Welcome to your CDP Climate Change Questionnaire 2023

C0. Introduction

C0.1

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

Owens Corning is a global building and construction materials leader committed to building a sustainable future through material innovation. Our three integrated businesses – Composites, Insulation, and Roofing – provide durable, sustainable, energy-efficient solutions that leverage our unique material science, manufacturing, and market knowledge to help our customers win and grow.

We aim to capitalize on our market-leading positions and innovative technologies to deliver substantial free cash flow and sustainable shareholder value. The business is global in scope, with operations in 31 countries, and human in scale, with approximately 19,000 employees and long-standing, local relationships with its customers and communities. Based in Toledo, Ohio, U.S., Owens Corning posted 2022 net sales of $9.8 billion. It has been a Fortune 500® company for 68 consecutive years

For more information, please visit https://www.owenscorning.com/

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

Yes

Select the number of past reporting years you will be providing Scope 1 emissions data for

3 years

Select the number of past reporting years you will be providing Scope 2 emissions data for

3 years

Select the number of past reporting years you will be providing Scope 3 emissions data for

3 years

C0.3

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

Belgium
Brazil
Canada
Chile
China
Czechia
Finland
France
Germany
India
Italy
Lithuania
Mexico
Netherlands
Poland
Republic of Korea
Singapore
Spain
Sweden
United Kingdom of Great Britain and Northern Ireland
United States of America

C0.4

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

USD

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	US6907421019
Yes, a Ticker symbol	OC
Yes, a CUSIP number	690742101

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 Board oversees management's execution of the Company's ESG strategy. The Board performs an annual review of ESG matters. In addition, the Compensation, Finance and Governance and Nominating Committees maintain oversight of management's responsibilities for particular aspects of ESG associated with their respective areas. The Board committees periodically provide reports concerning these ESG topics to the Board and the Board considers and discusses such reports.

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	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 the setting of corporate targets Monitoring progress towards corporate targets Reviewing and guiding the risk management process	Oversight on sustainability issues is provided by the board of directors, who oversee management's execution of our ESG strategy. This includes our goals for renewable energy, energy use reduction, and our Science-Based Targets for reducing Scope 1, 2, and 3 emissions. Sustainability is embedded in the company from the products we make to the actions we drive within the communities we operate. The board reviewed management's development of the Company's 2030 goals and oversees our progress in meeting goals such as GHG emissions reduction, energy efficiency of our operations, and sourcing 100% renewable electricity. The Board also reviews and approves annual compensation incentive of executive officers - including those tied to sustainability goals. Major acquisitions, capital projects and innovation are all reviewed by the board or its committees. Responsibility for risks related to climate change and sustainability lies with the Audit Committee; this is due to the Audit Committee's responsibility for overseeing risk for Owens Corning, including climate and sustainability risks. These risk management policies include current regulations, potential regulation changes, acute and chronic physical risks, and other climate related-issues. ESG matters that include climate related issues are a scheduled agenda item annually at a minimum and additionally as needed.

C1.1d

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

	Board member(s) have	Criteria used to assess competence of board member(s) on climate-related issues

	competence on climate-related issues	
Row 1	Yes	Directors are assessed for climate-related competence based on their experience. ESG/Sustainability experience, which includes climate experience, are important director skills, which is why Sustainability/ESG Management is one of the 9 skill criteria found in our Proxy Statement's Board of Directors Skill Matrix. The categories included in the Matrix are tied to the Company's strategy, and the goal is that the directors collectively possess qualities that facilitate their effective oversight of the Company's strategic plans. (see page 16: https://s21.q4cdn.com/855213745/files/doc_financials/2022/ar/2023-Owens-Corning-Bookmarked-Proxy-Statement.pdf). Along with skills, with each director's biographical information is a description of the principal experience, qualifications, attributes, or skills that led the Board to the conclusion that such individuals should serve as Owens Corning directors. In our 2023 Proxy statement, 9 directors are identified as possessing ESG/Sustainability Management experiential strength. For example, our Lead Independent Director has served on the board of ArcelorMittal, one of the world's leading steel and mining companies, and is a member of its Appointments, Remuneration, Corporate Governance and Sustainability Committee. This director also led McKinsey & Company's Global Organization, Risk Management, and Oil and Gas Electric Power and Renewables (wind, solar, geothermal) Practices, each of which has linkages to climate.

