Saint-Gobain - Climate Change 2023

C0. Introduction

C0.1

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

With €51 197M in sales in 2022, 167 665 employees, and a presence in 75 countries with 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 occurred 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, global construction customers and other industries. In order to continuously improve its processes and products, Saint-Gobain invests heavily in R&D. 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. In 2022, the Science Based Targets initiative approved our reduction targets as consistent with the organization's new Net-Zero standard, in line with limiting global temperature rise to 1.5°C . Please see our 2022 Universal Registration Document for more details: https://www.saint-gobain.com/en/news/2022-universal-registration-document.

C0.2

(C0.2) State the start and end date of the year for which you are reporting data and indicate whether you will be providing emissions data for past reporting years.

Reporting year

Start date
January 1 2022

End date
December 31 2022

Indicate if you are providing emissions data for past reporting years
No

Select the number of past reporting years you will be providing Scope 1 emissions data for
<Not Applicable>

Select the number of past reporting years you will be providing Scope 2 emissions data for
<Not Applicable>

Select the number of past reporting years you will be providing Scope 3 emissions data for
<Not Applicable>

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
Uruguay
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 or committee	Responsibilities for climate-related issues
Board-level committee	The role of the Board of Directors is to determine the Company's strategic direction and follow up on its implementation, as well as to monitor its proper management. All Directors are trained in climate risks by experts, and climate change issues are monitored on a regular basis by the Board of Directors. In February of 2018, the Board of Directors participated in a seminar organized specifically for their attention by the Chief Sustainability Officer. This was devoted to climate change and its consequences for businesses, with the support of external internationally recognized experts. The 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 of 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 of 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). As an example of a climate-related decision: in September of 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 1.5C", 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 of 2021, the Board held a session devoted to biodiversity, with a specific focus on the link between climate change and biodiversity; in September of 2021, the Board approved an update of our decarbonisation roadmap in preparation of the Capital Market Day on October 6, 2021; in April of 2022, the Board held a specific session on the "City of the Future", considering in particular the challenges of resilience and adaptation to climate change and its consequences for the portfolio of Saint-Gobain; and ost recently, the Board performed a climate fresk in April of 2023.
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 that 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 "The urban challenge" in 2021. 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 a climate-related decision: In September of 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 by 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 that date. With the support of the executive committee under his chairmanship, the CEO 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, 2021, 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 (CSR), starting July 1st, 2021. The Senior Vice-President is is responsible for CSR policy and she ensures its integration in the Group's different management processes, as well as the deployment and adoption of of the CSR roadmaps across the Group.
Chief Sustainability Officer (CSO)	The Chief Sustainability Officer is directly in charge of defining and implementing the climate change policy of the Group. This includes development of the Group's 2020 roadmap to carbon neutrality by 2050 and the resulting formulation of environmental objectives for 2030 and the definition of relevant action plans in line with this carbon neutrality target.

C1.1b

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

Frequency with which climate-related issues are a scheduled agenda item	Governance mechanisms into which climate-related issues are integrated	Scope of board-level oversight	Please explain
Scheduled – some meetings	Reviewing and guiding annual budgets Overseeing major capital expenditures Overseeing acquisitions, mergers, and divestitures Reviewing innovation/R&D priorities Overseeing and guiding employee incentives Reviewing and guiding strategy Overseeing and guiding the development of a transition plan Monitoring the implementation of a transition plan Overseeing and guiding scenario analysis Overseeing the setting of corporate targets Monitoring progress towards corporate targets Overseeing and guiding public policy engagement Overseeing value chain engagement Reviewing and guiding the risk management process	<Not Applicable>	The role of the Board of Directors is to determine Saint-Gobain's strategy and to follow up on its implementation, as well as to monitor its proper management. All Directors were trained in climate risks by experts, and climate issues are monitored on a regular basis by the Board. For example, the Board held a session devoted to biodiversity in April of 2021, with a specific focus on the link between climate change and biodiversity, and in September of 2021, the Board approved an update of the Group's decarbonisation roadmap in preparation of the Capital Market Day on October 6, 2021, in line with the 2030 targets approved in November 2020 by the Science-Based Targets initiative (SBTi). The Corporate Social Responsibility Committee of the Board of Directors also 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 three Directors with the Chairman and CEO, who met four times in 2022, and it 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 CSR, who attends the Committee. Please see our 2022 URD (pages 100-101) for a visual climate change organigram of the Group.

Frequency with which climate-related issues are a scheduled agenda item	Governance mechanisms into which climate-related issues are integrated	Scope of board-level oversight	Please explain
Scheduled – some meetings	Reviewing and guiding annual budgets Overseeing major capital expenditures Overseeing acquisitions, mergers, and divestitures Reviewing innovation/R&D priorities Overseeing and guiding employee incentives Reviewing and guiding strategy Overseeing and guiding the development of a transition plan Monitoring the implementation of a transition plan Overseeing and guiding scenario analysis Overseeing the setting of corporate targets Monitoring progress towards corporate targets Overseeing and guiding public policy engagement Overseeing value chain engagement Reviewing and guiding the risk management process	<Not Applicable>	The Board of Directors held nine meetings during the 2022 fiscal year, and over five sessions, one point on the agenda was dedicated to Corporate Social Responsibility matters, such as the topic of responsible purchasing with particular attention to scope 3 in order to align the value chain and CO2 objectives. In April 2022, the Directors took part in training organized specifically for them by the group, entitled “The City of the Future”. On this occasion, external experts, recognized internationally and with complementary skills gave presentations to the Directors and discussused in particular the challenges of resilience and adaptation to climate change, such as the transformation of large urban areas facing climate chance. In 2018, 2019, 2020 and 2021 , Directors participated in similar seminars devoted respectively to climate change and its consequences for companies, the circular economy and its challenges for companies, the transformation of energy and industrial systems in a zero-carbon economy, and biodiversity. In April of 2023, the Board of Directors also did a Climate Fresk.

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	Primary reason for no board-level competence on climate-related issues	Explain why your organization does not have at least one board member with competence on climate-related issues and any plans to address board-level competence in the future
Row 1	Yes	All members of the Board of Directors were trained in climate risks by experts, and climate change issues are monitored on a regular basis by the Board. Various Board members have a strong track record on climate change. For example, the 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. Please see our 2022 URD (pages 156-168) for further information on the skills matric of the members of the Board of Directors.	<Not Applicable>	<Not Applicable>

C1.2

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

Position or committee
Other C-Suite Officer, please specify (Senior Vice-President on Human Resources and Corporate Social Responsibility)

Climate-related responsibilities of this position
Managing annual budgets for climate mitigation activities
Managing major capital and/or operational expenditures related to low-carbon products or services (including R&D)
Managing climate-related acquisitions, mergers, and divestitures
Providing climate-related employee incentives
Developing a climate transition plan
Implementing a climate transition plan
Integrating climate-related issues into the strategy
Conducting climate-related scenario analysis
Setting climate-related corporate targets
Monitoring progress against climate-related corporate targets
Managing public policy engagement that may impact the climate
Managing value chain engagement on climate-related issues
Assessing climate-related risks and opportunities
Managing climate-related risks and opportunities

Coverage of responsibilities
<Not Applicable>

Reporting line
CEO reporting line

Frequency of reporting to the board on climate-related issues via this reporting line
More frequently than quarterly

Please explain
The Senior Vice-President of Human Resources and Corporate Social Responsibility is in charge of CSR policy and she ensures its integration in the Group's different management processes, as well as the deployment and adoption of of the CSR roadmaps across the Group. This includes coordination of the monitoring of climate objectives as part of the CSR roadmap. The Senior Vice-President is member of the Executive Committee and reports to the CEO.

The Corporate Social Responsibility Committee of the Executive Committee ensures that CSR issues are taken into account in the definition of the Group's strategy and its implementation. Leadership for this challenge is provided directly by the Senior-Vice President in charge of Human Resources and CSR, who attends the Committee. The Committee meets four times per year to review all sustainability-related policies and initiatives of the Group, and it regularly tracks the implementation of short-, medium- and long-term programs, covering also risks and opportunities.

Position or committee
Chief Sustainability Officer (CSO)

Climate-related responsibilities of this position
Managing annual budgets for climate mitigation activities
Managing major capital and/or operational expenditures related to low-carbon products or services (including R&D)
Managing climate-related acquisitions, mergers, and divestitures
Providing climate-related employee incentives
Developing a climate transition plan
Implementing a climate transition plan
Integrating climate-related issues into the strategy
Conducting climate-related scenario analysis
Setting climate-related corporate targets
Monitoring progress against climate-related corporate targets
Managing public policy engagement that may impact the climate
Managing value chain engagement on climate-related issues
Assessing climate-related risks and opportunities
Managing climate-related risks and opportunities

Coverage of responsibilities
<Not Applicable>

Reporting line
Other, please specify (Senior Vice-President on Human Resources and Corporate Social Responsibility)

Frequency of reporting to the board on climate-related issues via this reporting line
More frequently than quarterly

Please explain
The CSO leads the Sustainable Development Department and 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 Corporate Social Responibility.

Climate-related issues are managed within 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 SaintGobain 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 2022 URD (pages 100-101) 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
Chief Executive Officer (CEO)

Type of incentive
Monetary reward

Incentive(s)
Bonus - % of salary
Shares
Profit share

Performance indicator(s)
Board approval of climate transition plan
Progress towards a climate-related target
Achievement of a climate-related target
Reduction in absolute emissions
Reduction in emissions intensity
Increased share of renewable energy in total energy consumption
Increased share of revenue from low-carbon products or services in product or service portfolio
Implementation of employee awareness campaign or training program on climate-related issues

Incentive plan(s) this incentive is linked to
Both Short-Term and Long-Term Incentive Plan

Further details of incentive(s)
One third of the CEO's total bonus in 2022 was based on three qualitative targets, one of them being the implementation of the CSR policy (including for sustainability and climate change) and a second including embedding CSR in the Group's decisions and actions. For the 2023 fiscal year, further quantifiable CSR objectives have been included in the CEO's compensation (ex-post Say-on-Pay) with 5% variable compensation specifically related to CO2 emissions reduction objectives (Scopes 1 & 2). See pages 187-199 of our 2022 URD for reference.

Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan
These qualitative targets contribute to achievements such as the identification of major innovation priorities, the acceleration of innovation in net-zero carbon processes, the launch of the world's first commercial offering of low-carbon glass, and the development of digitial and IT initiatives with the pursuit of the implementation of the Group's CO2 roadmap.

Entitled to incentive
Other, please specify (2672 Group officers and employees)

Type of incentive
Monetary reward

Incentive(s)
Bonus - % of salary
Shares
Profit share

Performance indicator(s)
Achievement of climate transition plan KPI
Progress towards a climate-related target
Reduction in absolute emissions
Reduction in emissions intensity
Other (please specify) (Short-term incentive defined based on the scope of each manager's responsibility)

Incentive plan(s) this incentive is linked to
Both Short-Term and Long-Term Incentive Plan

Further details of incentive(s)
Group officers and employees entitled to monetary reward in the form of long-term incentives are: managers with outstanding performance and high-potential managers (2 540 grantees), the main functional and operational heads of the Entities and Regions (116 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 and maintained in 2022. For all employees having a short-term incentive (annual), this must include 5% of the compensation based on a carbon reduction objective.

Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan
The objective of the Group's short- and long-term incentive policy is to motivate the Group's Senior Management, officers and employees and to associate them with the Group's performance objectives, including the CSR policy and CO2 roadmap.

Entitled to incentive
All employees

Type of incentive
Non-monetary reward

Incentive(s)
Internal company award
Internal team/employee of the month/quarter/year recognition

Performance indicator(s)
Progress towards a climate-related target
Implementation of an emissions reduction initiative
Reduction in absolute emissions
Reduction in emissions intensity
Energy efficiency improvement
Increased share of renewable energy in total energy consumption
Increased investment in low-carbon R&D

Incentive plan(s) this incentive is linked to
Not part of an existing incentive plan

Further details of incentive(s)
To engage all its employees on the road to carbon neutrality by 2050, and to contribute to the Group's 2030 CO2 emissions reduction target, Saint-Gobain launched an internal pilot Carbon Fund in 2021. First implemented in a pilot region (Northern Europe) and now deployed in various other regions, the Fund 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.

Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan
The pilot Carbon Fund (first launched in Northern Europe and now deployed in various other regions) is based on the Group's internal carbon price for investment decisions and converts part of the CO2 emissions reduction into money to finance projects which themselves aim to reduce the Group's carbon footprint, thus creating a virtuous circle. These projects, proposed and selected by employees, concern their professional environment. Through this process the Carbon Fund encourages employees, wherever they work, to come up with the best initiatives, from small everyday eco-actions to high-impact investments.

Entitled to incentive
All employees

Type of incentive
Non-monetary reward

Incentive(s)
Internal company award
Internal team/employee of the month/quarter/year recognition

Performance indicator(s)
Progress towards a climate-related target
Achievement of a climate-related target
Implementation of an emissions reduction initiative
Reduction in absolute emissions
Reduction in emissions intensity
Energy efficiency improvement
Increased share of low-carbon energy in total energy consumption
Increased share of renewable energy in total energy consumption
Reduction in total energy consumption
Increased investment in low-carbon R&D
Increased engagement with suppliers on climate-related issues
Increased engagement with customers on climate-related issues

Incentive plan(s) this incentive is linked to
Not part of an existing incentive plan

Further details of incentive(s)
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. For example, in 2022, the Huntsville (United States)specialty grains and powders site was awarded for its implementation of recycling and material recovery programs that led to the reduction of raw material consumption of more than 25%, with nearly 4700 tonne of CO2eq in reduction in Scope 3 emissions. In Sweden, the Scanpac business unit was given an Emerald Award in 2022 for its efforts to eliminate fossil fuels from its factories by converting the oil heating system and replacing diesel forklifts with electic ones. In addition, solar panels were installed, producing a surplus of green electricity.

Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan
The Saint-Gobain internal Environment, Health and Safety (EHS) Awards, including the Emerald Awards for Environment, reward initiatives and measures across the Saint-Gobain Group that demonstrate significant and sustained progress in EHS topics. The Awards provide recognition to sites, businesses and their employees for their contributions to EHS progress, including the Group's CO2 roadmap and wider environmental objectives. The Awards are also an excellent opportunity to share locally implemented best practices and inspire similar actions across the Group.

