain announced that it will create the first net-zero carbon plasterboard plant in Norway through the Fredrikstad facility, thanks to an increased electrification of its production process. This project will eliminate more than twenty thousand tons of CO2 emissions per year. Start up is planned in 2023. In April 2022, the Group made the first worldwide production of zero carbon glass in France, using 100% recycled glass, biogas and renewable electricity. See https://www.saint-gobain.com/sites/saint-gobain.com/files/media/document/20220516_First%20zero-carbon%20production%20of%20flat%20glass_VA.pdf. Two internal carbon prices were also introduced in 2016, one for CAPEX and one for R&D projects, to support the viability of the Group's projects and strategy. The two prices were increased in February 2021 to fit with the carbon price evolution at worldwide level. As a strategic decision, we decided to allocate an annual €100M CAPEX and R&D budget over the next 10 years.
Operations	Yes	i) Description of how our strategy in this area has been influenced and the time horizon(s) it covers: Time horizon: Short-medium term.

		In Saint-Gobain's "Highway to Climate Hell" climate scenario, it is expected that there will be increased levels of acute physical climate events. The main risk for our operations is linked to two aspects: 1) possible lack of adaptation to climate change acute physical events in the short term 2) possible lack of attenuation of our impact to climate change leading to additional costs in the medium-term from carbon pricing mechanisms. Regarding adaptation, our strategy remains to assess on an annual basis our exposure to that risk through regular local audits and self-assessments. Facilities must apply the Group Loss Prevention Manual, and Business Continuity Plans are defined for each facility. At corporate level, the Risk and Insurance department manages risks of property damage and related business interruption (loss prevention and loss management). Regarding the increased cost of carbon on our operations, Saint-Gobain, as part of its Roadmap to Carbon Neutrality, is developing detailed roadmaps for each industrial process, based on knowledge of the local market, regulatory environment and best available techniques. ii) Case study examples of the most substantial strategic decisions: As a case study, we can highlight a 2018 Egyptian event (flood event in one of our glass production facilities) where a preventive and corrective action plan was subsequently built, including: - Daily weather forecast monitoring to check for potential rainstorm, - Digging a protection trench inside the property to divert the water, - Building a perimeter flood protection wall, - Raising the road elevation - Implementation of a flood emergency response plan, including emergency response teams. Similar specific action plans are built for at risk sites. Regarding attenuation, our strategy focuses on less emissions through: - ambitious 2030 SBT that we have set (-33% for 2030 vs 2017 for scope1+2) - envelope of €100M every year over the 10 next years for CAPEX and R&D investments related to reduction of carbon emissions. - internal shadow carbon price for investment and R&D supporting the development of low-carbon technologies even in places where carbon is not yet regulated.

C3.4

(C3.4) Describe where and how climate-related risks and opportunities have influenced your financial planning.

	Financial planning elements that have been influenced	Description of influence
Row 1	Revenues Indirect costs Capital expenditures Capital allocation	1) Revenues Time horizon: Short-term Our 2020 sales amount 44,160 M€ and 80% are linked to habitat (48% renovation, 22% new residential construction and 10% new non-residential construction) Thanks to its strong exposure to the renovation market, the Group is ideally situated to play a decisive role in the national and European green recovery plans for the energy transition, which should support Saint-Gobain's structural growth. In Europe, the residential renovation market alone accounted for nearly €420 billion in 2021 at the European level. This major trend is largely due to the need for energy efficiency in buildings, which is considered essential to achieve carbon neutrality. However, the majority of European buildings of 2050 have already been built. Renovation will therefore be increasingly stimulated by growing energy efficiency requirements, which are appearing in regulatory changes currently being made, and by energy renovation programs supported by public authorities. Case study: The health crisis of 2020 had a dual impact on this sector: a circumstantial impact, on renovation sites, due to containment measures; and a more structural impact, due to the adoption by many countries of recovery plans with a strong "green" component. Due to their unprecedented scale, they will be structuring the market for several years. In France, the €100 billion plan to support the economy in the face of the crisis therefore provides for a budget of €30 billion for ecological transition and its priority sectors such as the energy renovation of buildings, which alone will absorb nearly €7 billion. In this context, the "MaPrimeRenov" plan, extended in 2020 and with a budget of €2 billion over the next two years, promotes the acceleration of energy renovation; the authorities have estimated that it could entail a total amount of €6 billion worth of construction over two years. At European level, 30% of the recovery plan proposed by the Commission is dedicated to climate action. We have assessed that in the next ten years, the Group could benefit from around 1,2% annual growth of its turnover only with the increase of renovation in France. 2) Indirect costs: Time horizon: medium-term. Carbon pricing mechanisms may impact our indirect cost whenever we have a tax or allowance to buy to balance

		our emissions. EU-ETS is an example of possible impact for our company. Ensuring the control of our direct emissions and prudent management of previous allocations are two principles that Saint-Gobain has applied since the introduction of European regulations. Nevertheless, the free allocation rules are stricter since 2021, due to the entry in force of the period IV (2021-2030) and our plasterboard product is for example not considered anymore as being part of the so-called "carbon leakage list", which means that in 2030, no allocation shall be received for this product. Our position, including forecast, is constantly updated by Purchasing department and shared within a specific CO2 committee to manage the related risk. Based on current information, the Group believes that it will be able to maintain self-sufficiency in quotas in the medium term given its current stock level of more than 7 million tons of allocations. This means that our financial planning will evolve in the medium term based on the remaining free allocation and our results regarding carbon emissions reduction. The Group has budgeted an envelope of 100,000,000€ every year over the 10 next years for CAPEX and R&D investments for carrying out its carbon roadmaps. 3) Capital expenditures: Time horizon: Medium-term. The deployment of our carbon roadmaps to meet our 2030 and 2050 objectives has led the Group to update its financial planning by delivering 100M€ per year over the 10 next years for CAPEX and R&D investments. This envelope will focus on several pillars: working on our products (recycling, weight reduction, less carbonated material,…), energy efficiency in our processes to adapt our consumption to our needs or to recover heat losses, possibility to use future alternative energy such as biogas or hydrogen, possibility to electrify as much as possible our different processes and finally considering Carbon Capture Use or Storage. As example, on 24th of May 2021, Saint-Gobain announced that it will create for 2023 the first net zero carbon plasterboard plant in Norway through the Fredrikstad facility, thanks to an increased electrification of its production process. This investment is of approximately €25 million. 4) Capital allocation: Time horizon: short-term. Our process of validating investment has integrated since 2016 the use of an internal carbon price to speed up the Group's transition to low-carbon technologies. It was fixed at €30 per ton, updated to 75€ in February 2021, and applies to industrial investments above a certain threshold, investments associated with a change in energy source, energy investments on an existing or greenfield site with a total annual energy consumption of more than 10GWh. The example provided for ORC installation in Italy in 2019 is a good case study showing that investment can be achieved by applying such internal carbon price.

C3.5

(C3.5) In your organization's financial accounting, do you identify spending/revenue that is aligned with your organization's transition to a 1.5°C world?

Yes

C3.5a

(C3.5a) Quantify the percentage share of your spending/revenue that is aligned with your organization's transition to a 1.5°C world.

Financial Metric

Revenue

Percentage share of selected financial metric aligned with a 1.5°C world in the reporting year (%)

16.2

Percentage share of selected financial metric planned to align with a 1.5°C world in 2025 (%)

Percentage share of selected financial metric planned to align with a 1.5°C world in 2030 (%)

Describe the methodology used to identify spending/revenue that is aligned with a 1.5°C world

First assessment of eligibility toward European Taxonomy (mitigation of climate change) made for 2021. Alignment will be done for 2022.

Financial Metric

Revenue

Percentage share of selected financial metric aligned with a 1.5°C world in the reporting year (%)

72

Percentage share of selected financial metric planned to align with a 1.5°C world in 2025 (%)

75

Percentage share of selected financial metric planned to align with a 1.5°C world in 2030 (%)

Describe the methodology used to identify spending/revenue that is aligned with a 1.5°C world

The Group performed in 2021 a deep review of its portfolio of solutions in order to assess its sustainability benefits, in particular related to climate change. For example, Saint-Gobain assessed that 1 300MtCO2 were avoided at their customers thanks to the solutions being sod in one year. Altogether, the Group estimates that 72% of its turnover provided sustainability benefits to its customers in 2020. We aim to increase this figure to 75% in 2025.

C4. Targets and performance

C4.1

(C4.1) Did you have an emissions target that was active in the reporting year?

Absolute target

C4.1a

(C4.1a) Provide details of your absolute emissions target(s) and progress made against those targets.

Target reference number

Abs 1

Year target was set

2018

Target coverage

Company-wide

Scope(s)

Scope 1
Scope 2

Scope 2 accounting method

Location-based

Scope 3 category(ies)

Base year

2017

Base year Scope 1 emissions covered by target (metric tons CO2e)

9,945,315

Base year Scope 2 emissions covered by target (metric tons CO2e)

3,482,861

Base year Scope 3 emissions covered by target (metric tons CO2e)

Total base year emissions covered by target in all selected Scopes (metric tons CO2e)

13,428,176

Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1

100

Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2

100

Base year Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories)

Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes

100

Target year

2030

Targeted reduction from base year (%)

33

Total emissions in target year covered by target in all selected Scopes (metric tons CO2e) [auto-calculated]

8,996,877.92

Scope 1 emissions in reporting year covered by target (metric tons CO2e)

8,402,819

Scope 2 emissions in reporting year covered by target (metric tons CO2e)

1,927,391

Scope 3 emissions in reporting year covered by target (metric tons CO2e)

Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)

10,330,210

% of target achieved relative to base year [auto-calculated]

69.9110270641

Target status in reporting year

Underway

Is this a science-based target?

Yes, and this target has been approved by the Science Based Targets initiative

Target ambition

Well-below 2°C aligned

Please explain target coverage and identify any exclusions

Compared to last year, our target has been updated with 2030 as target year (vs 2025 previously) in a well-below 2°C trajectory (vs 2°C previously). Both target and reference years include our 2019 acquisition of Continental Building Products in North America. 2021 shows a faster decrease of our scope 2 emissions thanks to decarbonised energy progress in several country like in the US. Our scope 1 decreased less thanks to a better loading of our plant that recovered from the pandemic.

Plan for achieving target, and progress made to the end of the reporting year

In 2021, each site was asked to update its CO2 roadmap. We have various decarbonation projects all across the world being currently studied or implemented .

List the emissions reduction initiatives which contributed most to achieving this target

Target reference number

Abs 2

Year target was set

2018

Target coverage

Company-wide

Scope(s)

Scope 3

Scope 2 accounting method

Scope 3 category(ies)

Category 1: Purchased goods and services
Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2)
Category 4: Upstream transportation and distribution
Category 9: Downstream transportation and distribution

Base year

2017

Base year Scope 1 emissions covered by target (metric tons CO2e)

Base year Scope 2 emissions covered by target (metric tons CO2e)

Base year Scope 3 emissions covered by target (metric tons CO2e)

17,358,152

Total base year emissions covered by target in all selected Scopes (metric tons CO2e)

17,358,152

Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1

Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2

Base year Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories)

67

Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes

100

Target year

2030

Targeted reduction from base year (%)

16

Total emissions in target year covered by target in all selected Scopes (metric tons CO2e) [auto-calculated]

14,580,847.68

Scope 1 emissions in reporting year covered by target (metric tons CO2e)

Scope 2 emissions in reporting year covered by target (metric tons CO2e)

Scope 3 emissions in reporting year covered by target (metric tons CO2e)

21,280,000

Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)

21,280,000

% of target achieved relative to base year [auto-calculated]

-141.2105966119

Target status in reporting year

Underway

Is this a science-based target?

Yes, and this target has been approved by the Science Based Targets initiative

Target ambition

2°C aligned

Please explain target coverage and identify any exclusions

In 2019, the Group updated its Scope 3 evaluation, using 2017 as reference and making the methodology and data more robust for each category. The Group performed a new assessment of its scope 3 in 2021. Due to the increased accuracy, thanks to improved accounting, the Group's scope 3 is estimated at 21.3 Mteq CO2, which is an increase compared to the 2017 base used to validate the 2030 targets by the SBT initiative (17.3 Mteq CO2). Excluding the broader coverage of impacts, in particular for category 1 of scope 3, scope 3 would have been estimated at 16.8 Mteq CO2 in 2021, showing some improvements compared to 2017. The Group is working to improve the accuracy of its scope 3 accounting, in particular by implementing a complete system of monitoring of its Category 1, 3, 4, and 9 emissions

Plan for achieving target, and progress made to the end of the reporting year

Engagement of all main suppliers for them to disclose their carbon footprint and define their decarbonisation roadmap.