C1.2

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

Position or committee

Chief Sustainability Officer (CSO)

Climate-related responsibilities of this position

Managing annual budgets for climate mitigation activities
Integrating climate-related issues into the strategy
Setting climate-related corporate targets
Monitoring progress against climate-related corporate targets
Assessing climate-related risks and opportunities
Managing climate-related risks and opportunities

Coverage of responsibilities

Reporting line

CEO reporting line

Frequency of reporting to the board on climate-related issues via this reporting line

Quarterly

Please explain

Owens Corning created the chief sustainability officer (CSO) role in 2007 to underscore the essential role of sustainability in our overall operations. The CSO reports directly to the CEO and is responsible for our compliance with legal and company requirements related to environmental, safety, health, and sustainability. In addition, a sustainability organization, made up of approximately 50 employees, reports to the CSO. This team is accountable for circular economy, product stewardship, supply chain sustainability, sustainability reporting and analytics, operations sustainability, medical services, and EHS (environmental, health, and safety).

Vision and values related to sustainability are created by the CEO and the CSO, who create, maintain, and promote sustainability strategy and policies. In addition, they redefine targets and goals as needed. Roles for the oversight of sustainability for our CEO and CSO jointly consist of:

• Creating sustainability vision, values
• Sustainability strategy and policies
• Redefining targets or goals
• Performance monitoring and reporting

The CSO and his organization are responsible for performance monitoring and reporting. Our environmental metrics and data are monitored using Schneider Electric's Resource Advisor system. Data is input into the system where it can be reviewed and analyzed. Owens Corning has an Enterprise Environmental and Operations Sustainability Director reporting to the CSO who works directly with the environmental leaders of each of our businesses to monitor all climate-related issues throughout the company. In addition to the business level reviews, Owens Corning's Sustainability and Reporting Analytics team monitors the company's climate-related issues from a data perspective.

Furthermore, climate-related issues are addressed through our risk management process and included in our risk registers, which are developed by the business and legal teams from the plant level up.

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

Performance indicator(s)

Progress towards a climate-related target

Incentive plan(s) this incentive is linked to

Short-Term Incentive Plan

Further details of incentive(s)

Our stockholders have expressed heightened interest in and appreciation of our sustainability programs and achievements, as well as our investments in building a diverse and inclusive culture. In response to stockholder feedback and in recognition of the Company's ongoing commitment to safety, sustainability, and inclusion and diversity, we are continuing to enhance how we disclose our ESG goals and results. Progress against ESG goals influence the Compensation Committee's assessment of the CEO's and NEOs' annual performance and compensation decisions. In the 2023 Proxy Statement, our Named Executive officers were our CFO, the President of our Composites business, our Chief Growth Officer, and our President of our Insulation Business.

There are three goals areas with linkage to compensation: Safety, Sustainability, and Inclusion & Diversity. Within the sustainability bucket, we have a waste to landfill goal, and a GHG goal to continue to reduce GHG year-over-year in support of our 2030 sustainability goal of 50% reduction. More details can be found in our 2023 Proxy Statement (https://s21.q4cdn.com/855213745/files/doc_financials/2022/ar/2023-Owens-Corning-Bookmarked-Proxy-Statement.pdf)

Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan

This incentive directly supports the actions needed to meet our company's climate commitments, namely our Science-Based Target to reduce Scope 1 and 2 emissions 50% by 2030, against a 2018 base year. This target was approved by the Science-Based Targets Initiative as aligned with the 1.5-degree scenario. For our CEO, the incentive supports consideration of climate impacts in strategic plans and operations. For our business presidents, the incentive contributes to the consideration of our 2030 GHG reduction goal in the strategic plans for the business, supporting efforts to decarbonize our operations. Similarly for our Chief Growth Officer, the incentive contributes to the consideration of climate impacts when considering growth opportunities for the company.