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 Scopes 1 and 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 Scope 3, is in absolute value in 2030, compared to 2017. Associated with those medium-term targets are our sustainability projects, such as shifting to green electricity and developing technologies to transition away from fossil fuels, for example using biogas or by increasing the 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. This target was validated by the Science-Based Targets initiative (SBTi) in 2022 under its new Net-Zero standard. 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 the 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 (see pages 276-278 of our 2022 URD). 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 55 of our 2022 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 recognized 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 extraction of raw materials to end of life. As an example, the Group produced a study in 2020 that led to the table on pages 108-109 of our 2022 URD, showing 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 CSO 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 2022; 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 more than once a year with input provided on a geographical and divisional basis, representing all geographies and business units. 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 108-109 of our 2022 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 2022; 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 38% 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 2022 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. Considering the lack of free credits in phase IV under the last update of EU-ETS phase IV rules, the Group could have an annual shortage for of 1MtCO2/year by 2030, with an annual cost of around €75M to €100M (assuming a cost of €75-100/tCO2 for EU allowances). 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 approximately €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

	Relevance & inclusion	Please explain
Current regulation	Relevant, always 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 and can be considered as relevant depending on the potential impact to the Group. Current regulation is appropriately managed in order to avoid 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 2022 URD provides an overview of our risks associated with climate change on pages 108-109.
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 Environment, Health and Safety (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 Science-Base Target 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 2022 URD provides an overview of our risks associated with climate change on pages 108-109.
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, Industry, 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 2022 URD provides an overview of our risks and opportunities associated with climate change on pages 108-109.
Legal	Relevant, sometimes 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 and can be considered as relevant depending on the potential for 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 2022 URD provides an overview of our risks associated with climate change on pages 108-109.
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. By way of illustration, the Group's irrevocable purchase commitments relating to energy and raw materials represented €1.8 billion as of December 31, 2022. Our purchasing managers develop long-term contracts with suppliers whenever interesting and possible, and the Group has set up hedging arrangements for some of the risks associated with purchase. Still, some energies considered within our carbon roadmaps are not affordable today (e.g., biogas or green hydrogen). For example, an additional cost of €20/MWh for biogas relative to natural gas would lead to an additional cost of more than €550M for the Group respective to present consumption of natural gas. The war in Ukraine could further change this context: in effect, the 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 2022, Saint-Gobain signed a renewable electricity agreement to cover around 45% of Saint-Gobain Poland's electricity needs starting in 2025. The power purchase agreement will reduce CO2 emissions by around 135,000 tonne per year, i.e. nearly 20% of Saint-Gobain's scope 1 and 2 emissions in Poland. 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 2022 URD provides an overview of our risks associated with climate change on pages 108-109.

	Relevance & inclusion	Please explain
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. As an 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 2022, 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 2022 using 100% recycled material and 100% green energy from biogas and decarbonized electricity. The Group also announced the first zero-carbon production gypsum plant in Norway to start in 2023. Our 2022 URD provides an overview of our risks associated with climate change on pages 108-109.
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. The Risk and Insurance Department continuously assesses the risks to which the Group's sites are exposed worldwide and, in particular, the risks related to the effects of climate change. In 2022, a specific study of physical risks was carried out – globally and by region – on the basis of the 6th IPCC report. The management of these risks is reflected in the development and implementation of specific policies supporting Saint-Gobain's environmental commitments. In addition, the Group ensures that physical risks are taken into account throughout its value chain, for example through the responsible purchasing program, which relies on a diversity of suppliers and supply sources to reduce the risk of transportation difficulties and supply chain disruptions. The Purchasing Department also considers the risk of an increase in the price of raw materials or of energy and greenhouse gas emissions in its purchasing strategies. 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 approximately €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 2022 URD provides an overview of our risks associated with climate change on pages 108-109.
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 approximately 800 industrial facilities are 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 2022 URD provides an overview of our risks associated with climate change on pages 108-109.

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

Climate risk type mapped to traditional financial services industry risk classification

<Not Applicable>

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 nearly 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 have been defined, and in 2022 the Group continued to closely monitor various policy and legislative developments, including those relating to the EU Green Deal, Fit for 55 Package and associated measures. Overall, 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)
<Not Applicable>

Potential financial impact figure – minimum (currency)
75000000

Potential financial impact figure – maximum (currency)
100000000

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 could 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 €100/tCO2 for the maximum figure. The calculation is therefore as follows: 1MtCO2 multiplied by €75-100/tCO2, or respectively €75M and €100M for the minimum and maximum.

Cost of response to risk
100000000

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 also has 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. In 2022 and 2023, the CO2 committee has held a number of discussions on ways to improve the Group's assessments of future potential risks from evolutions in carbon market/pricing policy. Key projects also 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. This internal shadow price was updated to €100/tCO2 in 2023.

Explanation of cost calculation: In order to support the achievement of our 2030 SBT that we have set (-33% for 2030 vs 2017 for scope 1+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	Other, please specify (Increased cost of energy and raw materials)

Primary potential financial impact
Increased direct costs

Climate risk type mapped to traditional financial services industry risk classification
<Not Applicable>

Company-specific description
The Group could face increases in costs of energy and raw material supplies due to changes, for example in future energy mix evolution. Our industry, particularly the production of glass and pipe, requires high levels of energy consumption and in particular uses large amounts of natural gas. Fluctuations in natural gas prices, for example in Europe in 2022, following the war in Ukraine, have already increased the direct cost of energy in our operations, and in some cases we have had to seek alternative fuels to address the short-term price impacts. We could expect similar potential energy market disruptions with increased direct costs, for instance linked to energy due to scarcity of present resources and likewise related to the development of future resources (e.g., sufficient quantities of renewable electricity, green hydrogen and biogas). Issues may be technical, financial or linked to local regulation.

Saint-Gobain expects the transition market risk to have a higher likelihood of occurring in a low-temperature future (our “Wind of Change” climate scenario), if low-carbon energies are not yet fully developed. For example, the Group may be required to purchase biogas rather than natural gas, due to needs for low-carbon alternatives to drive down the carbon emissions of the Group. Given recent price volatility, with biogas ranging between €40/MWh to €70€/MWh more expensive than natural gas, this could result in an additional cost to the Group of between €1.1B and €1.9B per annum.

Time horizon
Medium-term

Likelihood
Likely

Magnitude of impact
Medium-high

Are you able to provide a potential financial impact figure?
Yes, an estimated range

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure – minimum (currency)
1100000000

Potential financial impact figure – maximum (currency)
1900000000

Explanation of financial impact figure
The potential financial figure is calculated based on an extra cost of €40/MWh to €70/MWh for biogas purchase vs natural gas, considering the full natural gas consumption of the Group (27 465 GWh in 2022) and noting that replacing this would require nearly all the biogas supply currently available globally. The calculation is therefore 27 465 GWh multiplied by €40 and €70 per MWh = €1.1B-€1.9B.

Cost of response to risk
100000000

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 October of 2022, Saint-Gobain signed a 10-year renewable electricity supply agreement, which is expected to offset emissions for the 145 industrial sites in North America by around 210,000 tonnes per year. This follows a similar agreement in March 2021, when Saint-Gobain in the US entered into a 12-year Power Purchase Agreement for 120 megawatts (MWp) from the Blooming Grove Wind Farm in Illinois.

Explanation of cost calculation: In order to support the achievement of our 2030 SBT (-33% for 2030 vs 2017 for scope 1+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 2022 URD provides an overview of our risks associated with climate change on page 108-109.

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

Climate risk type mapped to traditional financial services industry risk classification
<Not Applicable>

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. 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 approximately €50M.

Time horizon
Short-term

Likelihood
Very likely

Magnitude of impact
Medium

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure – minimum (currency)
50000000

Potential financial impact figure – maximum (currency)
100000000

Explanation of financial impact figure
Significant weather events such as flooding and other physical events (e.g., extreme weather) 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 these weather events could impact our operations, in 2022, we registered €23M of losses with links to increased physical risks from climate-change, most of them related to heavy hail in France. In 2021, we were particularly impacted by a flood event in Germany that caused a production stoppage with a financial cost of approximately €50M. This could have had a much higher impact without the business contingency plan activated by the site and the business during the event. The risk of such floods and other climate change-related weather events is likely to increase in a "Highway to Climate Hell" scenario, where high warming is likely to contribute to significant changes in weather systems. We estimate that the potential financial impact could be in the order of €50 to €100M or more, where the cost calculation could be from another major event, such as the one in Germany in 2021, resulting in €50M or more in damages,as well as potential subsequent losses, potentially in the same order of magnitude, if the event were to stop operations for an extended period of time, which was not the case in the 2021 flooding of our German site.

Cost of response to risk
290000

Description of response and explanation of cost calculation
Our facilities are several (around 800 industrial sites and 3500 distribution outlets) and are spread over a large geography (75 countries), which by nature decreases the impact of the risk. All 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.

In order to mitigate that risk, we assess on an annual basis our exposure to acute physical climate-related risks through regular local audits performed by an external company and self-assessments. The external engineering risk prevention company performs audit where they include the verification of the exposure of sites to natural hazards (all natural perils including 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.

In addition, the sites with high flood exposures are audited by external experts. As an illustration, 47 special flood surveys were realized in 2022. The top 3 recommendations from those audits included in the actions plans focus on "flood emergency plans", "barriers" and "drainage maintenance" that should be implemented in at least 36 months for those requesting CAPEX and in accordance with other site priorities. We also use of a flood risk mapping tool provided by AXA to identify priority sites. Those ones in exposed areas must establish prevention and protection action plans as well as reinforce Business Continuity Plan to reduce the closing time and to limit the loss of revenue. Always with AXA we simulated the possible impact of the climate change applying the IPPC scenarios to the relevant sites; simulation were considered under SSP2-4.5 & SSP5-8.5 scenarios.

Explanation of cost calculation: The indicated cost of €40k is linked to the contract for accessing data and improving our risk mapping, 50 k€ for climate change simulations, and ~200 k€ to the special flood surveys carried out, through €40k+€50k+€200k=€290k.

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 2022 URD provides an overview of our risks associated with climate change on pages 108-109.

As specific examples: In April 2022, we made the first worldwide production of zero-carbon glass production (Scopes 1 & 2) in France, using 100% recycled glass, biogas and renewable electricity. In June 2022, we announced an investment of approximately CAD$90 million in our plasterboard plant in Montreal to increase its production capacity and transform it into the first zero-carbon plasterboard plant (Scopes 1 & 2) in North America. Purchasing also plays a key role by pushing participation in sustainable energy programs. For instance, Saint-Gobain signed an 11-year power purchase agreement in Spain to cover around 55% of Saint-Gobain's Spanish electricity needs, which will enable a reduction in CO2 emissions of around 39,000 tonnes per year.

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)
256000000

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
Our potential financial impact is calculated through the hypothesis that our Group annual turnover of around €51 197M will increase by 0,5% thanks to our more sustainable products. The calculation is therefore €51 197M x 0,5%=€256M.

Cost to realize opportunity
100000000

Strategy to realize opportunity and explanation of cost calculation
Realizing this opportunity requires capital investment to install energy saving technologies. For example,in 2022 an investment of €20M was made to one of our glass facilities to improve the energy efficiency of the production process. Another investment of €7.2 M was made in 2021 in one of our French glass float lines 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. For example, we have seen in 2022 increased demand in Europe for building renovations and related building materials (e.g. insulation and window replacements) as a result of the energy situation following Russia's invasion of Ukraine, alongside policies encouraging building renovations in line with EU climate ambitions. 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. In 2022, Saint-Gobain also launched our ORAÉ low-carbon glass, with a CO2 reduction of 42% compared to Saint-Gobain Glass European baseline for clear glass, thanks to a remarkably high amount of recycled content and with no compromise on the technical, quality or aesthetic performances. As demand for such products and services increases in future years, the development of these types of new products is an opportunity for the Saint-Gobain Group.

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)
560000000

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
In 2022, Saint-Gobain did an assessment of its turnover providing sustainability benefits for its customers (CO2, energy efficiency, health and wellbeing), which is estimated at 73.9% of its turnover, or €38Bn. This figure has been progressing over the past 2 years, in line with the group target to increase to 75 % by 2025 ("Grow and Impact" strategy), which could therefore increase Group sales by over €560M (€51B * 1.1% increase in share).

Cost to realize opportunity
89000000

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).

As cost to realize opportunity, we spent €517M on R&D expenses in 2022. 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 12%. In addition, the share of R&D aligned activities adds a further 5%, bringing the total to 17%. The calculation is therefore €517M multiplied by 17% = 89 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 2022, 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 73,9% of its 2022 turnover was made with sustainable solutions. The objective is to increase this figure 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 2022 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. In 2022, Saint-Gobain updated this assessment and found that 1 300 MtCO2 will be avoided over the lifetime of solutions sold in 2022.

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)
<Not Applicable>

Potential financial impact figure – minimum (currency)
500000000

Potential financial impact figure – maximum (currency)
1000000000

Explanation of financial impact figure
We expect increased demand for our wide range of sustainable products, notably for our products relate to sustainable habitat solutions and energy efficiency. For example, we expect that the renovation market in Europe will continue to be resilient, in spite of an expected slow-down in the new construction market in 2023. Already, the share of sustainable products in our total sales in 2022 was 73,9%, and the Group expects this to reach 75% by 2025 (i.e., 1,1% more). Considering a turnover of around 50B€ for the Groupe, the potential financial figure is around 500-1000M€ per year over the next ten years. The calculation is therefore between 1% and 2% more (minimum of 1.1% to our 75% target) multiplied by 50 B€ = 500-1000 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. 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.

As an example, the residential renovation market in Europe alone accounted for nearly €535Bn in 2022. 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 climate transition plan that aligns with a 1.5°C world?

Row 1

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

Publicly available climate transition plan
Yes

Mechanism by which feedback is collected from shareholders on your climate transition plan
We have a different feedback mechanism in place

Description of feedback mechanism
Feedback from individual shareholders is collected through one-on-one meetings throughout the year. A general presentation of the transition plan was made during the October 2021 Capital Market Day.