List the emissions reduction initiatives which contributed most to achieving this target

C4.2

(C4.2) Did you have any other climate-related targets that were active in the reporting year?

Net-zero target(s)

C4.2c

(C4.2c) Provide details of your net-zero target(s).

Target reference number

NZ1

Target coverage

Company-wide

Absolute/intensity emission target(s) linked to this net-zero target

Abs1
Abs2

Target year for achieving net zero

2050

Is this a science-based target?

Yes, and this target has been approved by the Science Based Targets initiative

Please explain target coverage and identify any exclusions

In September 2019, during the Climate Action Summit conveyed by the General Secretary of the United Nations, our President signed the pledge of the Global Compact "Business ambition for 1.5°C", committing Saint-Gobain to reach net-zero emissions by no later than 2050 in line with 1.5°C scenarios. We applied for the validation of our net-zero target following the new standard released by the SBT initiative. The SBTi's Target Validation Team recently classified (July 2022) our scope 1 and 2 near-term target ambition and determined that it is in line with a 1.5°C trajectory. The Target Validation Team also evaluated our scope 1, 2, and 3 long-term target ambition and determined that it is aligned with the SBTi's 1.5°C mitigation pathways for reaching net-zero by 2050 or sooner.

Do you intend to neutralize any unabated emissions with permanent carbon removals at the target year?

Unsure

Planned milestones and/or near-term investments for neutralization at target year

Planned actions to mitigate emissions beyond your value chain (optional)

C4.3

(C4.3) Did you have emissions reduction initiatives that were active within the reporting year? Note that this can include those in the planning and/or implementation phases.

Yes

C4.3a

(C4.3a) Identify the total number of initiatives at each stage of development, and for those in the implementation stages, the estimated CO2e savings.

	Number of initiatives	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	0	0

To be implemented*	2	172,000
Implementation commenced*	1	65,000
Implemented*	8	462,750
Not to be implemented	0	0

C4.3b

(C4.3b) Provide details on the initiatives implemented in the reporting year in the table below.

Initiative category & Initiative type

Energy efficiency in production processes

Other, please specify

Cold Repair & New design Float Furnace Eggborough in 2021

Estimated annual CO2e savings (metric tonnes CO2e)

17,000

Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 1

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

3,400,000

Investment required (unit currency – as specified in C0.4)

5,000,000

Payback period

<1 year

Estimated lifetime of the initiative

11-15 years

Comment

Maintenance Opex needed.

Float furnace BAT deployment.

Initiative category & Initiative type

Energy efficiency in production processes

Other, please specify

Low C Raw Materials for textile glass production / Industrial trial / POC in Xicoh-plant

Estimated annual CO2e savings (metric tonnes CO2e)

2,500

Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 1

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

250,000

Investment required (unit currency – as specified in C0.4)

400,000

Payback period

1-3 years

Estimated lifetime of the initiative

>30 years

Comment

Technical feasibility proven. Ind. Deployment to Adfors plants til 2030 function of financial support to ensure Capex & Opex for RM-supply. Key point = Raw-Mat sourcing & strategy development

Initiative category & Initiative type

Energy efficiency in production processes

Other, please specify

BCP (Batch & Cullet Preheating) / Energy recovery syst.

Estimated annual CO2e savings (metric tonnes CO2e)

6,000

Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 1

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

2,000,000

Investment required (unit currency – as specified in C0.4)

7,240,000

Payback period

4-10 years

Estimated lifetime of the initiative

16-20 years

Comment

Demo full capacity late 2024, before potential deployment.

Initiative category & Initiative type

Energy efficiency in buildings

Other, please specify

Implement renewable energy (Solar) to replace the traditional fossil fuel energy

Estimated annual CO2e savings (metric tonnes CO2e)

250

Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

141,913

Investment required (unit currency – as specified in C0.4)

652,174

Payback period

4-10 years

Estimated lifetime of the initiative

16-20 years

Comment

LED project in one plant.

Initiative category & Initiative type

Low-carbon energy consumption

Wind

Estimated annual CO2e savings (metric tonnes CO2e)

200,000

Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 2 (market-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

0

Investment required (unit currency – as specified in C0.4)

0

Payback period

No payback

Estimated lifetime of the initiative

11-15 years

Comment

On March 2021, Saint-Gobain in the US entered into a 12-year Power Purchase Agreement (PPA) with Invenergy, a leading privately held global developer and operator of sustainable energy solutions, for 120 megawatts (MW) of the 250 MW Blooming Grove Wind Farm capacity in McLean County, Illinois.

Initiative category & Initiative type

Waste reduction and material circularity

Other, please specify

Increase recycle content for glass through cullet

Estimated annual CO2e savings (metric tonnes CO2e)

100,000

Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 1

Scope 3 category 1: Purchased goods & services

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

0

Investment required (unit currency – as specified in C0.4)

0

Payback period

No payback

Estimated lifetime of the initiative

>30 years

Comment

Figures reflect the increase of total cullet usage for glass between 2020 and 2021 (150kT) as 1 ton of cullet replacing 1,2 ton f virgin raw material allowing to reduce per

ton of cullet around 300 kg of CO2 scope 1 and around 300 kg of CO2 scope 3. We will continue to increase the cullet usage in the coming years. This initiative is made in every country where Glass is operating .

Initiative category & Initiative type

Waste reduction and material circularity

Other, please specify

Increase cullet usage for production of Glasswool

Estimated annual CO2e savings (metric tonnes CO2e)

72,000

Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 1

Scope 3 category 1: Purchased goods & services

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

0

Investment required (unit currency – as specified in C0.4)

0

Payback period

No payback

Estimated lifetime of the initiative

>30 years

Comment

Figures reflect the increase of total cullet usage forinsulation between 2020 and 2021 (120kT) as 1 ton of cullet replacing 1,2 ton f virgin raw material allowing to reduce per ton of cullet around 300 kg of CO2 scope 1 and around 300 kg of CO2 scope 3. We will continue to increase the cullet usage in the coming years.

Initiative category & Initiative type

Low-carbon energy consumption

Other, please specify

Replacement of coke usage by electricity

Estimated annual CO2e savings (metric tonnes CO2e)

65,000

Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 1

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

0

Investment required (unit currency – as specified in C0.4)

10,000,000

Payback period

1-3 years

Estimated lifetime of the initiative

21-30 years

Comment

Implementation of an electrical furnace to replace cast iron production through blast furnace in Pont à Mousson France. Start of the production is scheduled mid-2022.

C4.3c

(C4.3c) What methods do you use to drive investment in emissions reduction activities?

Method	Comment
Compliance with regulatory requirements/standards	Compliance with regulatory requirements is of course a key driver to invest in emissions reduction activities. The Corporate Legal Department ensures general environmental regulatory watch, while the Corporate Environment, Health and Safety Department works on anticipating the specific climate change regulations and assessing the related impacts on the Group activities. At asset level, facility EHS representatives are informed by their Legal and Tax Department about any new law or regulation related to environment, including climate change. Saint-Gobain places all its sites in a phase of continuous improvement. In this respect, they aim to identify and evaluate the Best Available Techniques (BAT) and Practices Available and then progressively upgrade them at an economically acceptable cost, in accordance with the Group's environmental vision. A BAT deployment plan is defined, updated annually and included in the strategic plan. Deployment of BAT is also part of our carbon roadmaps that we have set up to reach our 2030 and 2050 carbon objectives.
Dedicated budget for energy efficiency	The Group has defined R&D programs to especially improve the energy efficiency of our manufacturing processes such as the "Improving our CO2 footprint» program aiming to coordinate and expand R&D efforts devoted to improving manufacturing processes with a view to reducing their greenhouse gas emissions. The

	deployment of our carbon roadmaps to meet our 2030 and 2050 objectives has led the Group to provide a budget of €100M per year over the 10 next years for CAPEX and R&D investments, energy efficiency being one of the levers of this initiative.
Dedicated budget for low-carbon product R&D	The cross-functional R&D program, “Improvement in our CO2 footprint”, also includes an energy component: recovery of lost energy and research into the use of new, low-carbon forms of energy (such as green electricity, biogas, hydrogen). Saint-Gobain also initiated R&D programs to improve the environmental performance of its products portfolio. The “Low Carbon Cement-based Materials” program is one of the best examples.
Dedicated budget for other emissions reduction activities	In addition of its environmental targets (CO2, energy, water and waste), the Group has set emissions targets for dust, NOx and SO2 emissions (-20% in 2025 vs 2010 at iso-production). This leads to the allocation of R&D budget and to some investments in plants to upgrade/install depollution units. The Group environmental budget in 2021 amounted to €110.7M.
Internal incentives/recognition programs	The Environment Emerald Awards, launched in 2010, is a ceremony that rewards Saint-Gobain sites for carrying out projects that reduce their environmental impact and/or that of their manufactured products. Those projects have to address one of the following environmental issues: climate change, water, waste, atmospheric emissions, other (such as biodiversity, soil, noise, smell or visual Impacts). As example, in 2020, the two sites of glass production at Chennai (India) and Pisa (Italy) were awarded for their installation of ORC turbine producing utilities from recovered heat.
Internal incentives/recognition programs	The Environment Emerald Awards, launched in 2010, is a ceremony that rewards Saint-Gobain sites for carrying out projects that reduce their environmental impact and/or that of their manufactured products. Those projects must address one of the following environmental issues: climate change, water, waste, atmospheric emissions, other (such as biodiversity, soil, noise, smell or visual Impacts). For example, two projects were awarded in 2021. One was the signing of a 12-year Power Purchase Agreement with Invenergy, a leading privately held global developer and operator of sustainable energy solutions, for 120 megawatts (MWp) from the Blooming Grove Wind Farm, Illinois. The second project was related to a smart compressor program in Brazil.
Internal incentives/recognition programs	Saint-Gobain launched in 2021 an internal carbon und. First implemented in a pilot region (Northern Europe) and now being extended to other geographies, the fund aims to accelerate the reduction of non-industrial CO2 emissions through the everyday actions of employees and targeted investments on sites. The areas covered by these investments are mainly related to sustainable employee mobility, renewable energies and improving well-being and

	energy efficiency at Saint-Gobain sites. These projects, proposed and selected by employees, concern their professional environment.

C4.5

(C4.5) Do you classify any of your existing goods and/or services as low-carbon products?

Yes

C4.5a

(C4.5a) Provide details of your products and/or services that you classify as low-carbon products.

Level of aggregation

Group of products or services

Taxonomy used to classify product(s) or service(s) as low-carbon

Other, please specify

Internal methodology partly based on EU taxonomy and IEA technology roadmaps

Type of product(s) or service(s)

Road

Other, please specify

Glass for automotive

Description of product(s) or service(s)

The weight of the windshield has been reduced by 30%, which helps to reduce the energy consumption of equipped vehicles. In addition, SGS CoolCoat windshields have approximately twice the performance of the standard heat-reflecting products. The amount of heat entering a car with green tinted standard glazing is 65%, whereas it is only 40% with CoolCoat. Consequently, the vehicle interior stays cooler, air conditioning runs less and comfortable temperatures are reached faster. SGS CoolCoat reduces the AC load and saves fuel by about 0.1 liter per 100 km, corresponding to 1.6 grams CO2 per km.

The usage of SGS SolarWall roof, thanks to the high solar comfort thin coating helps to avoid velum installation inside the car. SolarWall replaces the shutter (motor, rails, textile, connections to the car body) using thin-film coatings to achieve an identical thermal protection. The mass saved is a direct CO2 reduction during the car build.

Thanks to the space of the shutter system gained, cars can be built lower by –(3-5)cm, hence being more aerodynamic and consuming less. This saves CO2 during driving.