Entitled to incentive

Chief Financial Officer (CFO)

Type of incentive

Monetary reward

Incentive(s)

Bonus - % of salary

Performance indicator(s)

Progress towards a climate-related target

Incentive plan(s) this incentive is linked to

Short-Term Incentive Plan

Further details of incentive(s)

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Entitled to incentive

President

Type of incentive

Monetary reward

Incentive(s)

Bonus - % of salary

Performance indicator(s)

Progress towards a climate-related target

Incentive plan(s) this incentive is linked to

Short-Term Incentive Plan

Further details of incentive(s)

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Entitled to incentive

Other, please specify

Chief Growth Officer

Type of incentive

Monetary reward

Incentive(s)

Bonus - % of salary

Performance indicator(s)

Progress towards a climate-related target

Incentive plan(s) this incentive is linked to

Short-Term Incentive Plan

Further details of incentive(s)

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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	1	3	
Medium-term	3	6	
Long-term	6	100	

C2.1b

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

Substantive impacts are assessed and monitored through Owens Corning's risk management process. Owens Corning looks at all risks, including climate-related risks, through essentially the same process. At the asset level, our business units (BUs) create business-specific risk registers which are used in their Strategic and Operational Planning processes. In creating

these registers, the BUs identify internal and external factors that could pose threats and opportunities to their business. They evaluate the potential impact and likelihood, and then establish management plans to mitigate the risk. Each risk is assessed by subject matter experts who consider relevant indicators in determining impact. These indicators vary depending on the aspects that are relevant for each risk. Potential quantifiable indicators that could factor into an individual risk's impact classification include potential impact on revenue, potential number of sites disrupted, applicable fines, litigation outcome, medical treatment cost and others. Of the risks that we monitor, Owens Corning has established three levels for value impact, which have a number of different factors which can be used to qualify a risk into one of the three levels. The lowest level are those risks where the company can absorb the financial impact, and the reputational impact is relatively non-existent. In terms of potential impact and/or likelihood, low impact qualifiers include financial losses between $2-15MM, low reputational risk, and no impacts such as injuries, and/or is a highly unlikely risk, below 10% probability of occurring. The next level is medium impact, with a potential to be known by the public or to damage our reputation. In terms of potential impact and/or likelihood, medium risk can be qualified by financial loss of $15-30MM, potential reputational damage, potential medical treatments required, and/or is a risk which may occur with up to 50% likelihood. The highest level of impact can be qualified by factors such as a material financial impact of greater than $30MM, long-term reputational damage, or serious injury, among other factors, and/or is a risk with a >90% probability to occur, with the potential to be catastrophic to the organization. Each risk is assessed to our impact and likelihood scales and is then categorized appropriately. All three levels of risks have been determined important to monitor, but those in the moderate and significant levels are defined as having substantive financial impact.

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

Owens Corning's risk committee meets with functional and business leaders throughout the organization to discuss identified risks, including climate risks, and manage corresponding action plans. Risks are considered by the committee for all ranges of time horizon, and in all aspects of the value chain. At the asset level, our business units (BUs) create business-specific risk registers which are used in their Strategic and Operational Planning processes. In creating these registers, the BUs identify internal and external factors that could pose threats and opportunities to their business. They evaluate the potential impact and likelihood, and then establish management plans to mitigate each risk. Risk are retained (risk exposure is accepted without further mitigation), reduced/transferred (risk exposure is reduced, transferred, or consequences are reduced) or avoided (risk exposure eliminated entirely, e.g., through ceasing a business)