Frequency of feedback collection
More frequently than annually

Attach any relevant documents which detail your climate transition plan (optional)
Access document : https://www.saint-gobain.com/en/finance/investor-days

Explain why your organization does not have a climate transition plan that aligns with a 1.5°C world and any plans to develop one in the future
<Not Applicable>

Explain why climate-related risks and opportunities have not influenced your strategy
<Not Applicable>

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	Primary reason why your organization does not use climate-related scenario analysis to inform its strategy	Explain why your organization does not use climate-related scenario analysis to inform its strategy and any plans to use it in the future
Row 1	Yes, qualitative and quantitative	<Not Applicable>	<Not Applicable>

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 (see page 103 of our 2022 URD). 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 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 are: achievement of the "Global zero carbon" objectivea in the mid-2050s, limiting sea level rise (compared to 1986-2005) to +0.4 meters and the average length of drought periods to 9-11 months, with the average number of tropical nights (compared to 1981-2000) increasing 16+ days and the share of electric cars in the vehicle fleet in 2050 (2019 = 8%) around 80%. 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. As a 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. In 2022, Saint-Gobain and Ecocem, a company specializing in low-carbon cement, announced a major partnership with ambitious R&D cooperation to accelerate the delivery of low-carbon products to market.
Physical climate scenarios: Customized publicly available physical scenario	Company-wide	2.1ºC - 3ºC	Some details of the "The show might go on" scenario (see page 103 of our 2022 URD) include: - 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 scenarios: Customized publicly available physical scenario	Company-wide	4.1ºC and above	Some details of the "Highway to climate hell" scenario (see page 103 of our 2022 URD) include: - 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

Buildings and construction accounts for around 40% of greenhouse gas emissions. A 1.5°C scenario implies a quick reduction of both operational carbon in buildings as well as embodied carbon for construction and renovation of buildings. In assessing the potential impact of our three climate-change scenarii, Saint-Gobain seeks to understand the potential risks and opportunities for future business developments. For example, retrofitting of existing buildings in our "Wind of Change" 1.5°C scenario is the key enabler for reducing operational carbon in developed countries (EU, North America), which represents need for significant developments of insulation solutions. Those solutions for energy efficiency in buildings already account for a huge part of Saint-Gobain portfolio, with lare potential growth in future years (e.g. under the Renovation Wave in Europe). For emerging markets, the main challenge is to reduce the embodied carbon for new builds, whilst ensuring they are also high-performance buildings with low operational carbon, as most new buildings will be constructed in those areas.

For Saint-Gobain these developments help to inform decisions on future business development. For example, in addition to developments for lightweight construction, other solutions were missing to address the key challenge of low-carbon concrete in construction in our portfolio. In response, the Group made two major steps to include construction chemical solutions in our offering, via the acquisition of Chryso in 2021 and the acquisition of GCP that was finalised end of 2022. These acquisitions will help us respond to evolving market needs and demand in a low-carbon world. For instance, 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 also are providing huge opportunities for Saint-Gobain, and we continue to assess strategic opportunities for current and new solutions in support of the global pathway to net-zero emissions.

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: The time-horizons 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 in 2021, our presence in the Admixture sector will increase through the acquisition of GCP Applied Technologies (announced in December 2021). Saint-Gobain also extended its sustainable solutions offer by investing in building-integrated photovoltaics in 2022.
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: the time-horizon covered is 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 2022, 40 556 contacts of suppliers were registered on our online platform, and 20 598 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: the time horizon is 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, covering 5 key areas: 1) work 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) possibilities to use future alternative energy sources such as biogas or hydrogen, 4) opportunities to electrify as much as possible our different processes, and finally 5) considering Carbon Capture Use or Storage. Saint-Gobain also uses two internal carbon (one for CAPEX and one for R&D projects) to support the viability of the Group's projects and strategy. These were increased in 2021 and again in 2023, to fit with the carbon price evolution at worldwide level, and as a strategic decision, an annual €100M CAPEX and R&D budget has been allocated for the next 10 years. ii) Case study of a substantial strategic decision: In April 2022, the Group made the first worldwide production of zero-carbon glass (Scopes 1 & 2) 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. Saint-Gobain also announced in June of 2022 an investment of CAD$90 million in its plasterboard plant near Montreal, Canada in order to increase production capacity and transform the site into the first zero-carbon (Scopes 1 & 2) plasterboard plant in North America. The new facility will be operational in 2024 and will elimate around 40 000 tCO2 per year.
Operations	Yes	i) Description of how our strategy in this area has been influenced and the time horizon(s) it covers: the time horizon is the short-medium term. In Saint-Gobain's "Highway to Climate Hell" scenario with increased levels of acute physical climate events, the main risk for our operations is linked to: 1) possible lack of adaptation to acute physical events in the short term; 2) additional costs from carbon pricing mechanisms from lack of attenuation of our climate impact. For adaptation, our strategy remains to assess on an annual basis our exposure to risks 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 is developing detailed roadmaps for each industrial process. ii) Case study examples of the most substantial strategic decisions: As an example of addressing adaptation, a 2018 Egyptian flood event in one of our glass production facilities resulted in a preventive and corrective action plan, including: daily weather forecast monitoring to check for potential rainstorm, digging a protection trench inside the property to divert water and building a perimeter flood protection wall, and 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 our ambitious 2030 SBT target (-33% for 2030 vs 2017 for Scopes 1+2), an envelope of €100M every year over the 10 next years for CAPEX and R&D investments related to reduction of CO2 emissions, and an 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 Direct costs Indirect costs Capital expenditures Capital allocation Acquisitions and divestments Access to capital	1) Revenues Time horizon: Short-term Our 2022 sales amount 51,197 M€ and 80% are linked to habitat. 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 €535 billion in 2022. 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 4 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 million 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 to commit resourcing for the climate transition of 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, Saint-Gobain announced in April of 2023 the start of a 100% carbon-free production of plasterboard at its Fredrikstad plant in Norway, thanks to the switch from natural gas to hydroelectric power, thus avoiding 23,000 tons of CO2 emissions per year. 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 then raised to €100/t in 2023. It applies to all CAPEX investments, for instance those associated with a change in energy source. 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 climate transition?

	Identification of spending/revenue that is aligned with your organization's climate transition	Indicate the level at which you identify the alignment of your spending/revenue with a sustainable finance taxonomy
Row 1	Yes, we identify alignment with both our climate transition plan and a sustainable finance taxonomy	At the company level only

C3.5a

(C3.5a) Quantify the percentage share of your spending/revenue that is aligned with your organization's climate transition.

Financial Metric
Revenue/Turnover

Type of alignment being reported for this financial metric
Alignment with our climate transition plan

Taxonomy under which information is being reported
<Not Applicable>

Objective under which alignment is being reported
<Not Applicable>

Amount of selected financial metric that is aligned in the reporting year (unit currency as selected in C0.4)
37834000000

Percentage share of selected financial metric aligned in the reporting year (%)
73.9

Percentage share of selected financial metric planned to align in 2025 (%)
75

Percentage share of selected financial metric planned to align in 2030 (%)
75

Describe the methodology used to identify spending/revenue that is aligned
First assessment of eligibility toward European Taxonomy (mitigation of climate change) made for 2021. Alignment was done in 2022. In addition, 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. This was updated in 2022, and Saint-Gobain assessed that 1 300 MtCO2 will be avoided by customers over the lifetime of those solutions sold that year. Altogether, the Group estimates that 73,9% of its turnover provided sustainability benefits to its customers in 2022. We aim to increase this figure to 75% in 2025.

C3.5c

(C3.5c) Provide any additional contextual and/or verification/assurance information relevant to your organization's taxonomy alignment.

In application of the European Regulation 2020/852 Taxonomy Regulation in effect since July 2020, with delegated acts for the first two objectives concerning mitigation and adaptation to climate change (Taxonomy Climate Delegated Act (EU) 2021/2139), as well as with the delegated act in Article 8 of Regulation (EU) 2020/852 and its annexes on the reporting conditions (Disclosures Delegated Act), Saint-Gobain has carried out an analysis of the eligibility criteria used to classify its sustainable economic activities with regard to the new reporting and disclosure requirements on the relevant contribution to the turnover, investments and operating expenses (CapEx and OpEx). This analysis and the information relevant to the alignment of activities is verified by the Group's statutory auditors.

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

Is this a science-based target?
Yes, and this target has been approved by the Science Based Targets initiative

Target ambition
1.5°C aligned

Year target was set
2022

Target coverage
Company-wide

Scope(s)
Scope 1
Scope 2
Scope 3

Scope 2 accounting method
Market-based

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 6: Business travel
Category 7: Employee commuting
Category 9: Downstream transportation and distribution
Category 12: End-of-life treatment of sold products

Base year
2017

Base year Scope 1 emissions covered by target (metric tons CO2e)
9945315

Base year Scope 2 emissions covered by target (metric tons CO2e)
3482861

Base year Scope 3, Category 1: Purchased goods and services emissions covered by target (metric tons CO2e)
11379853

Base year Scope 3, Category 2: Capital goods emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target (metric tons CO2e)
2936344

Base year Scope 3, Category 4: Upstream transportation and distribution emissions covered by target (metric tons CO2e)
2531767

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 6: Business travel emissions covered by target (metric tons CO2e)
257490

Base year Scope 3, Category 7: Employee commuting emissions covered by target (metric tons CO2e)
166377

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target (metric tons CO2e)
5415185

Base year Scope 3, Category 10: Processing of sold products emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 11: Use of sold products emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target (metric tons CO2e)
677650

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 14: Franchises emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 15: Investments emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Other (upstream) emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Other (downstream) emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year total Scope 3 emissions covered by target (metric tons CO2e)
23364666

Total base year emissions covered by target in all selected Scopes (metric tons CO2e)
36792842

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, Category 1: Purchased goods and services emissions covered by target as % of total base year emissions in Scope 3, Category 1: Purchased goods and services (metric tons CO2e)
100

Base year Scope 3, Category 2: Capital goods emissions covered by target as % of total base year emissions in Scope 3, Category 2: Capital goods (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target as % of total base year emissions in Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)

100

Base year Scope 3, Category 4: Upstream transportation and distribution covered by target as % of total base year emissions in Scope 3, Category 4: Upstream transportation and distribution (metric tons CO2e)
100

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target as % of total base year emissions in Scope 3, Category 5: Waste generated in operations (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 6: Business travel emissions covered by target as % of total base year emissions in Scope 3, Category 6: Business travel (metric tons CO2e)
100

Base year Scope 3, Category 7: Employee commuting covered by target as % of total base year emissions in Scope 3, Category 7: Employee commuting (metric tons CO2e)
100

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 8: Upstream leased assets (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target as % of total base year emissions in Scope 3, Category 9: Downstream transportation and distribution (metric tons CO2e)
87

Base year Scope 3, Category 10: Processing of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 10: Processing of sold products (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 11: Use of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 11: Use of sold products (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 12: End-of-life treatment of sold products (metric tons CO2e)
100

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 13: Downstream leased assets (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 14: Franchises emissions covered by target as % of total base year emissions in Scope 3, Category 14: Franchises (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 15: Investments emissions covered by target as % of total base year emissions in Scope 3, Category 15: Investments (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Other (upstream) emissions covered by target as % of total base year emissions in Scope 3, Other (upstream) (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Other (downstream) emissions covered by target as % of total base year emissions in Scope 3, Other (downstream) (metric tons CO2e)
<Not Applicable>

Base year total Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories)
97

Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes
98

Target year
2050

Targeted reduction from base year (%)
90

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

Scope 1 emissions in reporting year covered by target (metric tons CO2e)
8396326

Scope 2 emissions in reporting year covered by target (metric tons CO2e)
1406043

Scope 3, Category 1: Purchased goods and services emissions in reporting year covered by target (metric tons CO2e)
20589802

Scope 3, Category 2: Capital goods emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions in reporting year covered by target (metric tons CO2e)
2134274

Scope 3, Category 4: Upstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)
2460270

Scope 3, Category 5: Waste generated in operations emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 6: Business travel emissions in reporting year covered by target (metric tons CO2e)
27063

Scope 3, Category 7: Employee commuting emissions in reporting year covered by target (metric tons CO2e)
157114

Scope 3, Category 8: Upstream leased assets emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 9: Downstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)
3794504

Scope 3, Category 10: Processing of sold products emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 11: Use of sold products emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 12: End-of-life treatment of sold products emissions in reporting year covered by target (metric tons CO2e)
603452

Scope 3, Category 13: Downstream leased assets emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 14: Franchises emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 15: Investments emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Other (upstream) emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Other (downstream) emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Total Scope 3 emissions in reporting year covered by target (metric tons CO2e)
29766479

Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)
39568848

Does this target cover any land-related emissions?
No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

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

Target status in reporting year
New

Please explain target coverage and identify any exclusions
Saint-Gobain, committed to achieving carbon neutrality by 2050, announced in 2022 that the Science Based Targets initiative approved our greenhouse gas emission reduction targets as consistent with SBTi's new net zero standard and the Paris Climate Agreement. This validation of the Group's long-term commitments to achieve net-zero CO2 emissions, both direct and indirect, along its entire value chain by 2050 has allowed us to further refine our roadmap towards carbon neutrality. The net-zero target entails a reduction in CO2 emissions of at least 90% in the three scopes by 2050, with additional sequestration projects planned for residual emissions. In addition to our CO2 roadmap to reduce our Scope 1 & 2 emissions, the Group continues to work to improve the accuracy of its scope 3 accounting, in particular by implementing a complete system of monitoring of its Category 1, 3, 4, 6 and 9 emissions.

Plan for achieving target, and progress made to the end of the reporting year
In 2021, 2022 and again in 2023, each business unit has been asked to develop a CO2 roadmap in line with the Group commitment, with a particular focus on identifying relevant decarbonization projects and implementing them. Currently, we have more than 285 active projects across the Group, which are monitored through a central platform, that are being actively studied or currently implemented for CO2 reductions. This includes scope 1 projects, such as energy efficiency improvements in our production processes, as well as flagship projects such as the investment of approximately €25 million in its plasterboard plant announced in late 2021 for our plasterboard site in Fredrikstad, Norway, which will increase its production capacity by about 40% and deliver zero-carbon production for both Scopes 1 & 2. As an example of other major progress to date: In 2020, Saint-Gobain signed a 12-year power purchase agreement in the United States that represents roughly 40% of the Group's CO2 emissions from electricity in the US. Another long-term renewable electricity supply agreement was signed in 2022 and is expected to start in 2024. Saint-Gobain has signed other similar agreements to reduce its scope 2 impact in 2022, for instance in Spain, Poland and the Czech Republic.