The C02 footprint of such a glazing sunroof is saved during the vehicle lifetime,

representing a zero CO2 product potential. It can reduce about 0.9 grams CO2eq per km for a diesel motor car

Have you estimated the avoided emissions of this low-carbon product(s) or service(s)

No

Methodology used to calculate avoided emissions

Life cycle stage(s) covered for the low-carbon product(s) or services(s)

Functional unit used

Reference product/service or baseline scenario used

Life cycle stage(s) covered for the reference product/service or baseline scenario

Estimated avoided emissions (metric tons CO2e per functional unit) compared to reference product/service or baseline scenario

Explain your calculation of avoided emissions, including any assumptions

Revenue generated from low-carbon product(s) or service(s) as % of total revenue in the reporting year

0.1

Level of aggregation

Group of products or services

Taxonomy used to classify product(s) or service(s) as low-carbon

Other, please specify

Internal methodology partly based on EU taxonomy and IEA technology roadmaps

Type of product(s) or service(s)

Buildings construction and renovation

Building orientation: Thermal performance

Description of product(s) or service(s)

The methodology for thermal insulation of the building envelope is based on:
- The energy savings generated by a reduction in heating or cooling through building insulation.

- The comparison between a wall insulated with solutions manufactured and sold by Saint-Gobain and a wall considered as the reference on the market, distinguishing between new construction and renovation.
-The quantity of GHG emissions avoided is obtained by subtracting the emissions generated by Saint-Gobain solutions over their entire life cycle from the emissions avoided thanks to energy savings.
-The solutions included in the scope of the study are the insulation solutions used to insulate roofs, walls, floors and glazing in buildings.
-The sales data used to calculate the avoided GHG emissions correspond to the year 2019 (for a small part of the sales, 2018 data were used).
-The most recent international recommendations: GHG Protocol, World Resources Institute, etc. on the calculation of avoided emissions have been taken into account.

The amount of GHG emissions avoided is obtained by subtracting the emissions generated by Saint-Gobain solutions over their entire life cycle from the emissions avoided through energy savings.

Have you estimated the avoided emissions of this low-carbon product(s) or service(s)

Yes

Methodology used to calculate avoided emissions

Other, please specify

Internal methodology partly based on EU taxonomy and IEA technology roadmaps

Life cycle stage(s) covered for the low-carbon product(s) or services(s)

Cradle-to-gate + end-of-life stage

Functional unit used

The calculation is not based on functional unit but on the performance of a building element once insulated compared to a building stock. As the situation across the world is very diverse there is no single figure in terms of saving. We adopt an aggregated approach.

Reference product/service or baseline scenario used

Internal methodologies (See above)

Life cycle stage(s) covered for the reference product/service or baseline scenario

Cradle-to-gate + end-of-life stage

Estimated avoided emissions (metric tons CO2e per functional unit) compared to reference product/service or baseline scenario

845,000,000

Explain your calculation of avoided emissions, including any assumptions

The methodology for thermal insulation of the building envelope is based on:
-The energy savings generated by a reduction in heating or cooling through building insulation.

-The comparison between a wall insulated with solutions manufactured and sold by Saint-Gobain and a wall considered as the reference on the market, distinguishing between new construction and renovation.
-The quantity of GHG emissions avoided is obtained by subtracting the emissions generated by Saint-Gobain solutions over their entire life cycle from the emissions avoided thanks to energy savings.
-The solutions included in the scope of the study are the insulation solutions used to insulate roofs, walls, floors and glazing in buildings.
-The sales data used to calculate the avoided GHG emissions correspond to the year 2019 (for a small part of the sales, 2018 data were used).
-The most recent international recommendations: GHG Protocol, World Resources Institute, etc. on the calculation of avoided emissions have been taken into account.

The amount of GHG emissions avoided is obtained by subtracting the emissions generated by Saint-Gobain solutions over their entire life cycle from the emissions avoided through energy savings.

Revenue generated from low-carbon product(s) or service(s) as % of total revenue in the reporting year

72

C5. Emissions methodology

C5.1

(C5.1) Is this your first year of reporting emissions data to CDP?

No

C5.1a

(C5.1a) Has your organization undergone any structural changes in the reporting year, or are any previous structural changes being accounted for in this disclosure of emissions data?

Row 1

Has there been a structural change?

No

C5.1b

(C5.1b) Has your emissions accounting methodology, boundary, and/or reporting year definition changed in the reporting year?

	Change(s) in methodology, boundary, and/or reporting year definition?
Row 1	No

C5.2

(C5.2) Provide your base year and base year emissions.

Scope 1

Base year start
January 1, 2017

Base year end
December 31, 2017

Base year emissions (metric tons CO2e)
12,976,886

Comment

Scope 2 (location-based)

Base year start
January 1, 2017

Base year end
December 31, 2017

Base year emissions (metric tons CO2e)
4,461,638

Comment

Scope 2 (market-based)

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 1: Purchased goods and services

Base year start
January 1, 2017

Base year end

December 31, 2017

Base year emissions (metric tons CO2e)

11,379,853

Comment

Scope 3 category 2: Capital goods

Base year start

January 1, 2017

Base year end

December 31, 2017

Base year emissions (metric tons CO2e)

53,813

Comment

Scope 3 category 3: Fuel-and-energy-related activities (not included in Scope 1 or 2)

Base year start

January 1, 2017

Base year end

December 31, 2017

Base year emissions (metric tons CO2e)

2,936,344

Comment

Scope 3 category 4: Upstream transportation and distribution

Base year start

January 1, 2017

Base year end

December 31, 2017

Base year emissions (metric tons CO2e)

2,531,767

Comment

Scope 3 category 5: Waste generated in operations

Base year start

January 1, 2017

Base year end

December 31, 2017

Base year emissions (metric tons CO2e)

346,228

Comment

Scope 3 category 6: Business travel

Base year start

January 1, 2017

Base year end

December 31, 2017

Base year emissions (metric tons CO2e)

257,490

Comment

Scope 3 category 7: Employee commuting

Base year start

January 1, 2017

Base year end

December 31, 2017

Base year emissions (metric tons CO2e)

166,377

Comment

Scope 3 category 8: Upstream leased assets

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 9: Downstream transportation and distribution

Base year start

January 1, 2017

Base year end

December 31, 2017

Base year emissions (metric tons CO2e)

6,192,139

Comment

Scope 3 category 10: Processing of sold products

Base year start

January 1, 2017

Base year end

December 31, 2017

Base year emissions (metric tons CO2e)

225,454

Comment

Scope 3 category 11: Use of sold products

Base year start

January 1, 2017

Base year end

December 31, 2017

Base year emissions (metric tons CO2e)

106,817,603

Comment

Scope 3 category 12: End of life treatment of sold products

Base year start

January 1, 2017

Base year end

December 31, 2017

Base year emissions (metric tons CO2e)

677,650

Comment

Scope 3 category 13: Downstream leased assets

Base year start

January 1, 2017

Base year end

December 31, 2017

Base year emissions (metric tons CO2e)

84

Comment

Scope 3 category 14: Franchises

Base year start

January 1, 2017

Base year end

December 31, 2017

Base year emissions (metric tons CO2e)

5,277

Comment

Scope 3 category 15: Investments

Base year start

January 1, 2017

Base year end

December 31, 2017

Base year emissions (metric tons CO2e)

1,063,532

Comment

Scope 3: Other (upstream)

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3: Other (downstream)

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

C5.3

(C5.3) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate emissions.

European Union Emission Trading System (EU ETS): The Monitoring and Reporting Regulation (MMR) – General guidance for installations
IEA CO2 Emissions from Fuel Combustion
IPCC Guidelines for National Greenhouse Gas Inventories, 2006
The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)
The Greenhouse Gas Protocol: Scope 2 Guidance

C6. Emissions data

C6.1

(C6.1) What were your organization's gross global Scope 1 emissions in metric tons CO2e?

Reporting year

Gross global Scope 1 emissions (metric tons CO2e)

8,402,819

Comment

Our scope 1 emissions are linked to the energy use as well as the consumption of carbonated raw materials.

C6.2

(C6.2) Describe your organization's approach to reporting Scope 2 emissions.

Row 1

Scope 2, location-based

We are reporting a Scope 2, location-based figure

Scope 2, market-based

We have operations where we are able to access electricity supplier emission factors or residual emissions factors, but are unable to report a Scope 2, market-based figure

Comment

We have more than 800 industrial locations; therefore, we use a market-based approach, particularly for purchased green electricity, whenever we have a Renewable Energy Certificate.

C6.3

(C6.3) What were your organization's gross global Scope 2 emissions in metric tons CO2e?

Reporting year

Scope 2, location-based

1,927,391

Comment

Our scope 2 emissions are mainly linked to the consumption of electricity and steam.

C6.4

(C6.4) Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure?

No

C6.5

(C6.5) Account for your organization's gross global Scope 3 emissions, disclosing and explaining any exclusions.

Purchased goods and services

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

20,534,450

Emissions calculation methodology

Other, please specify

Activity data come from the raw materials of the Group. It also includes goods purchased by Distribution. Emission factors are the most reliable ones known for consideration at worldwide level.

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Please explain

Saint-Gobain's updated its scope 3 emissions assessment in 2021. It has been done by a more specific assessment of emissions factors and a more granular analysis of impacts.

Capital goods

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

53,813

Emissions calculation methodology

Other, please specify

Activity data come from data being easily accessible. Emission factors are the most reliable ones known for consideration at worldwide level.

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Please explain

An update was done in 2021 for main categories, which is not the case for this category, whose impact is considered as marginal.

Fuel-and-energy-related activities (not included in Scope 1 or 2)

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

2,299,469

Emissions calculation methodology

Other, please specify

Saint-Gobain Environmental reporting is able to provide energy consumptions for the reporting period. Emission factors are the most reliable ones known for consideration at national or worldwide level.

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Please explain

Saint-Gobain's updated its scope 3 emissions assessment in 2021. It has been done by a more specific assessment of emissions factors and a more granular analysis of impacts.

Upstream transportation and distribution

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

2,609,676

Emissions calculation methodology

Other, please specify

Different source of data depending on the activity (see please explain)

Percentage of emissions calculated using data obtained from suppliers or value chain partners

46

Please explain

Saint-Gobain's updated its scope 3 emissions assessment in 2021. it has been done by a more specific assessment of emissions factors and a more granular analysis of impacts.

For industry, activity data is based on our products sales considering the most relevant way of transportation (type, distance, filling rates). Emission factors are the most reliable ones known for consideration at worldwide level. For distribution, worldwide extrapolation data is based on the activity data provided by the distribution companies operating for Saint-Gobain in France.

Waste generated in operations

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

280,229

Emissions calculation methodology

Other, please specify

Saint-Gobain Environmental reporting is able to provide waste production for the reporting period (waste landfilled or incineratead without energy recovery). Emission factors are the most reliable ones known for consideration at worldwide level.

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Please explain

An update was done in 2021, to be compared to previous assessment using 2017 as reference.

Business travel

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

20,582

Emissions calculation methodology

Other, please specify

Activity data come from our central travel agency (air, train, car rentals, hotel). Emission factors are the most reliable ones known for consideration at worldwide level.

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Please explain

An update was done in 2021, to be compared to previous assessment using 2017 as reference. 2021 figures are impacted by COVID (strong reduction of business travel)

Employee commuting

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

155,226

Emissions calculation methodology

Other, please specify

Saint-Gobain Safety reporting provides employee data for the period. Internal data from an expert consultant was used to set up: shares by transport mode, emission factors for each mode, average number of days worked, average distance travelled.

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Please explain

An update was done in 2021, to be compared to previous assessment using 2017 as reference.

Upstream leased assets

Evaluation status

Not relevant, explanation provided

Please explain

This category includes emissions from the operation of assets that are leased by the company and not already included in the company's scope 1 or scope 2 inventories. Following our assessment, this is considered as marginal for Saint-Gobain compared to reported scope 1 and 2 emissions.

Downstream transportation and distribution

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

4,717,325

Emissions calculation methodology

Other, please specify

For industry, activity data is based on product sales considering the most relevant way of transport (type, distance, filling rates). For distribution, worldwide extrapolation data is based on activity data provided by the distribution companies.

Percentage of emissions calculated using data obtained from suppliers or value chain partners

88

Please explain

Saint-Gobain's updated its scope 3 emissions assessment in 2021. It has been done by a more specific assessment of emissions factors and a more granular analysis of impacts.