The risk committee considers significant risk to the corporation. They have a process where they:

1. Review the OC Risk Register substantiated by business and functional reviews. Risks are prioritized based on their placement in the risk register. The Y-axis ("Value") represents the potential financial impact, while the X-axis ("Likelihood") represents the probability of occurrence. Color coding (for risk acceptability) and different shapes (for trending information) offer a fuller understanding of the potential risks. We also include the concept of risk velocity in our conceptualization of risk, describing the potential rate at which a risk could impact our businesses. While risk velocity is not depicted on the risk register in an infographic manner, the concept is described in conjunction with the overall register narrative. By incorporating the idea of risk velocity into our understanding of risk, we gain a better understanding of impending impacts, which enables us to be proactive in our approach.

2. Align around key mitigation programs. Based on the risk assessment register outputs, the risk committee identifies the various mitigation actions to be taken and a planned approach is taken towards implementing them through the businesses.

3. Meet quarterly. The risk committee meets quarterly to review the risk registers and their potential impact to Owens Corning. They review the existing risk aspects, add any new risks being identified from internal or external sources, and update any risks which are no longer considered applicable to the businesses. The risk committee also reviews the mitigation actions and outputs for the annual cycle. Annually the business reviews emerging risks for the company and partners with the Strategic Growth Council to ensure these are contemplated in strategic planning cycle for the company.

4. Review risk register with the executive committee. All risk assessment results and outputs are reviewed by the executive committee, and feedback received is incorporated in the action register and reflected in the mitigation planning.

5. Provide quarterly update to the Audit Committee of the board of directors

We have a variety of processes for identifying and managing opportunities within the business, marketing, R&D, and across the company, including climate-related opportunities. As an example, tech scouting is a business strategy aligned with our corporate innovation team, and it is designed to continuously fuel Owens Corning business pipelines with technology-based opportunities that enable growth or mitigate threats. Our tech scouting team is integrated with each business unit, systematically finding and assessing business opportunities that match our needs and strategy, and effectively sourcing the most suitable technologies and partners. Any new products developed must go through our stringent product stewardship process, and each product is evaluated through our Ecodesign Strategy Wheel. Recycling, in the context of the circular economy, will be a key focus of the tech scouting team.

Some case studies of how we have followed our processes for managing climate-related risks and opportunities:

Case: Transitional Risk - Broad and gradual tightening of limits on emissions by federal and state governments could impact OC by disrupting our use of specific raw materials which in turn would disrupt our production capacity for products using those materials. One specific OC example is the phaseout of certain blowing agents used in our XPS foam plants in North America and Asia. As this occurs, we have been required to make certain capital investments at our plants to use alternative blowing agents. Because we believe the likelihood of this identified risk is high in the long term, we have completed development and certification of new foam blowing agent blends with lower GWP while maintaining product performance, and we have also begun capital upgrades needed to run our lines with these lower GWP blowing agent blends. All our plants in regions affected by existing or emerging regulation are capable of using the new blowing agent as of early 2022. As a result, we can manage this risk into the future, and are doing so already, as with the 2021 release of Foamular NGX® for Canada and the U.S.

Example: Physical Opportunity - Demand for products in our roofing business is generally driven by residential repair, remodeling activity, and new residential construction. As the effects of climate change are felt in the increased frequency and severity of storms, Owens Corning as a building materials company may see an increased demand for our roofing products due to storm related roof damage. Evaluation of climate-related physical risks and opportunities have driven changes and expansion in production and marketing of specific Owens Corning products, like Duration FLEX® shingles, which are rated against high winds and storm activity.

Value chain stage(s) covered

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

One common risk factor between Upstream and Downstream as it relates to climate is the risk of transportation disruptions. As with all other forms of risk, transportation risks are managed by the Risk Committee.