List the emissions reduction initiatives which contributed most to achieving this target
<Not Applicable>

Target reference number
Abs 2

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

Year target was set
2020

Target coverage
Company-wide

Scope(s)
Scope 1
Scope 2

Scope 2 accounting method
Market-based

Scope 3 category(ies)
<Not Applicable>

Base year
2017

Base year Scope 1 emissions covered by target (metric tons CO2e)
9945315

Base year Scope 2 emissions covered by target (metric tons CO2e)
3482861

Base year Scope 3, Category 1: Purchased goods and services emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 2: Capital goods emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 4: Upstream transportation and distribution emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 6: Business travel emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 7: Employee commuting emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 10: Processing of sold products emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 11: Use of sold products emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 14: Franchises emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 15: Investments emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Other (upstream) emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Other (downstream) emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year total Scope 3 emissions covered by target (metric tons CO2e)
<Not Applicable>

Total base year emissions covered by target in all selected Scopes (metric tons CO2e)
13428176

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, Category 1: Purchased goods and services emissions covered by target as % of total base year emissions in Scope 3, Category 1: Purchased goods and services (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 2: Capital goods emissions covered by target as % of total base year emissions in Scope 3, Category 2: Capital goods (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target as % of total base year emissions in Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 4: Upstream transportation and distribution covered by target as % of total base year emissions in Scope 3, Category 4: Upstream transportation and distribution (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target as % of total base year emissions in Scope 3, Category 5: Waste generated in operations (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 6: Business travel emissions covered by target as % of total base year emissions in Scope 3, Category 6: Business travel (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 7: Employee commuting covered by target as % of total base year emissions in Scope 3, Category 7: Employee commuting (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 8: Upstream leased assets (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target as % of total base year emissions in Scope 3, Category 9: Downstream transportation and distribution (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 10: Processing of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 10: Processing of sold products (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 11: Use of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 11: Use of sold products (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 12: End-of-life treatment of sold products (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 13: Downstream leased assets (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 14: Franchises emissions covered by target as % of total base year emissions in Scope 3, Category 14: Franchises (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 15: Investments emissions covered by target as % of total base year emissions in Scope 3, Category 15: Investments (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Other (upstream) emissions covered by target as % of total base year emissions in Scope 3, Other (upstream) (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Other (downstream) emissions covered by target as % of total base year emissions in Scope 3, Other (downstream) (metric tons CO2e)
<Not Applicable>

Base year total Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories)
<Not Applicable>

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]

Scope 1 emissions in reporting year covered by target (metric tons CO2e)
8396326

Scope 2 emissions in reporting year covered by target (metric tons CO2e)
1406043

Scope 3, Category 1: Purchased goods and services emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 2: Capital goods emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 4: Upstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 5: Waste generated in operations emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 6: Business travel emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 7: Employee commuting emissions in reporting year covered by target (metric tons CO2e)

<Not Applicable>

Scope 3, Category 8: Upstream leased assets emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 9: Downstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 10: Processing of sold products emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 11: Use of sold products emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 12: End-of-life treatment of sold products emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 13: Downstream leased assets emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 14: Franchises emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 15: Investments emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Other (upstream) emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Other (downstream) emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Total Scope 3 emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)
9802369

Does this target cover any land-related emissions?
No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

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

Target status in reporting year
Underway

Please explain target coverage and identify any exclusions
Our target was updated in November 2020 with 2030 as a target year (vs 2025 previously) in a well-below 2°C trajectory (vs 2°C previously). Both the target and reference years include our 2019 acquisition of Continental Building Products in North America. 2021 and 2022 had a faster decrease in scope 2 emissions thanks to decarbonised energy progress in several country like in the United States, Canada, Brazil and China. Our scope 1 decreased slightly in 2022, compared to 2021, thanks to measures such as energy efficiency improvements that offset record growth (+15.9% sales growth).

Plan for achieving target, and progress made to the end of the reporting year
In 2021, each business unit was asked to develop a CO2 roadmap for 2030 in line with the Group commitment. Each site is requested to update annually this roadmap by identifying relevant decarbonization projects and implementing them. Currently, we have more than 285 projects across the Group, which are monitored through a central platform, that are being studied or currently implemented for CO2 reductions. As an example of major progress to date: In 2020, Saint-Gobain signed a 12-year power purchase agreement in the United States that represents roughly 40% of the Group's CO2 emissions from electricity in the US. Another long-term renewable electricity supply agreement was signed in 2022 and is expected to start in 2024. Saint-Gobain has signed other similar agreements to reduce its scope 2 impact in 2022, for instance in Spain, Poland and the Czech Republic.

List the emissions reduction initiatives which contributed most to achieving this target
<Not Applicable>

Target reference number
Abs 3

Is this a science-based target?
Yes, and this target has been approved by the Science Based Targets initiative

Target ambition
2°C aligned

Year target was set
2020

Target coverage
Company-wide

Scope(s)
Scope 3

Scope 2 accounting method
<Not Applicable>

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 6: Business travel
Category 9: Downstream transportation and distribution

Category 12: End-of-life treatment of sold products

Base year
2017

Base year Scope 1 emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 2 emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 1: Purchased goods and services emissions covered by target (metric tons CO2e)
6372718

Base year Scope 3, Category 2: Capital goods emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target (metric tons CO2e)
2936344

Base year Scope 3, Category 4: Upstream transportation and distribution emissions covered by target (metric tons CO2e)
2531767

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 6: Business travel emissions covered by target (metric tons CO2e)
257490

Base year Scope 3, Category 7: Employee commuting emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target (metric tons CO2e)
4582183

Base year Scope 3, Category 10: Processing of sold products emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 11: Use of sold products emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target (metric tons CO2e)
677650

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 14: Franchises emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 15: Investments emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Other (upstream) emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Other (downstream) emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year total Scope 3 emissions covered by target (metric tons CO2e)
17358152

Total base year emissions covered by target in all selected Scopes (metric tons CO2e)
17358152

Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1
<Not Applicable>

Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2
<Not Applicable>

Base year Scope 3, Category 1: Purchased goods and services emissions covered by target as % of total base year emissions in Scope 3, Category 1: Purchased goods and services (metric tons CO2e)
56

Base year Scope 3, Category 2: Capital goods emissions covered by target as % of total base year emissions in Scope 3, Category 2: Capital goods (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target as % of total base year emissions in Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)
100

Base year Scope 3, Category 4: Upstream transportation and distribution covered by target as % of total base year emissions in Scope 3, Category 4: Upstream transportation and distribution (metric tons CO2e)
100

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target as % of total base year emissions in Scope 3, Category 5: Waste generated in operations (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 6: Business travel emissions covered by target as % of total base year emissions in Scope 3, Category 6: Business travel (metric tons CO2e)
100

Base year Scope 3, Category 7: Employee commuting covered by target as % of total base year emissions in Scope 3, Category 7: Employee commuting (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 8: Upstream leased assets (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target as % of total base year emissions in Scope 3, Category 9: Downstream transportation and distribution (metric tons CO2e)
74

Base year Scope 3, Category 10: Processing of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 10: Processing of sold products (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 11: Use of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 11: Use of sold products (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 12: End-of-life treatment of sold products (metric tons CO2e)
100

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 13: Downstream leased assets (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 14: Franchises emissions covered by target as % of total base year emissions in Scope 3, Category 14: Franchises (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 15: Investments emissions covered by target as % of total base year emissions in Scope 3, Category 15: Investments (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Other (upstream) emissions covered by target as % of total base year emissions in Scope 3, Other (upstream) (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Other (downstream) emissions covered by target as % of total base year emissions in Scope 3, Other (downstream) (metric tons CO2e)
<Not Applicable>

Base year total Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories)
72

Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes
72

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]

Scope 1 emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 2 emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 1: Purchased goods and services emissions in reporting year covered by target (metric tons CO2e)
11530289

Scope 3, Category 2: Capital goods emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions in reporting year covered by target (metric tons CO2e)
2134274

Scope 3, Category 4: Upstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)
2460270

Scope 3, Category 5: Waste generated in operations emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 6: Business travel emissions in reporting year covered by target (metric tons CO2e)
27063

Scope 3, Category 7: Employee commuting emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 8: Upstream leased assets emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 9: Downstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)
3227509

Scope 3, Category 10: Processing of sold products emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 11: Use of sold products emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 12: End-of-life treatment of sold products emissions in reporting year covered by target (metric tons CO2e)
603452

Scope 3, Category 13: Downstream leased assets emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 14: Franchises emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 15: Investments emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Other (upstream) emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Other (downstream) emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Total Scope 3 emissions in reporting year covered by target (metric tons CO2e)
19982857

Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)
19982857

Does this target cover any land-related emissions?
No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

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

Target status in reporting year
Underway

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 and again in 2022. Due to the increased accuracy, thanks to improved accounting and work to engage supply chain partners, the Group's scope 3 is estimated at 19.9 Mt CO2eq, which is an increase compared to the 2017 base used to validate the 2030 targets by the SBT initiative (17.3 Mt CO2eq). However, this is due, in part, to the broader coverage of our scope 3 impact, in particular for category 1 accounting. For example, the Group scope 3 emissions would have been estimated at 16.8 Mt CO2eq in 2021 using the previous methodology and perimeters. The Group continues to work to improve the accuracy of its scope 3 accounting, in particular by implementing a complete system of monitoring of its Category 1, 3, 4, 6 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
<Not Applicable>

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

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 classified in July of 2022 our Scopes 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 Scopes 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
<Not Applicable>

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*	178	917495
Implementation commenced*	106	179000
Implemented*	10	364720
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	Machine/equipment replacement

Estimated annual CO2e savings (metric tonnes CO2e)
2000

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)
780000

Investment required (unit currency – as specified in C0.4)
1000000

Payback period
1-3 years

Estimated lifetime of the initiative

16-20 years

Comment
Replacement of existing fiberizing machine with latest technology with optimized operational conditions and process conditions, reducing energy consumption by around 22%.

Initiative category & Initiative type

Energy efficiency in production processes	Other, please specify (Design optimization / improvement in production process)

Estimated annual CO2e savings (metric tonnes CO2e)
35000

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)
4500000

Investment required (unit currency – as specified in C0.4)
20000000

Payback period
1-3 years

Estimated lifetime of the initiative
16-20 years

Comment
Process design improvements and optimization of glass float, including fuel switching, to reduce CO2 impact, with implications for site under EU ETS.

Initiative category & Initiative type

Low-carbon energy consumption	Solar PV

Estimated annual CO2e savings (metric tonnes CO2e)
210000

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
6-10 years

Comment
In October of 2022, Saint-Gobain announced a 10-year renewable electricity supply agreement (Power Purchase Agreement) for the purchase of solar power for its 145 industrial sites in North America (United States and Canada). The agreement will start at the end of 2024.

Initiative category & Initiative type

Low-carbon energy consumption	Low-carbon electricity mix

Estimated annual CO2e savings (metric tonnes CO2e)
39000

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
In November of 2022, Saint-Gobain announced an 11-year renewable electricity supply agreement (Power Purchase Agreement) for the purchase of renewable electricity from wind, solar and hydroelectric power, covering around 55% of Saint-Gobain Spain's electricity needs. The agreement will start in 2024.

Initiative category & Initiative type

Other, please specify	Other, please specify (Low-carbon material substitution in production process)

Estimated annual CO2e savings (metric tonnes CO2e)
3000

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)
5000

Investment required (unit currency – as specified in C0.4)
0

Payback period
No payback

Estimated lifetime of the initiative
Ongoing

Comment
Substitution of CO2-emitting raw material used in glass float production for a lower-carbon alternative, with some additional reductions (~1,5%) in energy consumption and energy-related emissions.

Initiative category & Initiative type

Waste reduction and material circularity	Other, please specify (Increased cullet usage for production of flat glass)

Estimated annual CO2e savings (metric tonnes CO2e)
850

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)
550000

Payback period
1-3 years

Estimated lifetime of the initiative
>30 years

Comment
Increased use of cullet usage has helped to save over 1 million tonnes of raw materials over the last decade for glass production in the UK, reducing both Scope 1 and Scope 3 emissions by more than a quarter of a million tonnes of CO2. New crushing machines, designed specifically to separate glass from frames, were added in 2022 to increase cullet use to enable additional cullet from post-consumer recycling for glass as part of a closed-loop approach. Each machine is able to process over 500 tonnes of cullet in a year, saving around 690 MWh of energy and preventing around 570 tonnes of virgin raw materials.

Initiative category & Initiative type

Low-carbon energy consumption	Other, please specify (Replacement of coke use by electricity)

Estimated annual CO2e savings (metric tonnes CO2e)
65000

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)
10000000

Payback period
1-3 years

Estimated lifetime of the initiative
21-30 years

Comment
Implementation of an electric arc furnace to replace cast iron production through a blast furnace at our Pont-a-Mousson site in France. Production started in 2022.

Initiative category & Initiative type

Transportation	Other, please specify (Distribution fleet biofuel substitution)

Estimated annual CO2e savings (metric tonnes CO2e)
2775

Scope(s) or Scope 3 category(ies) where emissions savings occur
Scope 3 category 4: Upstream transportation & distribution

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
6-10 years

Comment
Our Danish distribution company set up HVO distribution terminals (using recycled oil from household and industrial waste) to switch 110 distribution vehicles from diesel. This represents around 5 500 liters of diesel a day that have been shifted to renewable HVO100, cutting CO2 emissions in our Danish distribution logistics by 90%.

Initiative category & Initiative type

Other, please specify	Other, please specify (CO2 optimization of the glass formulation)

Estimated annual CO2e savings (metric tonnes CO2e)
7000

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
Ongoing

Comment
Changes in the raw material formulation for glass line production with reductions both in raw material consumption as well as resulting CO2 emissions.

Initiative category & Initiative type

Transportation	Employee commuting

Estimated annual CO2e savings (metric tonnes CO2e)
95

Scope(s) or Scope 3 category(ies) where emissions savings occur
Scope 3 category 7: Employee commuting

Voluntary/Mandatory
Voluntary

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

0

Investment required (unit currency – as specified in C0.4)
525000

Payback period
No payback

Estimated lifetime of the initiative
3-5 years

Comment
Saint-Gobain announced a partnership in France with the Zenride service, which provides all employees the possibility to have a bicycle to commute to work, with as much as 70% of the cost covered by the Group. In the first year of its inception (2021-22), around 1700 employees used the service, covering a total of nearly 845 000 km, representing an approximate 95 tonnes of CO2eq avoided (relative to the employees previous commuting travel mode).