Processing of sold products

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

215,550

Emissions calculation methodology

Other, please specify

Activity data (production, energy and water uses) were collected for the most relevant products. It also includes goods sold by the Distribution. Emission factors are the most reliable ones known for consideration at worldwide level.

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Please explain

An update was done in 2021, to be compared to previous assessment using 2017 as reference.

Use of sold products

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

53,143,226

Emissions calculation methodology

Other, please specify

Activity data (production and related energy use) were collected for the most relevant products. It includes goods sold by Distribution. Emission factors were updated in 2021 and are the most reliable ones known for consideration at worldwide level.

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Please explain

An update was done in 2021, to be compared to previous assessment using 2017 as reference. A deep review of the methodology has been done. It has to be highlighted that car windshields are considered as indirect use-phase emissions and therefore not considered by the SBT initiative for setting-up scope 3 emissions targets.

End of life treatment of sold products

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

522,011

Emissions calculation methodology

Other, please specify

Activity data were collected for the most relevant products. It also includes goods sold by the Distribution. Emission factors are the most reliable ones known for consideration at worldwide level.

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Please explain

An update was done in 2021, to be compared to previous assessment using 2017 as reference.

Downstream leased assets

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

84

Emissions calculation methodology

Other, please specify

Activity data were collected for the most relevant franchises located in Europe. Emission factors are the most reliable ones known for consideration at national level.

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Please explain

An update was done in 2021 for main categories, which is not the case for this category whose impact is considered as marginal

Franchises

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

5,277

Emissions calculation methodology

Other, please specify

Activity data were collected for the most relevant franchises located in Europe. Emission factors are the most reliable ones known for consideration at national level.

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Please explain

An update was done in 2021 for main categories, which is not the case for this category whose impact is considered as marginal

Investments

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

636,323

Emissions calculation methodology

Other, please specify

Activity data come from our corporate finance department. Only the shares detained by Saint-Gobain are accounted in this category and multiplied by adapted emission factor. Sectorial financial emission factors have been employed (in kgCO2 eq/k€).

Percentage of emissions calculated using data obtained from suppliers or value chain partners

Please explain

An update was done in 2021 for main categories, which is not the case for this category whose impact is considered as marginal.

Other (upstream)

Evaluation status

Please explain

Other (downstream)

Evaluation status

Please explain

C6.7

(C6.7) Are carbon dioxide emissions from biogenic carbon relevant to your organization?

Yes

C6.7a

(C6.7a) Provide the emissions from biogenic carbon relevant to your organization in metric tons CO2.

	CO2 emissions from biogenic carbon (metric tons CO2)	Comment
Row 1	12,225	This amount is marginal (it is an order of magnitude of around 0,1% of our scope 1+2 emissions) and is mainly linked to charcoal consumption in some of our Brazilian facilities.

C6.10

(C6.10) Describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tons CO2e per unit currency total revenue and provide any additional intensity metrics that are appropriate to your business operations.

Intensity figure

0.00023

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)

10,330,210

Metric denominator

unit total revenue

Metric denominator: Unit total

44,160,000,000

Scope 2 figure used

Location-based

% change from previous year

15

Direction of change

Decreased

Reason for change

Positive impact of our growth between 2020 and 2021 (post covid recovery) and the implementation of our decarbonization roadmap, for example through the initiatives described in C4.3a & C4.3b such as
-Signature of the Bloomming grove PPA in US
-Installation of preheating equipement for batch and Cullet in one of our french float line
-Increase of the recycled content (culett) in glass production

C7. Emissions breakdowns

C7.1

(C7.1) Does your organization break down its Scope 1 emissions by greenhouse gas type?

No

C7.2

(C7.2) Break down your total gross global Scope 1 emissions by country/region.

Country/Region	Scope 1 emissions (metric tons CO2e)
Albania	31.632
Algeria	0
Angola	1,025.814
Argentina	37,368.762
Australia	316.835
Austria	34,322.264
Belgium	45,249.445
Bhutan	10,577
Botswana	122.82
Brazil	597,058.55
Bulgaria	440.447
Canada	176,424.747
Chile	46.255
China	248,233.946
Colombia	95,992.144
Côte d'Ivoire	0
Czechia	205,231.525
Denmark	152,272.326
Egypt	148,880.819
Estonia	946.849
Ethiopia	112.808
Finland	67,393.596
France	1,127,529.342
Germany	756,846.747
Ghana	129.973
Greece	5,695.856
Hungary	20,399.74
India	783,821.299
Indonesia	5,289.691
Ireland	37,758.773
Italy	175,862.07
Japan	50,591.049

Jordan	0
Kazakhstan	0
Kenya	0
Kuwait	10,068.832
Latvia	0
Lebanon	729.63
Lithuania	596.52
Luxembourg	161.954
Malaysia	17,571.43
Mauritius	0
Mexico	356,635.224
Morocco	95.397
Netherlands	57,020.777
New Zealand	0
Norway	70,212.288
Oman	5,276
Peru	253.084
Philippines	0
Poland	372,610.235
Portugal	35,487.646
Qatar	21.809
Republic of Korea	17,075.951
Romania	181,363.817
Russian Federation	221,606.738
Saudi Arabia	15,544.001
Serbia	361.863
Singapore	0
Slovakia	2,652.322
Slovenia	1,357.233
South Africa	31,822.546
Spain	290,579.309
Sri Lanka	0
Sweden	53,583.334
Switzerland	15,622.463
Thailand	47,399.706

Turkey	108,770.493
United Arab Emirates	17,295.571
United Kingdom of Great Britain and Northern Ireland	336,693.891
United Republic of Tanzania	6,810.115
United States of America	1,304,065.553
Venezuela (Bolivarian Republic of)	0
Viet Nam	39,020.457
Zimbabwe	3,831.852

C7.3

(C7.3) Indicate which gross global Scope 1 emissions breakdowns you are able to provide.

By activity

C7.3c

(C7.3c) Break down your total gross global Scope 1 emissions by business activity.

Activity	Scope 1 emissions (metric tons CO2e)
Glass Activity	3,191,911
Pipe Activity	569,906
Other	4,641,002

C7.5

(C7.5) Break down your total gross global Scope 2 emissions by country/region.

Country/Region	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Albania	5.359	
Algeria	0	
Angola	2.685	
Argentina	6,893.637	
Australia	1,307.985	
Austria	0	
Belgium	4,543.348	
Bhutan	947.16	
Botswana	37.74	
Brazil	15,321.858	
Bulgaria	366.171	

Canada	15,051.199	
Chile	765.728	
China	195,832.204	
Colombia	499.478	
Côte d'Ivoire	0	
Czechia	46,379.219	
Denmark	1,244.905	
Egypt	24,215.961	
Estonia	22,056.696	
Ethiopia	0	
Finland	562.274	
France	49,730.526	
Germany	106,107.82	
Ghana	28.581	
Greece	1,491.098	
Hungary	578.607	
India	200,779.495	
Indonesia	6,330.754	
Ireland	0	
Italy	36,064.694	
Japan	43,565.278	
Jordan	0	
Kazakhstan	0	
Kenya	0	
Kuwait	36,138.837	
Latvia	0	
Lebanon	12.46	
Lithuania	31.525	
Luxembourg	0	
Malaysia	5,713.455	
Mauritius	0	
Mexico	163,512.02	
Morocco	22,336.689	
Netherlands	0	
New Zealand	0	

Norway	0	
Oman	16.096	
Peru	301.988	
Philippines	0	
Poland	294,321.763	
Portugal	3,564.511	
Qatar	360.071	
Republic of Korea	54,150.056	
Romania	36,813.833	
Russian Federation	43,784.626	
Saudi Arabia	7,257.733	
Serbia	646.849	
Singapore	0	
Slovakia	700.261	
Slovenia	36.162	
South Africa	32,720.76	
Spain	0	
Sri Lanka	0	
Sweden	209.315	
Switzerland	844.065	
Thailand	26,393.083	
Turkey	49,170.95	
United Arab Emirates	5,073.881	
United Kingdom of Great Britain and Northern Ireland	361.025	
United Republic of Tanzania	399.307	
United States of America	338,086.354	
Venezuela (Bolivarian Republic of)	57.111	
Viet Nam	22,510.442	
Zimbabwe	1,155.347	

C7.6

(C7.6) Indicate which gross global Scope 2 emissions breakdowns you are able to provide.

By activity

C7.6c

(C7.6c) Break down your total gross global Scope 2 emissions by business activity.

Activity	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Glass Activity	410,278	
Pipe Activity	8,197	
Other	1,508,916	

C7.9

(C7.9) How do your gross global emissions (Scope 1 and 2 combined) for the reporting year compare to those of the previous reporting year?

Decreased

C7.9a

(C7.9a) Identify the reasons for any change in your gross global emissions (Scope 1 and 2 combined), and for each of them specify how your emissions compare to the previous year.

	Change in emissions (metric tons CO2e)	Direction of change	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption	622,696	Decreased	6	Our purchases of green electricity increased from 2020 to 2021, which led to a decrease of scope 2 emissions of 622,696 tCO2e compared to 2020. Our total scope 1 and 2 emissions in 2020 were 10,446727 MtCO2e, so we estimated a decrease of 6% through (0.622696/10.446727)*100=6%
Other emissions reduction activities	193,821	Decreased	1.9	The decrease can be explained by an increase in efficiency and implementaion of the decarbonization roadmap. In particular through the initiative describe is C4.3a. Our total scope 1 and 2 emissions in 2020 were 10,446727 MtCO2e, so we estimated a decrease of 1.9% through (0.193821/10.446727)*100=1,9%
Divestment				
Acquisitions				
Mergers				

Change in output	700,000	Increased	6.7	In 2021, our emissions increased due to Covid recovery. Our total scope 1 and 2 emissions in 2020 were 10,446727 MtCO2e, so we estimated an increase of 6.7 % through (0.7/10.446727)*100=6.7%
Change in methodology				
Change in boundary				
Change in physical operating conditions				
Unidentified				
Other				

C7.9b

(C7.9b) Are your emissions performance calculations in C7.9 and C7.9a based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure?

Location-based

C8. Energy

C8.1

(C8.1) What percentage of your total operational spend in the reporting year was on energy?

More than 5% but less than or equal to 10%

C8.2

(C8.2) Select which energy-related activities your organization has undertaken.

	Indicate whether your organization undertook this energy-related activity in the reporting year
Consumption of fuel (excluding feedstocks)	Yes
Consumption of purchased or acquired electricity	Yes
Consumption of purchased or acquired heat	Yes

Consumption of purchased or acquired steam	Yes
Consumption of purchased or acquired cooling	No
Generation of electricity, heat, steam, or cooling	Yes

C8.2a

(C8.2a) Report your organization's energy consumption totals (excluding feedstocks) in MWh.

	Heating value	MWh from renewable sources	MWh from non-renewable sources	Total (renewable and non-renewable) MWh
Consumption of fuel (excluding feedstock)	LHV (lower heating value)	1,024,433	34,066,726	35,091,159
Consumption of purchased or acquired electricity		3,275,591	5,033,754	8,309,345
Consumption of purchased or acquired heat		0	9,625	9,625
Consumption of purchased or acquired steam		0	29,906	29,906
Consumption of self-generated non-fuel renewable energy		20,592		20,592
Total energy consumption		4,320,616	39,140,011	43,460,627

C8.2b

(C8.2b) Select the applications of your organization's consumption of fuel.

	Indicate whether your organization undertakes this fuel application
Consumption of fuel for the generation of electricity	Yes
Consumption of fuel for the generation of heat	Yes

Consumption of fuel for the generation of steam	No
Consumption of fuel for the generation of cooling	No
Consumption of fuel for co-generation or tri-generation	Yes

C8.2c

(C8.2c) State how much fuel in MWh your organization has consumed (excluding feedstocks) by fuel type.