Each of our business's risk liaisons analyze and manage their transportation risks, review the risks' management with their business leadership teams, and then present their result to the risk committee to discuss the identified risks and manage corresponding action plans. The risk committee would then ask questions about the risk and assign follow-up actions to risk liaisons , who then report back on progress made to manage the risk.

Risks are considered by the committee for short and medium-term time spans, and in all aspects of the value chain. At the asset level, our business units (BUs) create business-specific risk registers which are used in their Strategic and Operational Long-Range Planning (LRP) processes. In creating these registers, the BUs identify internal and external factors that could pose threats and opportunities to their business. They evaluate the potential impact and likelihood, and then establish management plans to mitigate the risk. At the company level, Owens Corning has a risk committee that considers significant risk. The risk registers from the individual BUs as well as legal are consolidated and evaluated for the company as a whole. The company and BUs use risk maps as a risk analysis tool. They also use correlation analysis, sensitivity analysis and stress testing. Risk are retained, reduced, transferred or avoided.

Furthermore, our approach to prioritizing suppliers empowers us to emphasize the importance of sustainability throughout our value chain by enabling us to consider environmental, social, and governance (ESG) risk exposures. We have developed an ESG risk scoring framework based on S&P Global Rating's ESG Risk Atlas. In this approach, we assign a sector risk score based on the commodity that the company supplies to Owens Corning. This score encompasses associated environmental and social risk rationales. In addition, a regional risk score, embodying governance rationales, is assigned to a supplier's country. These scores are then tallied to determine an overall ESG risk score. For suppliers that provide multiple commodities to Owens Corning, and therefore have multiple ESG risk scores, we select the highest of their risk scores to ensure a more conservative representation of these suppliers

Upstream in our value chain, raw material sourcing risks are included in Owens Corning's risk assessments. Risks to disruptions in our material supply due to climate-

related disruptions (weather-driven, regulatory, etc.) are included due to the impact on our production that any raw material disruption could have to our production of insulation, roofing, or composite materials. Downstream, the risk of transportation disruptions is also included in our climate-related risk assessments. Owens Corning uses distributors to sell our building materials products to consumers, and a disruption of transportation would put our relationship with our distributors at risk, as well as resulting in a potential loss of sales.

During recent hurricanes that impacted our plants in Houston and Fresno, TX, Atlanta and Savannah, GA, and Jacksonville and Lakeland, FL, Owens Corning employed upstream transportation mitigation plans devised as a result of risk planning, as well as downstream transportation mitigation plans devised as a result of risk planning, including shipping from other Owens Corning plants.

Value chain stage(s) covered

Direct operations
Downstream

Risk management process

A specific climate-related risk management process

Frequency of assessment

More than once a year

Time horizon(s) covered

Short-term
Medium-term
Long-term

Description of process

In addition to asset, business-unit, and enterprise-level risks managed by the Risk Committee, there are also efforts for identifying risks & opportunities with respect to climate change that are coordinated through the Sustainability organization by ongoing work with each BU to identify & address opportunities & identify & reduce risk through:

1. Operations Sustainability
2. Product & Supply Chain Sustainability
3. Innovation & collaboration to deliver energy efficiency & durable material solutions at scale
4. Employee safety, health & engagement & community vitality

One specific process used to assess downstream risk is our Product Stewardship Review process. Product Stewardship reviews of all new and significantly modified existing products sold by Owens Corning is required as part of Owens Corning's total effort to assure that OC products are safe and environmentally sound to make, use and dispose of; and that the products perform as claimed. Product Stewardship reviews are

designed to address all elements of Owens Corning's Environmental, Health, Safety and Product Stewardship Policy.