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 naturally 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 (EHS) Department works on anticipating the specific climate change regulations and assessing the related impacts on the Group activities. At the 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 2022 amounted to €129.5M.
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). For example, in 2022, the Huntsville (United States)specialty grains and powders site was awarded for its implementation of recycling and material recovery programs that led to the reduction of raw material consumption of more than 25%, with nearly 4700 tonne of CO2eq in reduction in Scope 3 emissions.
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, the Scanpac business unit in Sweden was given an Emerald Award in 2022 for its efforts to eliminate fossil fuels from its factories by converting the oil heating system and replacing diesel forklifts with electic ones. In addition, solar panels were installed, producing a surplus of green electricity.
Internal incentives/recognition programs	Saint-Gobain launched in 2021 an internal carbon fund. 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
The IEA Energy Technology Perspectives Clean Energy Technology Guide

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 3-5cm lower, hence being more aerodynamic and consuming less. This saves CO2 during driving. The CO2 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
<Not Applicable>

Life cycle stage(s) covered for the low-carbon product(s) or services(s)
<Not Applicable>

Functional unit used
<Not Applicable>

Reference product/service or baseline scenario used
<Not Applicable>

Life cycle stage(s) covered for the reference product/service or baseline scenario
<Not Applicable>

Estimated avoided emissions (metric tons CO2e per functional unit) compared to reference product/service or baseline scenario
<Not Applicable>

Explain your calculation of avoided emissions, including any assumptions
<Not Applicable>

Revenue generated from low-carbon product(s) or service(s) as % of total revenue in the reporting year
0.5

Level of aggregation
Group of products or services

Taxonomy used to classify product(s) or service(s) as low-carbon
The IEA Energy Technology Perspectives Clean Energy Technology Guide

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 and glass..
- 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, first assessed in 2019 and updated regularly.
-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
845000000

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
73.9

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

Name of organization(s) acquired, divested from, or merged with
<Not Applicable>

Details of structural change(s), including completion dates
<Not Applicable>

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?	Details of methodology, boundary, and/or reporting year definition change(s)
Row 1	No	<Not Applicable>

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)
9945315

Comment

Scope 2 (location-based)

Base year start
January 1 2017

Base year end
December 31 2017

Base year emissions (metric tons CO2e)
3482861

Comment

Scope 2 (market-based)

Base year start
January 1 2017

Base year end
December 31 2017

Base year emissions (metric tons CO2e)
3482861

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)
11379853

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)
53813

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)
2936344

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)
2531767

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)
346228

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)
257490

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)
166377

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)
6192139

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)
225454

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)
106817603

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)
677650

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)
5277

Comment

Scope 3 category 15: Investments

Base year start
January 1 2017

Base year end
December 31 2017

Base year emissions (metric tons CO2e)
1063532

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
The Greenhouse Gas Protocol: Corporate Value Chain (Scope 3) Standard
US EPA Emissions & Generation Resource Integrated Database (eGRID)

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)
8396326

Start date
<Not Applicable>

End date
<Not Applicable>

Comment

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 are reporting a Scope 2, market-based figure

Comment
We have more than 800 industrial locations, and we use a market-based approach, particularly for purchased green electricity, whenever we have a power purchase agreement or energy attribute certificate (e.g. guarantee of origin and 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
2597937

Scope 2, market-based (if applicable)
1406043

Start date
<Not Applicable>

End date
<Not Applicable>

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

C6.4

(C6.4) Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1, Scope 2 or Scope 3 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)
20589802

Emissions calculation methodology
Other, please specify (Activity data come from raw materials consumed by the Group, as well as from goods purchased and packaging. 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 for the year 2022, in comparison with the previous assessments for 2021 and 2017.

Capital goods

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
53811

Emissions calculation methodology
Other, please specify (Activity data from readily available information using the most reliable emissions factors known at a worldwide level.)

Percentage of emissions calculated using data obtained from suppliers or value chain partners
100

Please explain
An update was done for the year 2022, in comparison with the previous assessments for 2021 and 2017.

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

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
2134274

Emissions calculation methodology
Other, please specify (Saint-Gobain Environmental reporting provides energy consumption for the reporting period. Emission factors are applied using the most reliable information known for consideration at national or worldwide level.)

Percentage of emissions calculated using data obtained from suppliers or value chain partners
100

Please explain
An update was done for the year 2022, in comparison with the previous assessments for 2021 and 2017.

Upstream transportation and distribution

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
2460270

Emissions calculation methodology
Other, please specify (For industry, an emission factor in kgCO2/kEUR for each transport type was applied using financial activity data. For distribution, a worldwide extrapolation was based on data from our French and Nordic distribution companies.)

Percentage of emissions calculated using data obtained from suppliers or value chain partners
46

Please explain
An update was done for the year 2022, in comparison with the previous assessments for 2021 and 2017.

Waste generated in operations

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
328370

Emissions calculation methodology
Other, please specify (Saint-Gobain Environmental reporting provides waste produced during the reporting period. Emission factors are applied using the most reliable information known for consideration at national or worldwide level.)

Percentage of emissions calculated using data obtained from suppliers or value chain partners
100

Please explain
An update was done for the year 2022, in comparison with the previous assessments for 2021 and 2017.

Business travel

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
27063

Emissions calculation methodology
Other, please specify (Activity data and CO2 emissions from our business travel are provided by our central travel agency and are extrapolated for the remaining share of travel not covered by the central agency (~10%).)

Percentage of emissions calculated using data obtained from suppliers or value chain partners
90

Please explain
An update was done for the year 2022, in comparison with the previous assessments for 2021 and 2017.

Employee commuting

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
157114

Emissions calculation methodology
Other, please specify (Saint-Gobain Safety reporting provides employee data for the reporting period. Internal data on the estimated share of travel by mode is used. Emission factors are the most reliable information known for consideration at national or worldwide level.)

Percentage of emissions calculated using data obtained from suppliers or value chain partners
100

Please explain
An update was done for the year 2022, in comparison with the previous assessments for 2021 and 2017.

Upstream leased assets

Evaluation status
Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
Emissions from the operation of assets leased by the company and not already included in Scope 1 and 2 inventories for Saint-Gobain are considered as marginal.

Downstream transportation and distribution

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
4361499

Emissions calculation methodology
Other, please specify (For industry, data is based on product sales considering the most relevant means of transport and the most reliable emission factors. For distribution, a worldwide extrapolation was based on data from our French and Nordic distribution companies.)

Percentage of emissions calculated using data obtained from suppliers or value chain partners
88

Please explain
An update was done for the year 2022, in comparison with the previous assessments for 2021 and 2017.

Processing of sold products

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
241705

Emissions calculation methodology
Other, please specify (Activity data (production, energy and water use) were collected for the most relevant products, including goods sold by distribution. Emission factors are the most reliable information known for consideration at national or worldwide level.)

Percentage of emissions calculated using data obtained from suppliers or value chain partners
100

Please explain
An update was done for the year 2022, in comparison with the previous assessments for 2021 and 2017.

Use of sold products

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
59672723

Emissions calculation methodology
Other, please specify (Activity data (production and energy use) were collected for the most relevant products, including goods sold by distribution. Emission factors are the most reliable information known for consideration at national or worldwide level.)

Percentage of emissions calculated using data obtained from suppliers or value chain partners
100

Please explain
An update was done for the year 2022, in comparison with the previous assessments for 2021 and 2017.

End of life treatment of sold products

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
603452

Emissions calculation methodology
Other, please specify (Activity data were collected for the most relevant products, including goods sold by distribution. Emission factors are the most reliable information known for consideration at national or worldwide level.)

Percentage of emissions calculated using data obtained from suppliers or value chain partners
100

Please explain
An update was done for the year 2022, in comparison with the previous assessments for 2021 and 2017.

Downstream leased assets

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
94

Emissions calculation methodology
Other, please specify (Activity data were collected for the most relevant assets in France. Emission factors are the most reliable information 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 for the year 2022, in comparison with the previous assessments for 2021 and 2017.

Franchises

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
3436

Emissions calculation methodology
Other, please specify (Activity data were collected for the most relevant franchises in Europe. Emission factors are the most reliable information 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 for the year 2022, in comparison with the previous assessments for 2021 and 2017.

Investments

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
947196

Emissions calculation methodology
Other, please specify (Activity data are provided by our corporate finance department on the shares detained by Saint-Gobain, applying the adapted emission factor. Sectorial financial emission factors used were in kgCO2eq/kEUR.)

Percentage of emissions calculated using data obtained from suppliers or value chain partners
100

Please explain
An update was done for the year 2022, in comparison with the previous assessments for 2021 and 2017.

Other (upstream)

Evaluation status
Please select

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain

Other (downstream)

Evaluation status
Please select

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

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	327950	

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
0.0001915

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)
9802369

Metric denominator
unit total revenue

Metric denominator: Unit total
51197000000

Scope 2 figure used
Market-based

% change from previous year
16.7

Direction of change
Decreased

Reason(s) for change
Change in renewable energy consumption
Other emissions reduction activities

Please explain
Positive impact from the implementation of our CO2 roadmap, against a backdrop year of record sales growth, thanks to initiatives such as those described in C4.3a and C4.3b, including in particular progress in signing of major renewable electricity agreements in the United States and Canada, Spain, Poland and Czechia.

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/area/region.

Country/area/region	Scope 1 emissions (metric tons CO2e)
Albania	32
Algeria	0
Angola	1293
Argentina	37076
Australia	302
Austria	33548
Belgium	44721
Bhutan	10249
Botswana	126
Brazil	488522
Bulgaria	388
Canada	190888

Country/area/region	Scope 1 emissions (metric tons CO2e)
Chile	192
China	221828
Colombia	103773
Côte d'Ivoire	0
Czechia	203529
Denmark	116457
Egypt	138731
Estonia	16380
Ethiopia	16
Finland	64752
France	1115335
Germany	719784
Ghana	93
Greece	6047
Hungary	14747
India	933460
Indonesia	5006
Ireland	40031
Italy	184905
Japan	54847
Jordan	0
Kazakhstan	6297
Kenya	21
Kuwait	9205
Latvia	0
Lebanon	587
Lithuania	565
Luxembourg	133
Malaysia	16170
Mauritius	238
Mexico	401827
Morocco	277
Netherlands	58740
New Zealand	0
Norway	66145
Oman	33
Peru	12006
Philippines	9
Poland	372490
Portugal	37045
Qatar	295
Republic of Korea	15824
Romania	178462
Russian Federation	198175
Saudi Arabia	21995
Serbia	301
Singapore	0
Slovakia	2333
Slovenia	10
South Africa	30271
Spain	292138
Sri Lanka	5
Sweden	49330
Switzerland	14050
Thailand	46310
Turkey	99105
United Arab Emirates	18534
United Kingdom of Great Britain and Northern Ireland	356741
United Republic of Tanzania	7823
United States of America	1304068
Viet Nam	31705
Zimbabwe	0

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	3126865
Insulation Activity	1220845
Gypsum Activity	2374837
Pipe Activity	607296
Other	1066483

C7.5

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

Country/area/region	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Albania	0	0
Algeria	0	0
Angola	4	4
Argentina	6569	5611
Australia	1295	1295
Austria	2375	0
Belgium	4566	73
Bhutan	0	0
Botswana	38	38
Brazil	45094	747
Bulgaria	267	267
Canada	23760	12086
Chile	829	829
China	277400	83897
Colombia	10815	0
Côte d'Ivoire	0	0
Czechia	119882	114
Denmark	9503	0
Egypt	14590	14590
Estonia	14768	1978
Ethiopia	0	0
Finland	8655	191
France	56906	51211
Germany	183143	41119
Ghana	54	54
Greece	1354	1354
Hungary	1396	0
India	303983	229250
Indonesia	6488	6488
Ireland	6521	0
Italy	53424	36925
Japan	45484	36721
Jordan	0	0
Kazakhstan	2377	2377
Kenya	0	0
Kuwait	34091	34091
Latvia	0	0
Lebanon	5	5
Lithuania	124	68
Luxembourg	196	0
Malaysia	6734	6734
Mauritius	205	205
Mexico	188001	65296
Morocco	25333	25333
Netherlands	17767	80
New Zealand	0	0
Norway	648	0
Oman	18	18
Peru	922	922
Philippines	27	27
Poland	269708	241813
Portugal	2923	95

Country/area/region	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Qatar	362	362
Republic of Korea	56411	56411
Romania	33581	31902
Russian Federation	42876	42876
Saudi Arabia	9618	9618
Serbia	612	612
Singapore	0	0
Slovakia	591	591
Slovenia	36	36
South Africa	32218	32218
Spain	46295	2420
Sri Lanka	21	21
Sweden	1775	8
Switzerland	1463	725
Thailand	25628	25628
Turkey	41538	36962
United Arab Emirates	5420	5420
United Kingdom of Great Britain and Northern Ireland	58019	48
United Republic of Tanzania	575	575
United States of America	466889	231932
Viet Nam	25771	25771
Zimbabwe	0	0

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	442773	296692
Insulation Activity	537141	354078
Gypsum Activity	323550	167303
Pipe Activity	26117	8662
Other	1268356	579308

C7.7

(C7.7) Is your organization able to break down your emissions data for any of the subsidiaries included in your CDP response?

No

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 in emissions	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption	587000	Decreased	9.68	The share of renewable energy in our overall consumption mix continues to increase, for instance thanks to green electricity purchases. Change over 2021 emissions (10 330 210tCO2 Scopes 1 & 2) is thus -587kt/10 330kt = -9.68%.
Other emissions reduction activities	94000	Decreased	0.91	The intensity of our energy and raw material consumption decreased thanks to continued efforts to improve the technical performance and energy efficiency of our production lines. Change over 2021 emissions (10 330 210tCO2 Scopes 1 & 2) is thus -94kt/10 330kt = -0.91%.
Divestment		<Not Applicable>		
Acquisitions		<Not Applicable>		
Mergers		<Not Applicable>		
Change in output	39000	Increased	0.38	Our global production increased in 2022, due to record sales. Change over 2021 emissions (10 330 210tCO2 Scopes 1 & 2) is thus 39kt/10 330kt = 0.38%
Change in methodology		<Not Applicable>		
Change in boundary		<Not Applicable>		
Change in physical operating conditions	77000	Increased	0.75	Some changes in our industrial activities, for example shifts away from natural gas to other fuels, due to the energy crisis in Europe, were offset by other influencing factors, such as improvements in the energy intensity of our production intensity, for an overall net increase in 2022 compared to 2021. Change over 2021 emissions (10 330 210tCO2 Scopes 1 & 2) is thus 77kt/10 330kt = 0.75%.
Unidentified		<Not Applicable>		
Other		<Not Applicable>		

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?