Sustainable biomass

Heating value

LHV

Total fuel MWh consumed by the organization

1,024,433

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

1,024,433

MWh fuel consumed for self- cogeneration or self-trigeneration

0

Comment

Other biomass

Heating value

Unable to confirm heating value

Total fuel MWh consumed by the organization

0

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self- cogeneration or self-trigeneration

0

Comment

Other renewable fuels (e.g. renewable hydrogen)

Heating value

Unable to confirm heating value

Total fuel MWh consumed by the organization

0

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self- cogeneration or self-trigeneration

0

Comment

Coal

Heating value

LHV

Total fuel MWh consumed by the organization

945,152

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

945,152

MWh fuel consumed for self- cogeneration or self-trigeneration

0

Comment

Oil

Heating value

LHV

Total fuel MWh consumed by the organization

1,304,192

MWh fuel consumed for self-generation of electricity

2,130

MWh fuel consumed for self-generation of heat

1,288,904

MWh fuel consumed for self- cogeneration or self-trigeneration

13,158

Comment

Gas

Heating value

LHV

Total fuel MWh consumed by the organization

30,222,661

MWh fuel consumed for self-generation of electricity

61,768

MWh fuel consumed for self-generation of heat

30,020,740

MWh fuel consumed for self- cogeneration or self-trigeneration

140,153

Comment

Other non-renewable fuels (e.g. non-renewable hydrogen)

Heating value

LHV

Total fuel MWh consumed by the organization

1,594,720

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

1,594,720

MWh fuel consumed for self- cogeneration or self-trigeneration

0

Comment

Total fuel

Heating value

LHV

Total fuel MWh consumed by the organization

35,091,158

MWh fuel consumed for self-generation of electricity

63,898

MWh fuel consumed for self-generation of heat

34,873,949

MWh fuel consumed for self- cogeneration or self-trigeneration

153,311

Comment

C8.2d

(C8.2d) Provide details on the electricity, heat, steam, and cooling your organization has generated and consumed in the reporting year.

	Total Gross generation (MWh)	Generation that is consumed by the organization (MWh)	Gross generation from renewable sources (MWh)	Generation from renewable sources that is consumed by the organization (MWh)
Electricity	67,838	46,151	24,012	20,592
Heat	34,873,949	34,873,949	1,024,433	1,024,433
Steam	0	0	0	0
Cooling	0	0	0	0

C8.2g

(C8.2g) Provide a breakdown of your non-fuel energy consumption by country.

Country/area

Albania

Consumption of electricity (MWh)

724

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

724

Country/area
Algeria

Consumption of electricity (MWh)
0

Consumption of heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]

0

Country/area
Angola

Consumption of electricity (MWh)
9

Consumption of heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]

9

Country/area
Argentina

Consumption of electricity (MWh)
24,003

Consumption of heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]

24,003

Country/area
Australia

Consumption of electricity (MWh)
1,910

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

1,910

Country/area

Austria

Consumption of electricity (MWh)

29,144

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

29,144

Country/area

Belgium

Consumption of electricity (MWh)

27,519

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

27,519

Country/area

Bhutan

Consumption of electricity (MWh)

32,661

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

32,661

Country/area

Botswana

Consumption of electricity (MWh)

30

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

30

Country/area

Brazil

Consumption of electricity (MWh)

541,853

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

541,853

Country/area

Bulgaria

Consumption of electricity (MWh)

889

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

889

Country/area

Canada

Consumption of electricity (MWh)

152,881

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

152,881

Country/area

Chile

Consumption of electricity (MWh)

1,829

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

1,829

Country/area

China

Consumption of electricity (MWh)

458,450

Consumption of heat, steam, and cooling (MWh)

1,540

Total non-fuel energy consumption (MWh) [Auto-calculated]

459,990

Country/area

Colombia

Consumption of electricity (MWh)

48,763

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

48,763

Country/area

Côte d'Ivoire

Consumption of electricity (MWh)

0

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

0

Country/area

Czechia

Consumption of electricity (MWh)

299,552

Consumption of heat, steam, and cooling (MWh)

2,877

Total non-fuel energy consumption (MWh) [Auto-calculated]

302,429

Country/area

Denmark

Consumption of electricity (MWh)

102,629

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

102,629

Country/area

Egypt

Consumption of electricity (MWh)

48,143

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

48,143

Country/area

Estonia

Consumption of electricity (MWh)

33,016

Consumption of heat, steam, and cooling (MWh)

490

Total non-fuel energy consumption (MWh) [Auto-calculated]

33,506

Country/area

Ethiopia

Consumption of electricity (MWh)

0

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

0

Country/area

Finland

Consumption of electricity (MWh)

112,498

Consumption of heat, steam, and cooling (MWh)

2,341

Total non-fuel energy consumption (MWh) [Auto-calculated]

114,839

Country/area

France

Consumption of electricity (MWh)

1,130,377

Consumption of heat, steam, and cooling (MWh)

12,344

Total non-fuel energy consumption (MWh) [Auto-calculated]

1,142,721

Country/area

Germany

Consumption of electricity (MWh)

586,322

Consumption of heat, steam, and cooling (MWh)

5,208

Total non-fuel energy consumption (MWh) [Auto-calculated]

591,530

Country/area

Ghana

Consumption of electricity (MWh)

85

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

85

Country/area

Greece

Consumption of electricity (MWh)

3,009

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

3,009

Country/area

Hungary

Consumption of electricity (MWh)

8,386

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

8,386

Country/area

India

Consumption of electricity (MWh)

380,012

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

380,012

Country/area

Indonesia

Consumption of electricity (MWh)

8,311

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

8,311

Country/area

Ireland

Consumption of electricity (MWh)

24,291

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

24,291

Country/area

Italy

Consumption of electricity (MWh)

200,051

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

200,051

Country/area

Japan

Consumption of electricity (MWh)

92,611

Consumption of heat, steam, and cooling (MWh)

4

Total non-fuel energy consumption (MWh) [Auto-calculated]

92,615

Country/area

Jordan

Consumption of electricity (MWh)

0

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

0

Country/area

Kazakhstan

Consumption of electricity (MWh)

0

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

0

Country/area

Kenya

Consumption of electricity (MWh)

0

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

0

Country/area

Kuwait

Consumption of electricity (MWh)

59,468

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

59,468

Country/area

Latvia

Consumption of electricity (MWh)

0

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

0

Country/area

Lebanon

Consumption of electricity (MWh)

17

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

17

Country/area

Lithuania

Consumption of electricity (MWh)

870

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

870

Country/area

Luxembourg

Consumption of electricity (MWh)

2,052

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

2,052

Country/area

Malaysia

Consumption of electricity (MWh)

8,629

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

8,629

Country/area

Mauritius

Consumption of electricity (MWh)

0

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

0

Country/area

Mexico

Consumption of electricity (MWh)

450,270

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

450,270

Country/area

Morocco

Consumption of electricity (MWh)

32,111

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

32,111

Country/area

Netherlands

Consumption of electricity (MWh)

61,440

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

61,440

Country/area

New Zealand

Consumption of electricity (MWh)

0

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

0

Country/area

Norway

Consumption of electricity (MWh)

105,090

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

105,090

Country/area

Oman

Consumption of electricity (MWh)

40

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

40

Country/area

Peru

Consumption of electricity (MWh)

1,499

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

1,499

Country/area

Philippines

Consumption of electricity (MWh)

0

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

0

Country/area
Poland

Consumption of electricity (MWh)
442,855

Consumption of heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]

442,855

Country/area
Portugal

Consumption of electricity (MWh)
15,494

Consumption of heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]

15,494

Country/area
Qatar

Consumption of electricity (MWh)
752

Consumption of heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]

752

Country/area
Republic of Korea

Consumption of electricity (MWh)
118,077

Consumption of heat, steam, and cooling (MWh)

435

Total non-fuel energy consumption (MWh) [Auto-calculated]

118,512

Country/area

Romania

Consumption of electricity (MWh)

122,248

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

122,248

Country/area

Russian Federation

Consumption of electricity (MWh)

130,065

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

130,065

Country/area

Saudi Arabia

Consumption of electricity (MWh)

13,752

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

13,752

Country/area
Serbia

Consumption of electricity (MWh)
872

Consumption of heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]

872

Country/area
Singapore

Consumption of electricity (MWh)
0

Consumption of heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]

0

Country/area
Slovakia

Consumption of electricity (MWh)
5,074

Consumption of heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]

5,074

Country/area
Slovenia

Consumption of electricity (MWh)
149

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

149

Country/area

South Africa

Consumption of electricity (MWh)

35,112

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

35,112

Country/area

Spain

Consumption of electricity (MWh)

304,496

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

304,496

Country/area

Sri Lanka

Consumption of electricity (MWh)

0

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

0

Country/area

Sweden

Consumption of electricity (MWh)

172,705

Consumption of heat, steam, and cooling (MWh)

672

Total non-fuel energy consumption (MWh) [Auto-calculated]

173,377

Country/area

Switzerland

Consumption of electricity (MWh)

60,287

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

60,287

Country/area

Thailand

Consumption of electricity (MWh)

57,153

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

57,153

Country/area

Turkey

Consumption of electricity (MWh)

114,006

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

114,006

Country/area

United Arab Emirates

Consumption of electricity (MWh)

10,055

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

10,055

Country/area

United Kingdom of Great Britain and Northern Ireland

Consumption of electricity (MWh)

312,824

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

312,824

Country/area

United Republic of Tanzania

Consumption of electricity (MWh)

1,006

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

1,006

Country/area

United States of America

Consumption of electricity (MWh)

1,284,088

Consumption of heat, steam, and cooling (MWh)

13,624

Total non-fuel energy consumption (MWh) [Auto-calculated]

1,297,712

Country/area

Venezuela (Bolivarian Republic of)

Consumption of electricity (MWh)

182

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

182

Country/area

Viet Nam

Consumption of electricity (MWh)

34,696

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

34,696

Country/area

Zimbabwe

Consumption of electricity (MWh)

1,415

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

1,415

C9. Additional metrics

C9.1

(C9.1) Provide any additional climate-related metrics relevant to your business.

C10. Verification

C10.1

(C10.1) Indicate the verification/assurance status that applies to your reported emissions.

	Verification/assurance status
Scope 1	Third-party verification or assurance process in place
Scope 2 (location-based or market-based)	Third-party verification or assurance process in place
Scope 3	Third-party verification or assurance process in place

C10.1a

(C10.1a) Provide further details of the verification/assurance undertaken for your Scope 1 emissions, and attach the relevant statements.

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Limited assurance

Attach the statement

Registration document 2021 EN.pdf

Page/ section reference

See Chapter 9, pages 385 to 388 (specifically scope 1 on page 388 second bullet point) of our 2021 URD: https://www.saint-gobain.com/sites/saint-gobain.com/files/media/document/SGO_URD_2021_FR_220321-MEL-20H55_HD.pdf. For the ISAE3000 standard referenced, see page 386.

Relevant standard

ISAE3000

Proportion of reported emissions verified (%)

90

C10.1b

(C10.1b) Provide further details of the verification/assurance undertaken for your Scope 2 emissions and attach the relevant statements.

Scope 2 approach

Scope 2 location-based

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Limited assurance

Attach the statement

Registration document 2021 EN.pdf

Page/ section reference

See Chapter 9, pages 385 to 388 (specifically scope 2 on page 388 second bullet point) of our 2021 URD: https://www.saint-gobain.com/sites/saint-gobain.com/files/media/document/SGO_URD_2021_FR_220321-MEL-20H55_HD.pdf. For the ISAE3000 standard referenced, see page 386.

Relevant standard

ISAE3000

Proportion of reported emissions verified (%)

90

C10.1c

(C10.1c) Provide further details of the verification/assurance undertaken for your Scope 3 emissions and attach the relevant statements.

Scope 3 category

Scope 3: Purchased goods and services
Scope 3: Capital goods
Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2)
Scope 3: Upstream transportation and distribution
Scope 3: Waste generated in operations
Scope 3: Business travel
Scope 3: Employee commuting
Scope 3: Upstream leased assets

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Limited assurance

Attach the statement

FY21_COMPAGNIE DE SAINT-GOBAIN_Lettre bilan travaux GES scope 3_PwC.pdf
Registration document 2021 EN.pdf

Page/section reference

See the attached statement by PWC concerning the review of the methodology for the scope 3 assessment, which included the categories listed above.

Relevant standard

ISAE3000

Proportion of reported emissions verified (%)

100

C10.2

(C10.2) Do you verify any climate-related information reported in your CDP disclosure other than the emissions figures reported in C6.1, C6.3, and C6.5?

Yes

C10.2a

(C10.2a) Which data points within your CDP disclosure have been verified, and which verification standards were used?