Our Product Stewardship Review Board (PSRB)— consisting of global members with variety of expertise such as EHS, chemistry, product compliance, building science, toxicology, sustainability, sourcing, reliability engineering, technical subjects, and analytical testing — is balanced with the needed expertise to assure all products meet Owens Corning's Product Stewardship standard. Our Product Stewardship Leader is responsible for managing the process and reports directly to our Product Sustainability Director. The leader ensures that our Product stewardship review board is balanced with the needed expertise. The review board meets weekly to review projects for new and significantly modified products. In addition to the PSRB, we have a Product Stewardship Advisory Council and a legal counsel who works closely with Product Stewardship Leader. The Product Stewardship Advisory Council consists of senior business and functional leaders. The council meets throughout the year to provide insights into key EHS and performance issues, review product stewardship guidelines, discuss product stewardship review board activities, and communicate to the company. This entire Product Stewardship organization provides counsel, guidance, and direction to ensure compliance with the Owens Corning Product Stewardship policy and Owens Corning Standards.

We understand that achieving our sustainability 2030 goals and moving toward a circular economy requires designing products based on a holistic view of the product's lifecycle. Therefore, in 2020, the Product Stewardship led a cross-functional team and developed a new tool, called the Ecodesign Strategy Wheel, based on the Okala Ecodesign Strategy Wheel (http://www.okala.net/index.html). The Ecodesign Strategy Wheel provides ecodesign strategies based on the seven areas of the products lifecycle; reimagined design; reduced impact of material; reduced manufacturing impact; reduced logistics impact; reduced use-phase impact; system longevity; and end of life optimization. The Ecodesign Strategy wheel is a powerful brainstorming tool which integrates stage-specific Design for Environment (DfE) and product sustainability strategies into the innovation process, empowering project teams to consider strategies that address a product's lifecycle. We believe the Ecodesign Strategy Wheel is the first of many tools that can help us make smarter decisions as we develop new products and make significant modifications to existing products.

Summary reports of product stewardship reviews are shared internally with leaders on a quarterly basis by the product stewardship leader. Throughout this tiered process, we evaluate a product's composition and development at key points, according to desired safety, performance, environmental, and sustainability attributes. In 2022, 92 projects were reviewed, for a total of over 1,700 such reviews since 1997 and over 1,400 since 2006, the year product stewardship reviews were made a mandatory part of our Business Code of Conduct.

C2.2a

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

	Relevance & inclusion	Please explain
Current regulation	Relevant, always included	Our risk committee reviews and evaluates the top risks facing the company, currently approximately 20 different key risk types, including evaluating Geopolitical Risk, which includes government action related to public policy or events, current regulations, and emerging regulations. Some current climate-related regulations are the American Innovation and Manufacturing (AIM) Act, the EPA Significant New Alternatives Policy (SNAP) regulations, and their state-level equivalents, which include phasing out certain blowing agent blends, and have led to new lower-GWP blends being developed for Owens Corning's foam products. This regulation is particularly relevant in states where there is no 'opt-out' clause in favor of federal standards, like Colorado, where the state's standards are more stringent than federal levels. If Owens Corning did not recognize and respond to this regulation, the company could see loss of revenue from being unable to sell our products in these locations. We first responded to the challenge to develop greener blowing agent blends from the EPA in 2015, and devoted significant resources (R&D, manufacturing and capital) to inventing a low-GWP Extruded Polystyrene (XPS) solution, as well as investing in the capital needed to use this lower GWP product at additional locations.
Emerging regulation	Relevant, always included	Our risk committee reviews and evaluates the top risks facing the company, currently approximately 20 different key risk types, including evaluating Geopolitical Risk, which includes government action related to public policy or events, current regulations, and emerging regulations. One example of emerging regulatory risk include opposition to energy efficiencies standards in state energy codes. Opposition to IECC codes, such as the upcoming IECC 2021, have sparked backlash against IECC 2021 and earlier versions where present in existing state codes. The home building industry's claims that these standards raise the cost of housing, however their data and economic analyses show that the major drivers on increased costs are substantially tied to zoning regulations, impact and related development fees, the cost and time to secure approvals, access to capital and financing. The cost of codes is a small fraction of these larger costs. Further, the builder's data rarely features the escalating prices of existing homes , profit margins or the cost of materials and finishes that builders voluntarily