Market-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	Yes
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)	924667	32656956	33581623
Consumption of purchased or acquired electricity	<Not Applicable>	4249706	3965485	8215191
Consumption of purchased or acquired heat	<Not Applicable>	0	9880	9880
Consumption of purchased or acquired steam	<Not Applicable>	0	23228	23228
Consumption of purchased or acquired cooling	<Not Applicable>	0	4	4
Consumption of self-generated non-fuel renewable energy	<Not Applicable>	24503	<Not Applicable>	24503
Total energy consumption	<Not Applicable>	5198876	36655553	41854429

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
924667

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat
924667

MWh fuel consumed for self-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
0

Comment
Saint-Gobain works with the Group's supply chain to source sustainable biomass and is committed to fighting deforestation through measures such as our "Timber Purchasing" policy that was initiated in the early 2000s and updated in 2020 to act ethically and responsibly throughout the Group's value chain. Our bioenergy consumption, used as a renewable fuel in our energy mix, is mostly solid biomass from responsible forest management that is certified by an independent third-party.

Other biomass

Heating value
LHV

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-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
0

Comment
Saint-Gobain works with the Group's supply chain to source sustainable biomass and is committed to fighting deforestation through measures such as our "Timber Purchasing" policy that was initiated in the early 2000s and updated in 2020 to act ethically and responsibly throughout the Group's value chain. Our bioenergy consumption, used as a renewable fuel in our energy mix, is mostly solid biomass from responsible forest management that is certified by an independent third-party.

Other renewable fuels (e.g. renewable hydrogen)

Heating value
LHV

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-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
0

Comment

Coal

Heating value
LHV

Total fuel MWh consumed by the organization
865817

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat
865817

MWh fuel consumed for self-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
0

Comment

Oil

Heating value
LHV

Total fuel MWh consumed by the organization
2015537

MWh fuel consumed for self-generation of electricity
15460

MWh fuel consumed for self-generation of heat
1977652

MWh fuel consumed for self-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
22425

Comment

Gas

Heating value
LHV

Total fuel MWh consumed by the organization
27464573

MWh fuel consumed for self-generation of electricity
31093

MWh fuel consumed for self-generation of heat
27273238

MWh fuel consumed for self-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
160242

Comment

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

Heating value
LHV

Total fuel MWh consumed by the organization
2311028

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat
2311028

MWh fuel consumed for self-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
0

Comment

Total fuel

Heating value
LHV

Total fuel MWh consumed by the organization
33581623

MWh fuel consumed for self-generation of electricity
46553

MWh fuel consumed for self-generation of heat
33352402

MWh fuel consumed for self-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
182667

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	56957	43158	28540	24503
Heat	33535069	33535069	924667	924667
Steam	0	0	0	0
Cooling	0	0	0	0

C8.2e

(C8.2e) Provide details on the electricity, heat, steam, and/or cooling amounts that were accounted for at a zero or near-zero emission factor in the market-based Scope 2 figure reported in C6.3.

Country/area of low-carbon energy consumption
Canada

Sourcing method
Financial (virtual) power purchase agreement (VPPA)

Energy carrier
Electricity

Low-carbon technology type
Wind

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
50633

Tracking instrument used
US-REC

Country/area of origin (generation) of the low-carbon energy or energy attribute
United States of America

Are you able to report the commissioning or re-powering year of the energy generation facility?
Yes

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
2020

Comment

Country/area of low-carbon energy consumption
United States of America

Sourcing method
Financial (virtual) power purchase agreement (VPPA)

Energy carrier
Electricity

Low-carbon technology type
Wind

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
428227

Tracking instrument used
US-REC

Country/area of origin (generation) of the low-carbon energy or energy attribute
United States of America

Are you able to report the commissioning or re-powering year of the energy generation facility?
Yes

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
2020

Comment

Country/area of low-carbon energy consumption
Brazil

Sourcing method
Retail supply contract with an electricity supplier (retail green electricity)

Energy carrier
Electricity

Low-carbon technology type
Renewable energy mix, please specify (Hydropower, wind, and solar)

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
476332

Tracking instrument used
Contract

Country/area of origin (generation) of the low-carbon energy or energy attribute
Brazil

Are you able to report the commissioning or re-powering year of the energy generation facility?
No

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
<Not Applicable>

Comment

Country/area of low-carbon energy consumption
Czechia

Sourcing method
Physical power purchase agreement (physical PPA) with a grid-connected generator

Energy carrier
Electricity

Low-carbon technology type
Nuclear

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
263906

Tracking instrument used
GO

Country/area of origin (generation) of the low-carbon energy or energy attribute
Czechia

Are you able to report the commissioning or re-powering year of the energy generation facility?
No

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
<Not Applicable>

Comment

Country/area of low-carbon energy consumption
Canada

Sourcing method
Unbundled procurement of energy attribute certificates (EACs)

Energy carrier
Electricity

Low-carbon technology type
Hydropower (capacity unknown)

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
21176

Tracking instrument used
Other, please specify (Green-e Certified REC)

Country/area of origin (generation) of the low-carbon energy or energy attribute
United States of America

Are you able to report the commissioning or re-powering year of the energy generation facility?
No

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
<Not Applicable>

Comment

Country/area of low-carbon energy consumption
United States of America

Sourcing method
Unbundled procurement of energy attribute certificates (EACs)

Energy carrier
Electricity

Low-carbon technology type
Hydropower (capacity unknown)

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
210268

Tracking instrument used
Other, please specify (Green-e Certified REC)

Country/area of origin (generation) of the low-carbon energy or energy attribute
United States of America

Are you able to report the commissioning or re-powering year of the energy generation facility?
No

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
<Not Applicable>

Comment

C8.2g

(C8.2g) Provide a breakdown by country/area of your non-fuel energy consumption in the reporting year.

Country/area
Albania

Consumption of purchased electricity (MWh)
646

Consumption of self-generated electricity (MWh)
5

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

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

Consumption of self-generated heat, steam, and cooling (MWh)
0

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

Country/area
Algeria

Consumption of purchased electricity (MWh)
0

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

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

Consumption of self-generated heat, steam, and cooling (MWh)
0

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

Country/area
Angola

Consumption of purchased electricity (MWh)
15

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

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

Consumption of self-generated heat, steam, and cooling (MWh)
0

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

Country/area
Argentina

Consumption of purchased electricity (MWh)
24096

Consumption of self-generated electricity (MWh)
1

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

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

Consumption of self-generated heat, steam, and cooling (MWh)
0

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

Country/area
Australia

Consumption of purchased electricity (MWh)
1909

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

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

Consumption of self-generated heat, steam, and cooling (MWh)
0

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

Country/area
Austria

Consumption of purchased electricity (MWh)
19904

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

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

Consumption of self-generated heat, steam, and cooling (MWh)
0

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

Country/area
Belgium

Consumption of purchased electricity (MWh)
27858

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

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

Consumption of self-generated heat, steam, and cooling (MWh)
10738

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

Country/area
Bhutan

Consumption of purchased electricity (MWh)
30997

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

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

Consumption of self-generated heat, steam, and cooling (MWh)
0

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

Country/area
Botswana

Consumption of purchased electricity (MWh)
28

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

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

Consumption of self-generated heat, steam, and cooling (MWh)
0

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

Country/area
Brazil

Consumption of purchased electricity (MWh)
484360

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

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

Consumption of self-generated heat, steam, and cooling (MWh)
0

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

Country/area
Bulgaria

Consumption of purchased electricity (MWh)
716

Consumption of self-generated electricity (MWh)
112

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

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

Consumption of self-generated heat, steam, and cooling (MWh)
0

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

Country/area
Canada

Consumption of purchased electricity (MWh)
159047

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

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

Consumption of self-generated heat, steam, and cooling (MWh)
0

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

Country/area
Chile

Consumption of purchased electricity (MWh)
1983

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

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

Consumption of self-generated heat, steam, and cooling (MWh)
0

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

Country/area
China

Consumption of purchased electricity (MWh)
451172

Consumption of self-generated electricity (MWh)
4075

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
442

Consumption of self-generated heat, steam, and cooling (MWh)
0

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

Country/area
Colombia

Consumption of purchased electricity (MWh)
47166

Consumption of self-generated electricity (MWh)
292

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

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

Consumption of self-generated heat, steam, and cooling (MWh)
0

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

Country/area
Czechia

Consumption of purchased electricity (MWh)
292156

Consumption of self-generated electricity (MWh)

0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
453

Consumption of self-generated heat, steam, and cooling (MWh)
0

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

Country/area
Denmark

Consumption of purchased electricity (MWh)
101207

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

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

Consumption of self-generated heat, steam, and cooling (MWh)
0

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

Country/area
Egypt

Consumption of purchased electricity (MWh)
38133

Consumption of self-generated electricity (MWh)
125

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

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

Consumption of self-generated heat, steam, and cooling (MWh)
0

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

Country/area
Estonia

Consumption of purchased electricity (MWh)
29841

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

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

Consumption of self-generated heat, steam, and cooling (MWh)
0

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

Country/area
Ethiopia

Consumption of purchased electricity (MWh)
0

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

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

Consumption of self-generated heat, steam, and cooling (MWh)
0

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

Country/area
Finland

Consumption of purchased electricity (MWh)
117062

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
2644

Consumption of self-generated heat, steam, and cooling (MWh)
0

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

Country/area
France

Consumption of purchased electricity (MWh)
1101093

Consumption of self-generated electricity (MWh)
519

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
12552

Consumption of self-generated heat, steam, and cooling (MWh)
18070

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

Country/area
Germany

Consumption of purchased electricity (MWh)
584256

Consumption of self-generated electricity (MWh)
9342

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
4628

Consumption of self-generated heat, steam, and cooling (MWh)
19690

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

Country/area
Ghana

Consumption of purchased electricity (MWh)
168

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

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

Consumption of self-generated heat, steam, and cooling (MWh)
0

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

Country/area
Greece

Consumption of purchased electricity (MWh)
3629

Consumption of self-generated electricity (MWh)

0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

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

Consumption of self-generated heat, steam, and cooling (MWh)
0

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

Country/area
Hungary

Consumption of purchased electricity (MWh)
6350

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

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

Consumption of self-generated heat, steam, and cooling (MWh)
0

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

Country/area
India

Consumption of purchased electricity (MWh)
441002

Consumption of self-generated electricity (MWh)
25695

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

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

Consumption of self-generated heat, steam, and cooling (MWh)
31596

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

Country/area
Indonesia

Consumption of purchased electricity (MWh)
8418

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

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

Consumption of self-generated heat, steam, and cooling (MWh)
0

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

Country/area
Ireland

Consumption of purchased electricity (MWh)
24541

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

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

Consumption of self-generated heat, steam, and cooling (MWh)
0

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

Country/area
Italy

Consumption of purchased electricity (MWh)
201828

Consumption of self-generated electricity (MWh)
1001

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

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

Consumption of self-generated heat, steam, and cooling (MWh)
39381

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

Country/area
Japan

Consumption of purchased electricity (MWh)
95531

Consumption of self-generated electricity (MWh)
206

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
4

Consumption of self-generated heat, steam, and cooling (MWh)
0

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

Country/area
Jordan

Consumption of purchased electricity (MWh)
0

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

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

Consumption of self-generated heat, steam, and cooling (MWh)
0

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

Country/area
Kazakhstan

Consumption of purchased electricity (MWh)
4148

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

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

Consumption of self-generated heat, steam, and cooling (MWh)
0

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

Country/area
Kenya

Consumption of purchased electricity (MWh)
4

Consumption of self-generated electricity (MWh)

0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

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

Consumption of self-generated heat, steam, and cooling (MWh)
0

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

Country/area
Kuwait

Consumption of purchased electricity (MWh)
55469

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

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

Consumption of self-generated heat, steam, and cooling (MWh)
0

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

Country/area
Latvia

Consumption of purchased electricity (MWh)
0

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

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

Consumption of self-generated heat, steam, and cooling (MWh)
0

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

Country/area
Lebanon

Consumption of purchased electricity (MWh)
7

Consumption of self-generated electricity (MWh)
27

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

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

Consumption of self-generated heat, steam, and cooling (MWh)
0

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

Country/area
Lithuania

Consumption of purchased electricity (MWh)
829

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

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

Consumption of self-generated heat, steam, and cooling (MWh)
0

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

Country/area
Luxembourg

Consumption of purchased electricity (MWh)
1816

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

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

Consumption of self-generated heat, steam, and cooling (MWh)
0

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

Country/area
Malaysia

Consumption of purchased electricity (MWh)
10344

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

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

Consumption of self-generated heat, steam, and cooling (MWh)
0

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

Country/area
Mauritius

Consumption of purchased electricity (MWh)
270

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

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

Consumption of self-generated heat, steam, and cooling (MWh)
0

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

Country/area
Mexico

Consumption of purchased electricity (MWh)
471653

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

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

Consumption of self-generated heat, steam, and cooling (MWh)
0

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

Country/area
Morocco

Consumption of purchased electricity (MWh)
35386

Consumption of self-generated electricity (MWh)

0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

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

Consumption of self-generated heat, steam, and cooling (MWh)
0

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

Country/area
Netherlands

Consumption of purchased electricity (MWh)
57898

Consumption of self-generated electricity (MWh)
64

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
973

Consumption of self-generated heat, steam, and cooling (MWh)
0

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

Country/area
New Zealand

Consumption of purchased electricity (MWh)
0

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

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

Consumption of self-generated heat, steam, and cooling (MWh)
0

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

Country/area
Norway

Consumption of purchased electricity (MWh)
99719

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

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

Consumption of self-generated heat, steam, and cooling (MWh)
0

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

Country/area
Oman

Consumption of purchased electricity (MWh)
45

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

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

Consumption of self-generated heat, steam, and cooling (MWh)
0

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

Country/area
Peru

Consumption of purchased electricity (MWh)
5204

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

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

Consumption of self-generated heat, steam, and cooling (MWh)
0

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

Country/area
Philippines

Consumption of purchased electricity (MWh)
38

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

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

Consumption of self-generated heat, steam, and cooling (MWh)
0

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

Country/area
Poland

Consumption of purchased electricity (MWh)
433058

Consumption of self-generated electricity (MWh)
34

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

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

Consumption of self-generated heat, steam, and cooling (MWh)
0

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

Country/area
Portugal

Consumption of purchased electricity (MWh)
15885

Consumption of self-generated electricity (MWh)
359

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

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

Consumption of self-generated heat, steam, and cooling (MWh)
0

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

Country/area
Qatar

Consumption of purchased electricity (MWh)
746

Consumption of self-generated electricity (MWh)