Disclosure module verification relates to	Data verified	Verification standard	Please explain
C4. Targets and performance	Progress against emissions reduction target	Compagnie Nationale des Commissaires aux Comptes (CNCC)+ISAE3000	We ask from our auditors, in their mission statement, to verify our progress against our set of internal targets (such as the “Abs1” target) as well as the year-on-year variation of our emissions. See registration document page 385. 1

[1]Registration document 2021 EN.pdf

C11. Carbon pricing

C11.1

(C11.1) Are any of your operations or activities regulated by a carbon pricing system (i.e. ETS, Cap & Trade or Carbon Tax)?

Yes

C11.1a

(C11.1a) Select the carbon pricing regulation(s) which impacts your operations.

BC carbon tax
Beijing pilot ETS
California CaT - ETS
EU ETS
France carbon tax
Korea ETS
Québec CaT - ETS
Shanghai pilot ETS
Other carbon tax, please specify
Ontario carbon tax
Other carbon tax, please specify
Alberta carbon tax

C11.1b

(C11.1b) Complete the following table for each of the emissions trading schemes you are regulated by.

Beijing pilot ETS

% of Scope 1 emissions covered by the ETS

0

% of Scope 2 emissions covered by the ETS

1.02

Period start date

January 1, 2021

Period end date

December 31, 2021

Allowances allocated

13,560

Allowances purchased

0

Verified Scope 1 emissions in metric tons CO2e

85

Verified Scope 2 emissions in metric tons CO2e

19,647

Details of ownership

Facilities we own and operate

Comment

Will be verified by local authority in June.

California CaT - ETS

% of Scope 1 emissions covered by the ETS

0.8

% of Scope 2 emissions covered by the ETS

0.5

Period start date

January 1, 2021

Period end date

December 31, 2021

Allowances allocated

30,692

Allowances purchased

0

Verified Scope 1 emissions in metric tons CO2e

66,266

Verified Scope 2 emissions in metric tons CO2e

10,564

Details of ownership

Facilities we own and operate

Comment

EU ETS

% of Scope 1 emissions covered by the ETS

42.6

% of Scope 2 emissions covered by the ETS

0

Period start date

January 1, 2021

Period end date

December 31, 2021

Allowances allocated

2,085,783

Allowances purchased

0

Verified Scope 1 emissions in metric tons CO2e

3,325,265

Verified Scope 2 emissions in metric tons CO2e

0

Details of ownership

Facilities we own and operate

Comment

Korea ETS

% of Scope 1 emissions covered by the ETS

0.2

% of Scope 2 emissions covered by the ETS

1.04

Period start date

January 1, 2021

Period end date

December 1, 2021

Allowances allocated

33,666

Allowances purchased

0

Verified Scope 1 emissions in metric tons CO2e

16,358

Verified Scope 2 emissions in metric tons CO2e

20,121

Details of ownership

Facilities we own and operate

Comment

Will be verify by local authority on June

Québec CaT - ETS

% of Scope 1 emissions covered by the ETS

0.4

% of Scope 2 emissions covered by the ETS

0.5

Period start date

January 1, 2021

Period end date

December 31, 2021

Allowances allocated

18,599

Allowances purchased

0

Verified Scope 1 emissions in metric tons CO2e

36,838

Verified Scope 2 emissions in metric tons CO2e

10

Details of ownership

Facilities we own and operate

Comment

Shanghai pilot ETS

% of Scope 1 emissions covered by the ETS

0.3

% of Scope 2 emissions covered by the ETS

2.4

Period start date

January 1, 2021

Period end date

December 31, 2021

Allowances allocated

51,046

Allowances purchased

0

Verified Scope 1 emissions in metric tons CO2e

23,960

Verified Scope 2 emissions in metric tons CO2e

46,369

Details of ownership

Facilities we own and operate

Comment

Will be verified by local authority in September

C11.1c

(C11.1c) Complete the following table for each of the tax systems you are regulated by.

BC carbon tax

Period start date

January 31, 2021

Period end date

December 31, 2021

% of total Scope 1 emissions covered by tax

0.3

Total cost of tax paid

766,140

Comment

France carbon tax

Period start date

January 1, 2021

Period end date

December 31, 2021

% of total Scope 1 emissions covered by tax

0.2

Total cost of tax paid

675,000

Comment

Other carbon tax, please specify

Period start date

January 1, 2021

Period end date

December 31, 2021

% of total Scope 1 emissions covered by tax

0.4

Total cost of tax paid

235,656

Comment

Alberta carbon tax

Other carbon tax, please specify

Period start date

January 1, 2021

Period end date

December 31, 2021

% of total Scope 1 emissions covered by tax

0.6

Total cost of tax paid

176,690

Comment

Ontario carbon tax

C11.1d

(C11.1d) What is your strategy for complying with the systems you are regulated by or anticipate being regulated by?

The carbon systems we are regulated by or anticipate being regulated by are identified as having a potential substantive financial or strategic impact on our business. It is therefore key to us to have an appropriate strategy on this topic: ensuring the control of our emissions and prudent management of allocations are two principles that Saint-Gobain applies, as is the case regarding the European ETS. Our strategy focuses on less emissions through:
- ambitious 2030 validated SBT that we have set (-33% for 2030 vs 2017 for scope 1+2)
- envelope of €100M every year over the 10 next years for CAPEX and R&D investments related to reduction of carbon emissions
- internal shadow carbon price for investment and R&D supporting the development of low-carbon technologies even in places where carbon is not yet regulated.

As a case study, we can highlight that that our facilities being part of the EU-ETS have decreased their scope 1 emissions by 1.1 % between 2017 and 2021 (thanks to our reduction activities such as process optimization and waste heat recovery).
Allowances may be purchased in the future in case of remaining gap, this is continuously checked by the CO2 committee including Purchasing, Finance and Sustainable Development departments.

C11.2

(C11.2) Has your organization originated or purchased any project-based carbon credits within the reporting period?

No

C11.3

(C11.3) Does your organization use an internal price on carbon?

Yes

C11.3a

(C11.3a) Provide details of how your organization uses an internal price on carbon.

Objective for implementing an internal carbon price

Drive low-carbon investment

GHG Scope

Scope 1
Scope 2

Application

Internal carbon price of €30/tCO2, updated to €75/tCO2 in February 2021, applies to industrial investments above a certain threshold, investments associated with a change in energy source, and energy investments on an existing or greenfield site with a total annual energy consumption of more than 10 GWh. The internal carbon price is applicable by all entities in each of the 70 countries where we operate. As an example, internal carbon price has been used in Mexico and India to add energy efficiency equipment (heat recovery) in new float line to produce flat glass.

Actual price(s) used (Currency /metric ton)

75

Variance of price(s) used

We updated the value to €75/tCO2 in February 2021 to consider carbon price evolution at worldwide level.

Type of internal carbon price

Shadow price

Impact & implication

The internal carbon price mechanism, implemented at the beginning of 2016, has the objective of accelerating the transition to low-carbon technologies at Group level. The internal carbon price covers scope 1 and scope 2 CO2 emissions of the Group. The efficiency of the carbon price for investment is highly dependent on the project specificity. In any case, the carbon price has a strong impact in terms of awareness of CO2 cost within the Group, particularly in the frame of our net-zero carbon commitment. As an example, internal carbon price has been used in Mexico and India to add energy efficiency equipment (heat recovery) in new float line to produce flat glass.

Objective for implementing an internal carbon price

Drive low-carbon investment

GHG Scope

Scope 1
Scope 2
Scope 3

Application

The other internal price of carbon is much higher (€100/tCO2, updated to €150/tCO2 in February 2021) and is used to guide R&D budgets with a long-term orientation. The internal carbon price is applicable by all entities in each of the 70 countries where we operate.

Actual price(s) used (Currency /metric ton)

150

Variance of price(s) used

We updated the value to €150/tCO2 in February 2021 to consider carbon price evolution at worldwide level. This R&D internal price of carbon has been used for our H2 application in float furnace. First pilot started in Germany.

Type of internal carbon price

Shadow price

Impact & implication

The internal carbon price mechanism, implemented at the beginning of 2016, has the objective of accelerating the transition to low-carbon technologies at Group level and for R&D to invest in breakthrough low-carbon technology. For R&D, the internal carbon price covers scope 1, scope 2 and 3 CO2 emissions of the Group. This price level has already demonstrated value in supporting low-carbon R&D projects, for example for the development of new technologies to preheat raw materials.

C12. Engagement

C12.1

(C12.1) Do you engage with your value chain on climate-related issues?

Yes, our suppliers

Yes, our customers/clients

C12.1a

(C12.1a) Provide details of your climate-related supplier engagement strategy.

Type of engagement

Engagement & incentivization (changing supplier behavior)

Details of engagement

Run an engagement campaign to educate suppliers about climate change

% of suppliers by number

20.4

% total procurement spend (direct and indirect)

79.8

% of supplier-related Scope 3 emissions as reported in C6.5

Rationale for the coverage of your engagement

41,799 suppliers signed our Responsible Purchasing Charter. They represent 79.8% of our spending and 20.4% of the total number of suppliers (205,376). As rationale for coverage of our engagement, we can highlight that we first focus on the percentage covered in spending rather than the number of suppliers, i.e., where the biggest impact

is. We track these data through the R-Net online platform, a private website entirely dedicated to the subject of responsible purchasing.

Impact of engagement, including measures of success

Impact of engagement: Responsible purchasing is part of Saint-Gobain's responsible development policy. For both the industrial and distribution activities of Saint-Gobain, a common Suppliers Charter explains Saint-Gobain's requirements and supplier obligations in the area of CSR. As an example, some local events (suppliers green day) were organized in 2021 at a country level (e.g. France , Sweden) to explain the Saint-Gobain decarbonization strategy and to share best practices between participants.

Example of a measure of success including threshold: for suppliers with an annual sales of more than €100k , the Group set a target for 2022 of 95% of procurement spending covered by a Responsible Purchasing Charter signed. 91,3% of those suppliers signed our Responsible Purchasing Charter in 2021, versus 90,6 % in 2020. The increase in the number of suppliers represents a greater adherence to the principles of the Charter. An online platform called R-Net has been set up to facilitate responsible purchasing. Industrial activities suppliers have access to R-Net to acknowledge receipt of Supplier Charter of Saint-Gobain, electronically transmit essential proofs (timber certificates, quality certificates, ISO standards), answer self-assessment questionnaires, get all the information on Saint-Gobain's responsible purchasing directives and access to details of their CSR assessments.

For all suppliers, at the end of 2021, 38,701 contacts of suppliers were registered on our online platform, and 21,740 supplier subsidiaries were covered by a fulfilled questionnaire. About 57% of all suppliers that answered the questionnaire notified that they have implemented in their production the necessary measurements to limit or even to remove greenhouse gas emissions.

Comment

Type of engagement

Information collection (understanding supplier behavior)

Details of engagement

Collect climate change and carbon information at least annually from suppliers

% of suppliers by number

46.7

% total procurement spend (direct and indirect)

71.2

% of supplier-related Scope 3 emissions as reported in C6.5

Rationale for the coverage of your engagement

The responsible purchase program (https://www.saint-gobain.com/en/ensure-ethical-business-practices) of our industrial activities is applicable to suppliers who represent more than €100k per year in spending, representing around 90% of Saint-Gobain's spending. 5,352 of them are considered as potentially risky regarding CSR, and 71.2% of them in spending (46.7% by number) have been concerned by documentation reviews and audits.

Impact of engagement, including measures of success

Impact of engagement: The Group set a target for 2017-2022 to evaluate the CSR performance of 90% suppliers with CSR risk and annual sales of more than €100k with the Group. Regarding CSR audits, the goal is to achieve about 100 audits per year for low initial CSR performance. These audits may lead to de-references if the necessary corrective plans are not implemented within the agreed deadlines.

Example of measure of success including threshold: we can state that 2,497 suppliers (71,2%, out of the 90% target) have been concerned by documentation reviews and audits by a third party: this represents an increase of 15.9% compared to 2020. The suppliers with unsatisfactory grades to those CSR evaluations have to work to improve their overall performance according to the detailed scorecard evaluation recommendation.