689

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

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

Consumption of self-generated heat, steam, and cooling (MWh)
0

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

Country/area
Republic of Korea

Consumption of purchased electricity (MWh)
120783

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
452

Consumption of self-generated heat, steam, and cooling (MWh)
0

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

Country/area
Romania

Consumption of purchased electricity (MWh)
122961

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

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

Consumption of self-generated heat, steam, and cooling (MWh)
0

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

Country/area
Russian Federation

Consumption of purchased electricity (MWh)
119431

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

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

Consumption of self-generated heat, steam, and cooling (MWh)
0

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

Country/area
Saudi Arabia

Consumption of purchased electricity (MWh)
15754

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

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

Consumption of self-generated heat, steam, and cooling (MWh)
0

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

Country/area
Serbia

Consumption of purchased electricity (MWh)
801

Consumption of self-generated electricity (MWh)
10

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

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

Consumption of self-generated heat, steam, and cooling (MWh)
0

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

Country/area
Singapore

Consumption of purchased electricity (MWh)
0

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

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

Consumption of self-generated heat, steam, and cooling (MWh)
0

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

Country/area
Slovakia

Consumption of purchased electricity (MWh)
4567

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

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

Consumption of self-generated heat, steam, and cooling (MWh)
0

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

Country/area
Slovenia

Consumption of purchased electricity (MWh)
156

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

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

Consumption of self-generated heat, steam, and cooling (MWh)
0

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

Country/area
South Africa

Consumption of purchased electricity (MWh)
34875

Consumption of self-generated electricity (MWh)

132

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

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

Consumption of self-generated heat, steam, and cooling (MWh)
0

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

Country/area
Spain

Consumption of purchased electricity (MWh)
301988

Consumption of self-generated electricity (MWh)
8

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

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

Consumption of self-generated heat, steam, and cooling (MWh)
0

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

Country/area
Sri Lanka

Consumption of purchased electricity (MWh)
34

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

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

Consumption of self-generated heat, steam, and cooling (MWh)
0

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

Country/area
Sweden

Consumption of purchased electricity (MWh)
171576

Consumption of self-generated electricity (MWh)
82

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
730

Consumption of self-generated heat, steam, and cooling (MWh)
0

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

Country/area
Switzerland

Consumption of purchased electricity (MWh)
60216

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

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

Consumption of self-generated heat, steam, and cooling (MWh)
0

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

Country/area
Thailand

Consumption of purchased electricity (MWh)
54326

Consumption of self-generated electricity (MWh)
8

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

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

Consumption of self-generated heat, steam, and cooling (MWh)
63185

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

Country/area
Turkey

Consumption of purchased electricity (MWh)
100820

Consumption of self-generated electricity (MWh)
88

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

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

Consumption of self-generated heat, steam, and cooling (MWh)
0

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

Country/area
United Arab Emirates

Consumption of purchased electricity (MWh)
10268

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

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

Consumption of self-generated heat, steam, and cooling (MWh)
0

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

Country/area
United Kingdom of Great Britain and Northern Ireland

Consumption of purchased electricity (MWh)
300308

Consumption of self-generated electricity (MWh)
149

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

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

Consumption of self-generated heat, steam, and cooling (MWh)
0

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

Country/area
United Republic of Tanzania

Consumption of purchased electricity (MWh)
1716

Consumption of self-generated electricity (MWh)

0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

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

Consumption of self-generated heat, steam, and cooling (MWh)
0

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

Country/area
United States of America

Consumption of purchased electricity (MWh)
1265969

Consumption of self-generated electricity (MWh)
37

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
10264

Consumption of self-generated heat, steam, and cooling (MWh)
0

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

Country/area
Uruguay

Consumption of purchased electricity (MWh)
0

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

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

Consumption of self-generated heat, steam, and cooling (MWh)
0

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

Country/area
Viet Nam

Consumption of purchased electricity (MWh)
41010

Consumption of self-generated electricity (MWh)
98

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

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

Consumption of self-generated heat, steam, and cooling (MWh)
0

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

Country/area
Zimbabwe

Consumption of purchased electricity (MWh)
0

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

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

Consumption of self-generated heat, steam, and cooling (MWh)
0

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

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
E07 - Saint Gobain - FY22 - Rapport OTI-ENG.pdf
DEU_SAINT-GOBAIN_2022-ENG-1p_28Mo.pdf

Page/ section reference
Please see pages 378-380 of our 2022 URD (specifically the footnote on Quantitative Environment and Safety review) as well as the attached auditors report.

Relevant standard
ISAE3000

Proportion of reported emissions verified (%)
100

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 market-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
E07 - Saint Gobain - FY22 - Rapport OTI-ENG.pdf
DEU_SAINT-GOBAIN_2022-ENG-1p_28Mo.pdf

Page/ section reference
Please see pages 378-380 of our 2022 URD (specifically the footnote on Quantitative Environment and Safety review) as well as the attached auditors report.

Relevant standard
ISAE3000

Proportion of reported emissions verified (%)
100

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: Business travel

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
COMPAGNIE DE SAINT-GOBAIN -- RAPPORT SCOPE 3.pdf

Page/section reference
See the attached auditor's report on the Scope 3 Category 6 business travel assessment.

Relevant standard
ISAE3000

Proportion of reported emissions verified (%)
90

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 Universal Registration Document pages 385-387. DEU_SAINT-GOBAIN_2022-ENG-1p_28Mo.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.

Alberta TIER - ETS
BC carbon tax
Beijing pilot ETS
California CaT - ETS
Canada federal Output Based Pricing System (OBPS) - ETS
EU ETS
Korea ETS
Mexico carbon tax
Ontario EPS - ETS
Québec CaT - ETS
Shanghai pilot ETS
UK ETS

C11.1b

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

Alberta TIER - ETS

% of Scope 1 emissions covered by the ETS

0.35

% of Scope 2 emissions covered by the ETS

0

Period start date

January 1 2022

Period end date

December 31 2022

Allowances allocated

0

Allowances purchased

4257

Verified Scope 1 emissions in metric tons CO2e

29660

Verified Scope 2 emissions in metric tons CO2e

0

Details of ownership

Facilities we own and operate

Comment

Beijing pilot ETS

% of Scope 1 emissions covered by the ETS
0

% of Scope 2 emissions covered by the ETS
1.59

Period start date
January 1 2022

Period end date
December 31 2022

Allowances allocated
17882

Allowances purchased
4471

Verified Scope 1 emissions in metric tons CO2e
0

Verified Scope 2 emissions in metric tons CO2e
22299

Details of ownership
Facilities we own and operate

Comment

California CaT - ETS

% of Scope 1 emissions covered by the ETS
0.57

% of Scope 2 emissions covered by the ETS
0

Period start date
January 1 2022

Period end date
December 31 2022

Allowances allocated
25114

Allowances purchased
55440

Verified Scope 1 emissions in metric tons CO2e
47770

Verified Scope 2 emissions in metric tons CO2e
0

Details of ownership
Facilities we own and operate

Comment

Canada federal OBPS - ETS

% of Scope 1 emissions covered by the ETS
0.21

% of Scope 2 emissions covered by the ETS
0

Period start date
January 1 2022

Period end date
December 31 2022

Allowances allocated
0

Allowances purchased
3021

Verified Scope 1 emissions in metric tons CO2e
17870

Verified Scope 2 emissions in metric tons CO2e
0

Details of ownership
Facilities we own and operate

Comment

EU ETS

% of Scope 1 emissions covered by the ETS
38.29

% of Scope 2 emissions covered by the ETS
0

Period start date
January 1 2022

Period end date
December 31 2022

Allowances allocated
2088645

Allowances purchased
0

Verified Scope 1 emissions in metric tons CO2e
3215166

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
0.19

% of Scope 2 emissions covered by the ETS
1.49

Period start date
January 1 2022

Period end date
December 31 2022

Allowances allocated
33666

Allowances purchased
264

Verified Scope 1 emissions in metric tons CO2e
16035

Verified Scope 2 emissions in metric tons CO2e
20895

Details of ownership
Facilities we own and operate

Comment

Ontario EPS - ETS

% of Scope 1 emissions covered by the ETS
0.55

% of Scope 2 emissions covered by the ETS
0

Period start date
January 1 2022

Period end date
December 31 2022

Allowances allocated
263

Allowances purchased
1425

Verified Scope 1 emissions in metric tons CO2e
46378

Verified Scope 2 emissions in metric tons CO2e
0

Details of ownership
Facilities we own and operate

Comment

Québec CaT - ETS

% of Scope 1 emissions covered by the ETS
0.41

% of Scope 2 emissions covered by the ETS
0

Period start date
January 1 2022

Period end date
December 31 2022

Allowances allocated
15759

Allowances purchased
21560

Verified Scope 1 emissions in metric tons CO2e
34568

Verified Scope 2 emissions in metric tons CO2e
0

Details of ownership
Facilities we own and operate

Comment

Shanghai pilot ETS

% of Scope 1 emissions covered by the ETS
0.23

% of Scope 2 emissions covered by the ETS
3.03

Period start date
January 1 2022

Period end date
December 31 2022

Allowances allocated
54204

Allowances purchased
8030

Verified Scope 1 emissions in metric tons CO2e
19648

Verified Scope 2 emissions in metric tons CO2e
42586

Details of ownership
Facilities we own and operate

Comment

UK ETS

% of Scope 1 emissions covered by the ETS
3.83

% of Scope 2 emissions covered by the ETS
0

Period start date
January 1 2022

Period end date
December 31 2022

Allowances allocated
152193

Allowances purchased
0

Verified Scope 1 emissions in metric tons CO2e
321587

Verified Scope 2 emissions in metric tons CO2e
0

Details of ownership
Facilities we own and operate

Comment

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 1 2022

Period end date
December 31 2022

% of total Scope 1 emissions covered by tax
0.38

Total cost of tax paid
920505

Comment

Mexico carbon tax

Period start date
January 1 2022

Period end date
December 31 2022

% of total Scope 1 emissions covered by tax
0.29

Total cost of tax paid
471506

Comment

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 already 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

- regularly revised internal carbon price for investment and R&D to incentivize 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 under the EU-ETS reduced their scope 1 emissions by 1.1 % between 2017 and 2022, thanks to reduction measures such as process optimization and waste heat recovery. Allowances may be purchased in the future in case of remaining gaps, and this is continuously checked by the Group CO2 committee, including Purchasing, Finance and Sustainable Development departments.

C11.2

(C11.2) Has your organization canceled any project-based carbon credits within the reporting year?
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.

Type of internal carbon price
Shadow price

How the price is determined
Alignment with the price of allowances under an Emissions Trading Scheme
Benchmarking against peers
Price with material impact on business decisions

Objective(s) for implementing this internal carbon price
Change internal behavior
Drive energy efficiency
Drive low-carbon investment
Identify and seize low-carbon opportunities

Scope(s) covered
Scope 1
Scope 2

Pricing approach used – spatial variance
Uniform

Pricing approach used – temporal variance
Evolutionary

Indicate how you expect the price to change over time
We updated the value to €75/tCO2eq in October 2021 to consider carbon price evolution at worldwide level. In May 2023, this intern carbon price was updated again to €100/tCO2eq.

Actual price(s) used – minimum (currency as specified in C0.4 per metric ton CO2e)
100

Actual price(s) used – maximum (currency as specified in C0.4 per metric ton CO2e)
100

Business decision-making processes this internal carbon price is applied to
Capital expenditure
Procurement
Risk management

Mandatory enforcement of this internal carbon price within these business decision-making processes
Yes, for some decision-making processes, please specify (As of May 2023, the internal carbon price applies to all CapEx projects, regardless of size or annual energy consumption. Previously, the internal carbon price applied to CapEx above €10M.)

Explain how this internal carbon price has contributed to the implementation of your organization's climate commitments and/or climate transition plan
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, but overall 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, the 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.

Type of internal carbon price
Shadow price

How the price is determined
Alignment with the price of allowances under an Emissions Trading Scheme
Benchmarking against peers
Price with material impact on business decisions

Objective(s) for implementing this internal carbon price
Change internal behavior
Drive energy efficiency
Drive low-carbon investment
Identify and seize low-carbon opportunities
Stress test investments

Scope(s) covered
Scope 1
Scope 2
Scope 3 (upstream)
Scope 3 (downstream)

Pricing approach used – spatial variance
Uniform

Pricing approach used – temporal variance
Evolutionary

Indicate how you expect the price to change over time
A 2nd internal carbon price is used to guide R&D budgets with a long-term orientation and is is much higher than the other internal carbon price (€100/tCO2eq as of May 2023). For R&D projects, the carbon price was updated in May 2023 to €200/tCO2eq, following previous revisions in 2021.

Actual price(s) used – minimum (currency as specified in C0.4 per metric ton CO2e)
200

Actual price(s) used – maximum (currency as specified in C0.4 per metric ton CO2e)
200

Business decision-making processes this internal carbon price is applied to
Product and R&D

Mandatory enforcement of this internal carbon price within these business decision-making processes

Yes, for some decision-making processes, please specify (Decisions with material impact on CO2)

Explain how this internal carbon price has contributed to the implementation of your organization's climate commitments and/or climate transition plan
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
21.1

% total procurement spend (direct and indirect)
81.3

% of supplier-related Scope 3 emissions as reported in C6.5
90

Rationale for the coverage of your engagement
44,498 suppliers signed our Responsible Purchasing Charter. They represent 81.3% of our spending and 21.1% of the total number of suppliers (211,252). 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 2022 at a country level (e.g. France , Sweden) to explain the SaintGobain 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. 92,7% of those suppliers signed our Responsible Purchasing Charter in 2022, versus 91,3% in 2021. 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 2022, 40,556 contacts of suppliers were registered on our online platform, and 20,598 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
90% of our supplier-related Scope 3 Category 1 emissions are covered by suppliers who have signed our Responsible Purchasing Charter.