Linked to our 2050 net-zero carbon objective and 2030 SBT validated objective of -16% scope 3 emissions vs 2017, specific attention is paid to suppliers having the biggest impact on our scope 3 category 1 (purchase of goods/raw materials) and 4 (upstream transportation). Specific work is being done in the frame of our scope 3 assessment to have a better overview of the origin and carbon performance of our most impacting purchased raw materials with the final aim at reducing the impact through specific action plans. As an example, Industrial Mortars, the activity directly concerned by one of these raw materials, is working to reduce the carbon footprint of this material, mainly through raw materials substitution.

Comment

C12.1b

(C12.1b) Give details of your climate-related engagement strategy with your customers.

Type of engagement & Details of engagement

Education/information sharing

Run an engagement campaign to educate customers about the climate change impacts of (using) your products, goods, and/or services

% of customers by number

80

% of customer - related Scope 3 emissions as reported in C6.5

0

Please explain the rationale for selecting this group of customers and scope of engagement

These education/information/promotion actions are carried out for all our habitat activities, which represent around 80% of our sales. Craftsmen and installers are of particular relevance for educating, while informing the full actors of the construction sector such as architects or professional schools is of particular interest for the Group.

The use of our products in that context helps to avoid emissions, meaning that there is no link with scope 3 emissions. Indeed, the use of sold products linked to building insulation does not enter the category 11 of the scope 3 as per GHG Protocol standard.

Impact of engagement, including measures of success

Impact of engagement: Some of the training courses delivered by local teams cover energy efficiency and reducing the environmental impact of buildings. Building distribution is particularly active in that area and plays a key role in supporting craftsmen, thereby facilitating the marketing and use of sustainable products. These services put in place by distribution accelerate the transition to more sustainable construction and reduce the carbon impact of buildings. For example, in France, POINT.P has developed a simulator called CapRenov+ to evaluate a project's energy efficiency. This is made available to our customers.

Example of measure of success including threshold: we aim to have any and all of our customers use the CapRenov+ tool, where the number of annual simulations continues to improve, from 3,184 in 2017 to 9,723 in 2018, 14,610 in 2019, 38,385 in 2020 and 94,624 for 2021 (a nearly 30-fold improvement over 2017).

In addition, a training program on how to save energy in the construction industry is offered (FeeBat), along with a support mechanism for official recognition of the effectiveness of steps taken called Renoprim +. In other countries, like the Netherlands, Norway or even Denmark, dedicated spaces are offered to installers and individuals to provide them with advice and training in the realm of renewable energies. Beyond building distribution, training structures are offered by country. They are open to craftsmen, installers, architects and other actors of the construction sector. They can also be associated with professional schools. In France, the sales and marketing teams are involved with eight apprenticeship training centers (CFAs) for partnerships for training services or support for trainers specific to the establishment. A website dedicated to training called seformeravecsaint-gobain.com offers the possibility of training via e-learning or face-to-face. Guides called "Les essentials de l'habitat" allow craftsmen and professionals to train and learn about topics such as energy efficiency or the evolution of tomorrow's norms and standards for sustainable construction. Finally, a web platform called Green Buildings Saint-Gobain enables the Group's customers to evaluate the contribution of its products and solutions to obtaining LEED, BREEAM, WELL or international HQE certifications.

C12.2

(C12.2) Do your suppliers have to meet climate-related requirements as part of your organization's purchasing process?

Yes, climate-related requirements are included in our supplier contracts

C12.2a

(C12.2a) Provide details of the climate-related requirements that suppliers have to meet as part of your organization's purchasing process and the compliance mechanisms in place.

Climate-related requirement

Climate-related disclosure through a public platform

Description of this climate related requirement

Contractual supplier code of conduct featuring climate-related requirements with third party verification

% suppliers by procurement spend that have to comply with this climate-related requirement

17.6

% suppliers by procurement spend in compliance with this climate-related requirement

10.9

Mechanisms for monitoring compliance with this climate-related requirement

Other, please specify

Climate-related disclosure through a public platform

Response to supplier non-compliance with this climate-related requirement

Other, please specify

For suppliers considered as potentially risky, assessments (document reviews and on-site audits) are required. If not disclosed, the supplier must take corrective action and may be unlisted.

C12.3

(C12.3) Does your organization engage in activities that could either directly or indirectly influence policy, law, or regulation that may impact the climate?

Row 1

Direct or indirect engagement that could influence policy, law, or regulation that may impact the climate

Yes, we engage directly with policy makers

Yes, we engage indirectly through trade associations

Does your organization have a public commitment or position statement to conduct your engagement activities in line with the goals of the Paris Agreement?

No, but we plan to have one in the next two years

Describe the process(es) your organization has in place to ensure that your engagement activities are consistent with your overall climate change strategy

The Group's Chief Sustainability Officer leads and coordinates actions across the Group, with a team in charge of sustainable business development (including a Public Affairs team) and the EHS department, managing the Group environmental targets, including CO2. This organization ensures all actions and projects are in line with our climate commitments. The sustainable business development team defines and coordinates our strategy for influencing sustainable markets, including issues relevant to climate change (e.g. embodied carbon and energy efficiency) within the framework of discussions with stakeholders. Through our public advocacy activities, we ensure regular monitoring of policy and regulatory developments and provide timely input to future policy developments. We engage to secure or consolidate the role of buildings in global climate commitments. The EHS team and network work to maximise reduction of environmental impacts, with mid- and long-term targets for emissions reduction and energy consumption. Such orientations are communicated to all employees through guidance documents for a consistent approach across the Group.

The Corporate Marketing Department has defined "Public Advocacy and Standards" as one of our marketing pillars dedicated to the enhancement of monitoring of new regulations. Public advocacy actions led by Saint-Gobain are fully transparent and shared with our stakeholders. Our engagement is publicly disclosed in the Transparency Register in Brussels, which provides citizens with a direct, single access to information on who is engaged in activities aiming to influence EU decision-making. Within the Group, the Public Advocacy network fosters exchange and alignment of our positions, as well as best practice sharing. At country level, our public advocacy committees, composed of internal experts, promote pro-active positions to mitigate consequences of climate change and enable adaptation in the building sector. Our objectives to decrease our carbon footprint for scope 1, 2 and 3 by 2030, reaching carbon neutrality by 2050, together with the avoided emissions thanks to the use of our improved insulations solutions are fully in line with worldwide public policies (building energy efficiency, cap and trade and carbon taxes schemes). We engage with policy makers for stronger and more comprehensive building policies that help decrease the whole life carbon impacts of buildings.

C12.3a

(C12.3a) On what policy, law, or regulation that may impact the climate has your organization been engaging directly with policy makers in the reporting year?

Focus of policy, law, or regulation that may impact the climate

Other, please specify

Energy efficiency

Specify the policy, law, or regulation on which your organization is engaging with policy makers

Saint-Gobain followed the launch of the EU Green Deal in 2019 and is engaged in the preparation of specific policies and pieces of legislation in the EU “Fit for 55” package, such as the Effort Sharing Regulation, the Renovation Wave, the review of the Energy Efficiency Directive (EED) and the review of the Energy Performance of Buildings Directive (EPBD).

At the European level, activities have notably included input and support to the position of our key partners, including EuroACE, EU-ASE, Eurima, Eurogypsum, Glass For Europe, the Renovate Europe Campaign, the World GBC Europe Regional Network, and the Coalition for Energy Savings. These positions are further explained and echoed at national level, notably through our own Public Advocacy network, the national partners of the Renovate Europe Campaign and the local Green Building Councils.. We have also engaged in supporting the implementation work of existing EU Directive, , notably regarding the Long Term Renovation Strategies under the EPBD. In addition, Saint-Gobain has taken a pro-active role in the design and deployment of the EU recovery package, notably by contributing to ensure that renovation activities would be part of National Recovery and Resilience Plans, under the flagship “Renovate”. We have also engaged in developing the WGBC BuildingLife Roadmap, which provides a series of proposals to introduce a Whole Life Carbon Approach in buildings related policies.

Policy, law, or regulation geographic coverage

Regional

Country/region the policy, law, or regulation applies to

Europe

Your organization’s position on the policy, law, or regulation

Support with minor exceptions

Description of engagement with policy makers

We have engaged in the Renovation Wave and its related legislative elements, such as the revision of the Energy Efficiency Directive (EED) and the revision of the Energy Performance of Buildings Directive (EPBD). On the EED, Saint-Gobain supports an ambitious binding target for energy efficiency by 2030, the integration of the Energy Efficiency First principle, renovation obligation for all public buildings, as well as a solid scheme to support the deployment of energy efficiency obligation schemes, as a major driver to the uptake of energy renovation measures. Regarding the EPBD, Saint-Gobain advocated for the phased introduction of Minimum Energy Performance Requirements (MEPS) in existing buildings, so as to renovate worst performing buildings in priority and

mobilise adequate finance on this segment. We also support the mainstreaming of deep renovation (avoiding lock-in effect), the improvement of Energy Performance Certificates (EPCs) and deployment of Building Renovation Passports. All these measures should lead to the adequate consideration of the building envelope potential (incl. insulation, glazing) in mitigating operational emissions. Not least, we support stronger national renovation strategies, with 2030 and 2040 milestones, to secure that the potential for energy savings and GHG reduction of existing buildings is effectively tapped. .

Details of exceptions (if applicable) and your organization's proposed alternative approach to the policy, law or regulation

We believe that MEPS should be widely implemented to accelerate the energy renovation of buildings and that the current proposal should be enlarged rather than limited to certain types of buildings.

Have you evaluated whether your organization's engagement is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Focus of policy, law, or regulation that may impact the climate

Other, please specify

Cap and trade

Specify the policy, law, or regulation on which your organization is engaging with policy makers

We are active in the discussions on EU-ETS, in particular for the period from 2021 and 2030. Saint-Gobain is engaged mostly through the sectorial associations representing its activities.

Policy, law, or regulation geographic coverage

Regional

Country/region the policy, law, or regulation applies to

Europe

Your organization's position on the policy, law, or regulation

Support with minor exceptions

Description of engagement with policy makers

Through the national and European business associations, we have publicly expressed our position on the post 2020 reform of the EU-ETS Directive. The EU-ETS is a milestone of the EU Climate and Energy Policy and a necessary tool to reach the "at least – 55%" greenhouse gas emission reduction by 2030 (compared to 1990), while preserving the competitiveness and ability of our activities to invest in low-carbon solutions. Saint-Gobain supports: - The need for free and dynamic allocations and to address carbon leakage - The expansion of the Innovation Fund to support low-carbon innovation in industrial sectors - The adaptation of the ETS Directive to changing

economic conditions in order to provide the long-term visibility required to stimulate investment in low-carbon technologies and processes. We are supportive of the main principles of a Carbon Border Adjustment Mechanism.

Details of exceptions (if applicable) and your organization's proposed alternative approach to the policy, law or regulation

We don't support the extension of the EU ETS to buildings as we believe that it is not as efficient as other regulatory actions to accelerate the development of energy efficiency in buildings.

Have you evaluated whether your organization's engagement is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

C12.3b

(C12.3b) Provide details of the trade associations your organization engages with which are likely to take a position on any policy, law or regulation that may impact the climate.

Trade association

Other, please specify

Green Building Councils

Is your organization's position on climate change consistent with theirs?

Consistent

Has your organization influenced, or is your organization attempting to influence their position?

We publicly promote their current position

State the trade association's position on climate change, explain where your organization's position differs, and how you are attempting to influence their position (if applicable)

For many years, Saint-Gobain has been involved in local efforts to promote sustainable buildings by joining Green Building Councils (GBCs). These national associations of building market professionals and actors, present in over 100 countries, offer an effective dialogue platform to promote sustainable construction.

Funding figure your organization provided to this trade association in the reporting year, if applicable (currency as selected in C0.4) (optional)

Describe the aim of your organization's funding

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Trade association

Other, please specify

EpE

Is your organization's position on climate change consistent with theirs?

Consistent

Has your organization influenced, or is your organization attempting to influence their position?

We publicly promote their current position

State the trade association's position on climate change, explain where your organization's position differs, and how you are attempting to influence their position (if applicable)

EpE (Enterprises for the Environment) is a coalition of around 40 French and international companies in the industrial and services sectors committed to working together to improve the inclusion of environmental challenges in their strategy and day-to-day management. EpE addresses medium- and long-term policy issues like climate change. EpE, a non-profit organization and partner of the WBCSD, gives its members a forum for discussion, within the business world itself, but also with NGOs, ministers, politicians, scientists and academics. Shared experience and practices lead to the publication of guides, books, methodologies and proposals for action.