Type of engagement
Information collection (understanding supplier behavior)

Details of engagement
Collect other climate related information at least annually from suppliers

% of suppliers by number
51.3

% total procurement spend (direct and indirect)
77.6

% of supplier-related Scope 3 emissions as reported in C6.5
12.5

Rationale for the coverage of your engagement
The responsible purchase program (https://www.saint-gobain.com/en/ensure-ethicalbusiness-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. 5,586 of them are considered as potentially risky regarding CSR, and 77,6% of them in spending (51,3% 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 2,867 suppliers (77,4%, out of the 90% target) have been concerned by documentation reviews and audits by a third party: this represents an increase of 6,4% compared to 2021. 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 building insulation products in that context helps to avoid emissions, meaning that there is no link with scope 3 emissions.

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, 94,624 for 2021 and 214,055 in 2022, largely surpassing the expected threshold of 100,000 simulations. 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
Setting a science-based emissions reduction target

Description of this climate related requirement
Contractual supplier code of conduct featuring climate-related requirements with third party verification for suppliers within so-called "risky" purchases evaluated in terms of CSR

% suppliers by procurement spend that have to comply with this climate-related requirement
100

% suppliers by procurement spend in compliance with this climate-related requirement
74.5

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

External engagement activities that could directly or indirectly influence policy, law, or regulation that may impact the climate

Yes, we engage directly with policy makers

Yes, our membership of/engagement with trade associations could influence policy, law, or regulation that may impact the climate

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

Yes

Attach commitment or position statement(s)

See page 90 of our URD, which notes that Saint-Gobain ensures that its advocacy initiatives are aligned with its commitment to contribute to carbon neutrality by 2050. The Group's actions and positions therefore take into account the ambition to limit the rise in temperatures to below 1.5°C. The Group ensures proper coordination of the positions taken locally and ensures that these institutional commitments are well known and respected by the countries. Saint-Gobain complies with the transparency obligations applicable to relations between companies and public authorities in all countries where it operates.

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Describe the process(es) your organization has in place to ensure that your external engagement activities are consistent with your climate commitments and/or climate transition plan

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.

Primary reason for not engaging in activities that could directly or indirectly influence policy, law, or regulation that may impact the climate

<Not Applicable>

Explain why your organization does not engage in activities that could directly or indirectly influence policy, law, or regulation that may impact the climate

<Not Applicable>

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?

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

Saint-Gobain has been actively 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 developing the WGBC BuildingLife Roadmap, which provides a series of proposals to introduce a Whole Life Carbon Approach in buildings related policies.

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

Climate change mitigation

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

Climate transition plans

Policy, law, or regulation geographic coverage

Regional

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

EU27

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 the regulatory framework for existing buildings should trigger stability in the way support and subsidy programmes are designed, and help structure investment capacity. This is why we support the concept of MEPS as a driver for building renovation and integration of the various dimensions of renovation policies. The current EU

proposal represents a first step that should be enlarged and actively supported by rather than limited to certain types of buildings.

Have you evaluated whether your organization's engagement on this policy, law, or regulation is aligned with the goals of the Paris Agreement?
Yes, we have evaluated, and it is aligned

Please explain whether this policy, law or regulation is central to the achievement of your climate transition plan and, if so, how?
The EU Fit for 55 framework is central to our Saint-Gobain decarbonisation journey. It will help to bring greater regulatory certainty regarding new built and renovation markets (EPBD, ETS2, EED) while consolidating the drivers to decarbonize our solutions (ETS, CBAM, IED).

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.

Category of policy, law, or regulation that may impact the climate
Carbon pricing, taxes, and subsidies

Focus area of policy, law, or regulation that may impact the climate
Emissions trading schemes

Policy, law, or regulation geographic coverage
Regional

Country/area/region the policy, law, or regulation applies to
EU27
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 a fair transition alongside phase out of free allocations and introduction of Carbon Border Adjustment Mechanism (CBAM)
- 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
The extension of the ETS system to heating in buildings needs to be complemented by a solid Energy Performance of Buildings Directive. The funding channeled through the Social Climate Fund will require simple mechanism to support building renovation in the most vulnerable segments.

Have you evaluated whether your organization's engagement on this policy, law, or regulation is aligned with the goals of the Paris Agreement?
Yes, we have evaluated, and it is aligned

Please explain whether this policy, law or regulation is central to the achievement of your climate transition plan and, if so, how?
We support a stronger focus on circularity as one of the key levers to decarbonize our solutions. One tonne of cullet used in the flat glass production process helps saved 700 kg CO2. The current EU framework for circularity in the construction sector covers several pieces of legislation such as the waste framework directive, the waste shipment directive, the CDW protocols, end-of-waste criteria for certain waste streams, or Level(s), the sustainability framework for buildings. More consistency in EU circularity requirements at buildings and product level, and more convergence between circularity frameworks among EU countries, will help actors like Saint-Gobain in tapping the full potential of circularity. For example, it will facilitate our decisions to invest in circular production processes or partner with local partners to develop take-back collection networks for CDW.

C12.3b

(C12.3b) Provide details of the trade associations your organization is a member of, or 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 policy consistent with theirs?
Consistent

Has your organization attempted to influence their position in the reporting year?
Yes, we publicly promoted their current position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position
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 (currency as selected in C0.4)

Describe the aim of your organization's funding
<Not Applicable>

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 (Entreprises pour l'Environnement (EpE))

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

Has your organization attempted to influence their position in the reporting year?
Yes, we publicly promoted their current position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position
EpE (Enterprises for the Environment) is a coalition of around 70 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 (currency as selected in C0.4)

Describe the aim of your organization's funding
<Not Applicable>

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 policy consistent with theirs?
Consistent

Has your organization attempted to influence their position in the reporting year?
Yes, we publicly promoted their current position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position
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 (currency as selected in C0.4)

Describe the aim of your organization's funding
<Not Applicable>

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 policy consistent with theirs?
Consistent

Has your organization attempted to influence their position in the reporting year?
Yes, we publicly promoted their current position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position
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 (currency as selected in C0.4)

Describe the aim of your organization's funding
<Not Applicable>

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 (Energy Transition Commission (ETC))

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

Has your organization attempted to influence their position in the reporting year?
Yes, we publicly promoted their current position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position
Energy Transition Commission 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 (currency as selected in C0.4)

Describe the aim of your organization's funding
<Not Applicable>

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 policy consistent with theirs?
Consistent

Has your organization attempted to influence their position in the reporting year?
Yes, we publicly promoted their current position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position
The GlobalABC, 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 (currency as selected in C0.4)

Describe the aim of your organization's funding
<Not Applicable>

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 policy consistent with theirs?
Consistent

Has your organization attempted to influence their position in the reporting year?
Yes, we publicly promoted their current position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position
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 (currency as selected in C0.4)

Describe the aim of your organization's funding
<Not Applicable>

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 policy consistent with theirs?
Consistent

Has your organization attempted to influence their position in the reporting year?
Yes, we publicly promoted their current position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position
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 (currency as selected in C0.4)

Describe the aim of your organization's funding
<Not Applicable>

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 policy consistent with theirs?
Consistent

Has your organization attempted to influence their position in the reporting year?
No, we did not attempt to influence their position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position
WBCSD is a worldwide organization more than 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 (currency as selected in C0.4)

Describe the aim of your organization's funding
<Not Applicable>

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 policy consistent with theirs?
Consistent

Has your organization attempted to influence their position in the reporting year?
Yes, we publicly promoted their current position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position
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 (currency as selected in C0.4)

Describe the aim of your organization's funding
<Not Applicable>

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
DEU_SAINT-GOBAIN_2022-ENG-1p_28Mo.pdf

Page/Section reference
See pages 100-118 of our 2022 URD.

Content elements
Governance
Strategy
Risks & opportunities
Emissions figures
Emission targets

Comment
See Universal Registration Document 2022

Publication
In voluntary communications

Status
Complete

Attach the document
2002_09_15_PPA_Pologne_vA.pdf
2022_10_25_PPA_NorthAm_VA.pdf
20221124_PPA Spain_VA.pdf

Page/Section reference
See attached press releases

Content elements
Strategy
Emissions figures
Emission targets

Comment
Press releases regarding our Power Purchase Agreements in North America, Spain and Poland

Publication
In voluntary communications

Status
Complete

Attach the document
22 10 03 - PR partnership Saint-Gobain Ecocem.pdf
20220921_Gypsum CSR Roadmap progress_VA.pdf
20220516_First zero-carbon production of flat glass_VA.pdf
20220609_Montreal_VA.pdf

Page/Section reference
See attached press releases

Content elements
Strategy
Emissions figures
Emission targets

Comment
Press release regarding our achievement of the world's first zero-carbon production of flat glass, our investment in one of our North American plants to achieve zero-carbon production of plasterboard, progress on our CSR roadmap across several of our sites (e.g., achieving plasterboard made from more than 50% recycled gypsum), and announcement of a partnership with Ecocem to fast track new low carbon cement technology as a mass market solution.

Publication
In voluntary communications

Status
Complete

Attach the document
20220902_SBTi_VA.pdf

Page/Section reference
See attached press release

Content elements
Strategy
Emission targets

Comment
Press release on approval by Sciences Based targets initiative of Saint-Gobain's commitment to achieve net-zero emissions by 2050 along its entire value chain.

C12.5

(C12.5) Indicate the collaborative frameworks, initiatives and/or commitments related to environmental issues for which you are a signatory/member.

	Environmental collaborative framework, initiative and/or commitment	Describe your organization's role within each framework, initiative and/or commitment
Row 1	Business Ambition for 1.5C Task Force on Climate-related Financial Disclosures (TCFD) UN Global Compact We Are Still In We Mean Business World Business Council for Sustainable Development (WBCSD) Other, please specify (Race to Zero)	Saint-Gobain is a signatory to Business Ambition for 1.5C, the Task Force on Climate-related Financial Disclosures, UN Global Compact, We Are Still In, We Mean Business and Race to Zero. Saint-Gobain is a pathboard member for the built environment workstream at the World Business Council for Sustainable Development.

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	Scope of board-level oversight
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 84 of the 2022 URD.	<Not Applicable>

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 impacts and dependencies of its value chain on biodiversity?

Impacts on biodiversity

Indicate whether your organization undertakes this type of assessment
Yes

Value chain stage(s) covered
Direct operations
Upstream
Downstream

Portfolio activity
<Not Applicable>

Tools and methods to assess impacts and/or dependencies on biodiversity
Other, please specify (An interdependence and sensitivity has been carried out in 2016 by expert)

Please explain how the tools and methods are implemented and provide an indication of the associated outcome(s)
In 2016 , 6 000 sites has been scored based on their proximity to a protected area and this list has been updated in 2022. Then each Saint-Gobain businesses have evaluated how the their activities impact and depends on ecosystem. The study has follow the Ecosystem Services Review (ESR) Methodology developed in 2008 by three organizations: the World Resources Institute, the World Business Council for Sustainable Development and the Meridian Institute to assess the link between their activities and ecosystem services. From this study the group has identified around 75 priority sites on which Biodiversity management plan (B'map) should be developed. This plan start with a biodiversity inventory and the outcome is a details action plan in order to reduce the impact of your activity on the ecosystem. In 2022, 43 Biodiversity management has be validated by the Corporate biodiversity committee.

Dependencies on biodiversity

Indicate whether your organization undertakes this type of assessment
Yes

Value chain stage(s) covered
Direct operations
Upstream
Downstream

Portfolio activity
<Not Applicable>

Tools and methods to assess impacts and/or dependencies on biodiversity
Other, please specify (An interdependence and sensitivity has been carried out in 2016 by expert)

Please explain how the tools and methods are implemented and provide an indication of the associated outcome(s)
In 2016 , 6 000 sites has been scored based on their proximity to a protected area and this list has been updated in 2022. Then each Saint-Gobain businesses have evaluated how the their activities impact and depends on ecosystem. The study has follow the Ecosystem Services Review (ESR) Methodology developed in 2008 by three organizations: the World Resources Institute, the World Business Council for Sustainable Development and the Meridian Institute to assess the link between their activities and ecosystem services. It has confirmed the need of our already existing timber policy and raise the need to have 100% of our buyer trained on this policy (Act4Nature Commitment). In 2020 the Group as also set a target in order to reduce the use of virgin raw material in order to reduce its dependence on Sand, Gypsum and Iron ore by 2030.

C15.4

(C15.4) Does your organization have activities located in or near to biodiversity- sensitive areas in the reporting year?
Yes

C15.4a

(C15.4a) Provide details of your organization's activities in the reporting year located in or near to biodiversity -sensitive areas.

Classification of biodiversity -sensitive area
Other biodiversity sensitive area, please specify (World Database on Protected Areas (WDPA))

Country/area
France

Name of the biodiversity-sensitive area
Le Jas de Rhodes

Proximity
Adjacent

Briefly describe your organization's activities in the reporting year located in or near to the selected area
SAMIN (Société d'Exploitation des Sables et Minéraux) operates silica sand deposits and solid rock quarries. A subsidiary of the Saint-Gobain group, the company operates eight industrial sites in France. The site is located in le Jas de Rhode.

Indicate whether any of your organization's activities located in or near to the selected area could negatively affect biodiversity
Yes, but mitigation measures have been implemented

Mitigation measures implemented within the selected area
Restoration

Explain how your organization's activities located in or near to the selected area could negatively affect biodiversity, how this was assessed, and describe any mitigation measures implemented
As part of the expansion of our mineral extraction activities, we must ensure the protection of the animal species present in the environment. For our dolomite quarry of Jas-de-Rhodes, we have decided to anticipate and amplify the mandatory compensation measures that will be required at the time of the expansion request, by creating living quarters for the ocellated lizards present in the quarry. The zones concerned by those living quarters will not be affected by the future extension. Ecological specialists from Ecosphere and ONF defined the measures to be implemented to protect the living habitats for the ocellated lizards . Two living habitats for the ocellated lizards have been constructed using stones from Jas-de-Rhodes site; the location has been chosen with the specialist, considering also the presence of water nearby. Already in May 2022, lizard droppings have been seen next to the habitats, testifying their presence (NB: it would be very challenging to see the lizards next to the habitats, due to their high viewing ability – from 400 m away).

C15.5

(C15.5) 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)

C15.6

(C15.6) 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)

C15.7

(C15.7) 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, 28% of them have completed the Biodiversity Management and Action Plan (B'MAP). See section 4.2. Non-financial indicators of our 2022 URD. DEU_SAINT-GOBAIN_2022-ENG-1p_28Mo.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 Corporate Social Responsability	Board/Executive board