Funding figure your organization provided to this trade association in the reporting year, if applicable (currency as selected in C0.4) (optional)

Describe the aim of your organization's funding

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Trade association

Other, please specify

EuroACE

Is your organization's position on climate change consistent with theirs?

Consistent

Has your organization influenced, or is your organization attempting to influence their position?

We publicly promote their current position

State the trade association's position on climate change, explain where your organization's position differs, and how you are attempting to influence their position (if applicable)

EuroACE, Energy Efficient Buildings, expresses a unique consolidated voice of industrial actors that provide materials and solutions for energy efficiency in buildings. Created in 1998, EuroACE works at European level, together with the European institutions and a broad range of stakeholders, to develop a consistent European framework enabling more energy efficiency in new and existing buildings. EuroACE also supports targeted actions at national level, notably via the Renovate Europe Campaign.

Funding figure your organization provided to this trade association in the reporting year, if applicable (currency as selected in C0.4) (optional)

Describe the aim of your organization's funding

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Trade association

Other, please specify

EURIMA

Is your organization's position on climate change consistent with theirs?

Consistent

Has your organization influenced, or is your organization attempting to influence their position?

We publicly promote their current position

State the trade association's position on climate change, explain where your organization's position differs, and how you are attempting to influence their position (if applicable)

Eurima, the European Insulation Manufacturers Association, represents the interests of all major mineral wool producers throughout Europe. Eurima is a leading voice making the case for a European energy policy that places a more meaningful emphasis on energy efficiency and savings by promoting the common interests of our industry and working for positive regulations and standards to reduce energy use across Europe. Eurima also takes the lead on promoting sustainability and circularity in the construction sector.

Funding figure your organization provided to this trade association in the reporting year, if applicable (currency as selected in C0.4) (optional)

Describe the aim of your organization's funding

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Trade association

Other, please specify

ETC

Is your organization's position on climate change consistent with theirs?

Consistent

Has your organization influenced, or is your organization attempting to influence their position?

We publicly promote their current position

State the trade association's position on climate change, explain where your organization's position differs, and how you are attempting to influence their position (if applicable)

Energy Transition Commission is a diverse group of leaders from public, private and social sectors. They are energy users and suppliers, researchers and advisers, with experience in various geographies aiming to help identify pathways for change in their energy systems to ensure both better growth and a better climate.

Funding figure your organization provided to this trade association in the reporting year, if applicable (currency as selected in C0.4) (optional)

Describe the aim of your organization's funding

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Trade association

Other, please specify

Global Alliance for Buildings and Construction (GlobalABC)

Is your organization's position on climate change consistent with theirs?

Consistent

Has your organization influenced, or is your organization attempting to influence their position?

We publicly promote their current position

State the trade association's position on climate change, explain where your organization's position differs, and how you are attempting to influence their position (if applicable)

This alliance, launched by France and United Nations Environment (UNEP) at COP21, aims to bring states, local authorities, construction businesses and relevant associations together by means of a roadmap to smooth the transition to energy efficient buildings with low greenhouse gas emissions, in accordance with the goals set under the Paris Agreement.

Funding figure your organization provided to this trade association in the reporting year, if applicable (currency as selected in C0.4) (optional)

Describe the aim of your organization's funding

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Trade association

Other, please specify

Glass for Europe

Is your organization's position on climate change consistent with theirs?

Consistent

Has your organization influenced, or is your organization attempting to influence their position?

We publicly promote their current position

State the trade association's position on climate change, explain where your organization's position differs, and how you are attempting to influence their position (if applicable)

Glass for Europe is the trade association for Europe's manufacturers of building, automotive, and transport glass, all derived from the base material known as flat glass. Glass for Europe's position is to call for a binding energy efficiency target that will support economic growth, sustain the competitiveness of Europe's industries and facilitate the transition towards a low-carbon economy across all sectors of the Economy.

Funding figure your organization provided to this trade association in the reporting year, if applicable (currency as selected in C0.4) (optional)

Describe the aim of your organization's funding

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Trade association

Other, please specify

Eurogypsum

Is your organization's position on climate change consistent with theirs?

Consistent

Has your organization influenced, or is your organization attempting to influence their position?

We publicly promote their current position

State the trade association's position on climate change, explain where your organization's position differs, and how you are attempting to influence their position (if applicable)

Eurogypsum is the European federation of national associations of gypsum products manufacturers. Eurogypsum promotes a sustainable built environment for Europe thanks to the environmental, social and economic credentials of gypsum products and solutions. Eurogypsum advocates for circularity in the construction sector notably via encouraging better collaboration between actors of the value chain and the development of replicable circular economy models.

Funding figure your organization provided to this trade association in the reporting year, if applicable (currency as selected in C0.4) (optional)

Describe the aim of your organization's funding

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Trade association

Other, please specify

World Business Council for Sustainable Development (WBCSD)

Is your organization's position on climate change consistent with theirs?

Consistent

Has your organization influenced, or is your organization attempting to influence their position?

We are not attempting to influence their position

State the trade association's position on climate change, explain where your organization's position differs, and how you are attempting to influence their position (if applicable)

WBCSD is a worldwide organization of 200 companies that deliberate on and develop solutions for a more sustainable world. A core component of WBCSD's Climate Policy activities is to foster strong policy signals and economic incentives promoting a race to the top where sustainable solutions can succeed. They actively call for policies that are consistent with ambitious action on climate and enable business-led solutions to scale up and speed up the implementation of the Paris Agreement.

Funding figure your organization provided to this trade association in the reporting year, if applicable (currency as selected in C0.4) (optional)

Describe the aim of your organization's funding

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Trade association

Other, please specify

Carbon Pricing Leadership Coalition (CPLC)

Is your organization's position on climate change consistent with theirs?

Consistent

Has your organization influenced, or is your organization attempting to influence their position?

We publicly promote their current position

State the trade association's position on climate change, explain where your organization's position differs, and how you are attempting to influence their position (if applicable)

The Carbon Pricing Leadership Coalition (CPLC) was officially launched on November 30, 2015, at the opening day of the United Nations Framework Convention on Climate Change 21st Conference of Parties (COP21) in Paris. The World Bank Group, business groups, and investors have called on governments and corporations around the world to

support carbon pricing to bring down emissions and drive cleaner investments in cleaner technologies.

Funding figure your organization provided to this trade association in the reporting year, if applicable (currency as selected in C0.4) (optional)

Describe the aim of your organization's funding

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

C12.4

(C12.4) Have you published information about your organization's response to climate change and GHG emissions performance for this reporting year in places other than in your CDP response? If so, please attach the publication(s).

Publication

In mainstream reports, incorporating the TCFD recommendations

Status

Complete

Attach the document

Registration document 2021 EN.pdf

Page/Section reference

Pages 134 -150

Content elements

Governance
Strategy
Risks & opportunities
Emissions figures
Emission targets
Other metrics

Comment

Universal Registration Document 2021

Publication

In voluntary communications

Status

Complete

Attach the document

CDP CLIMAT_ 12.4_Capital Market Day.pdf

Page/Section reference

Full document

Content elements

Strategy
Risks & opportunities
Emissions figures
Emission targets
Other metrics

Comment

Press release regarding our Power Purchase Agreement in the US

Publication

In voluntary communications

Status

Complete

Attach the document

CDP CLIMAT_ 12.4_Net zero platerboard Nordic 2021.pdf

Page/Section reference

Full document

Content elements

Strategy
Risks & opportunities
Emissions figures
Emission targets

Comment

Press release regarding our first net-zero carbon plasterboard plant in Norway.

Publication

In voluntary communications

Status

Complete

Attach the document

CDP CLIMAT_ 12.4_ Carbon fund.pdf

Page/Section reference

Full document

Content elements

Governance
Emission targets

Comment

Press release regarding our internal carbon fund for employees

Publication

In voluntary communications

Status

Complete

Attach the document

CDP CLIMAT_ 12.4_Capital Market Day.pdf

Page/Section reference

Full document

Content elements

Strategy
Emission targets

Comment

Capital Market Day press release

C15. Biodiversity

C15.1

(C15.1) Is there board-level oversight and/or executive management-level responsibility for biodiversity-related issues within your organization?

	Board-level oversight and/or executive management-level responsibility for biodiversity-related issues	Description of oversight and objectives relating to biodiversity

Row 1	Yes, both board-level oversight and executive management-level responsibility	Saint-Gobain is particularly committed to protecting biodiversity at its high-impact sites or in areas with remarkable biodiversity. Thanks to the experience acquired in the field of extraction activities, the Group now has strong internal expertise in the area. A mapping study of all Saint-Gobain's sites was conducted using geographical tools to evaluate their sensitivity to the ecosystems based on their proximity to areas of high biodiversity value. This made it possible to finalize a list of around one hundred priority sites in 2021, the vast majority of which were quarries, Among the local initiatives identified in 2021, the Group renewed its commitment to "Act4nature International", a voluntary commitment to biodiversity from international companies: one of the strong commitments concerns the implementation of biodiversity management plans for all active open-cast quarries by 2025. In addition, Saint-Gobain is committed to fighting deforestation through a "Timber Purchasing" policy, by acting ethically and responsibly throughout the Group's value chain to preserve forests, the local populations living in them and biodiversity. See page 103 of the 2021 URD.

C15.2

(C15.2) Has your organization made a public commitment and/or endorsed any initiatives related to biodiversity?

	Indicate whether your organization made a public commitment or endorsed any initiatives related to biodiversity	Biodiversity-related public commitments	Initiatives endorsed
Row 1	Yes, we have made public commitments and publicly endorsed initiatives related to biodiversity	Adoption of the mitigation hierarchy approach Commitment to avoidance of negative impacts on threatened and protected species	Other, please specify Biodiversity policy, Act4nature commitment

C15.3

(C15.3) Does your organization assess the impact of its value chain on biodiversity?

	Does your organization assess the impact of its value chain on biodiversity?
Row 1	Yes, we assess impacts on biodiversity in both our upstream and downstream value chain

C15.4

(C15.4) What actions has your organization taken in the reporting year to progress your biodiversity-related commitments?

	Have you taken any actions in the reporting period to progress your biodiversity-related commitments?	Type of action taken to progress biodiversity- related commitments
Row 1	Yes, we are taking actions to progress our biodiversity-related commitments	Land/water protection Land/water management Species management Other, please specify Management and Action Plan for Biodiversity

C15.5

(C15.5) Does your organization use biodiversity indicators to monitor performance across its activities?

	Does your organization use indicators to monitor biodiversity performance?	Indicators used to monitor biodiversity performance
Row 1	Yes, we use indicators	Response indicators Other, please specify Management and Action Plan for Biodiversity

C15.6

(C15.6) Have you published information about your organization's response to biodiversity-related issues for this reporting year in places other than in your CDP response? If so, please attach the publication(s).

Report type	Content elements	Attach the document and indicate where in the document the relevant biodiversity information is located
In mainstream financial reports	Details on biodiversity indicators	Among the priority sites identified, a majority are quarries. Currently, 31% of them have completed the Biodiversity Management and Action Plan (B'MAP). See paragraph 4. 2. Non-financial results for the biodiversity indicators. 1

[1]Registration document 2021 EN.pdf

C16. Signoff

C-FI

(C-FI) Use this field to provide any additional information or context that you feel is relevant to your organization's response. Please note that this field is optional and is not scored.

C16.1

(C16.1) Provide details for the person that has signed off (approved) your CDP climate change response.

	Job title	Corresponding job category
Row 1	Senior Vice President in charge of Human Resources,and having the global oversight on ESG	Board/Executive board

Submit your response

In which language are you submitting your response?

English

Please confirm how your response should be handled by CDP

	I understand that my response will be shared with all requesting stakeholders	Response permission
Please select your submission options		Public

The European Climate Pact Submission

Please indicate your consent for CDP to showcase your disclosed environmental actions on the European Climate Pact website as pledges to the Pact.

Yes, we wish to pledge to the European Climate Pact through our CDP disclosure

Please confirm below

I have read and accept the applicable Terms