		choose to use in homes – and which are not driven by codes. When regressive policies are used as an excuse to halt the adoption of the energy code, or to weaken the energy code, the long-term negative impact on the climate of an energy inefficient home lasts for up to 70 years or more.
Technology	Relevant, always included	Our risk committee reviews and evaluates the top risks facing the company, currently approximately 20 different key risk types, including evaluating technology related risk types such as IT Infrastructure, Cyber Risk, and Intellectual Property. However, technology risks underpin many other risk types, including competitive threats (e.g., the risk of technological innovation by our competitors and energy costs),technology changes that impact our energy procurement costs or technological innovations that put our supply chain at risk compared to our competitors, and others. Some risks identified and reviewed include the risks of competitors developing new roofing shingles that perform better in extreme climates, the development of low carbon products better than our current insulation product line, and the development of alternative materials other than fiberglass used in the manufacture of wind turbine blades.
Legal	Relevant, always included	Owens Corning considers and manages relevant climate litigation risks through our Enterprise Risk Management (ERM) risk management process. In 2020, Environmental risk was evaluated as a distinct risk category within our company's core risk register, which increases the extent to which sustainability issues are embedded into the enterprise-wide risk process. Litigation risk is one of the risk types considered when the risk committee considers environmental risk. An example of a climate litigation risk could be from stakeholders affected by the physical impacts of climate change filing suit against manufacturing companies for their contributions to climate change. At this time, climate litigation risks has not been identified by Owens Corning through our ERM process. To identify new risks — and update risks no longer considered important — the risk committee regularly reviews results and outputs of risk assessments. In the past, this was done at least twice per year, but in 2020 the risk committee began meeting four times per year.
Market	Relevant, always included	Our risk committee reviews and evaluates the top risks facing the company, currently approximately 20 different key risk types, including evaluating market-related risks like Trade Credit Risk, Talent risk (losing personnel to other opportunities), Liquidity (driven partly by market factors), and also risks of changing customer preference and demand. Specific to climate change, we evaluate the risks of worsening climate change conditions causing us to lose customers and sales to competing solutions. Shifts in customer preference and demand away

		from Owens Corning products like Foam or fiberglass insulation to competing or new solutions could have a negative impact on our results.
Reputation	Relevant, always included	As a good corporate citizen we are committed to managing climate change risk meaningfully. We consider failure to respond to climate risks with meaningful science-based climate actions as a reputational risk, and as such have historically shown our support for climate action, such as setting climate targets approved by the Science-Based Targets Initiative, publishing an updated Climate Change Statement in February 2020 that reaffirmed our commitment to climate action, the IPCC and the Paris Agreement. Owens Corning recognizes the reputational risk of not effectively responding to climate risks, where such responses are expected by global stakeholders, as opposed to solely considering shareholder expectations. By this logic, failing to manage the reputational risk aspect could lead to a loss of revenue from consumers who are seeking to give their business to climate-forward companies. In response to this risk, Owens Corning's CEO was one of 180 signatories to the Business Roundtable's landmark statement on the purpose of a corporation to serve society, and not just shareholders. As the statement declares when discussing communities as a stakeholder whose needs must be considered, "We respect the people in our communities and protect the environment by embracing sustainable practices across our businesses." We see these actions as the right thing to do, and part of the massive cost of inaction in these areas would include reputational risk in the future for failure to act on the climate in the present.
Acute physical	Relevant, always included	Risks of acute physical risks like adverse weather and similar natural disasters are included in our ERM. Much effort has been spent creating mitigation plans and scenarios to ensure that customer needs are met even in the event of a plant being down due to a climate-change related acute physical event. Owens Corning has directly been impacted by climate related weather events including Hurricane Sandy significantly damaging our Kearny roofing plant leading to disruption. The risk of disruption to customers due to a similar event, and our mitigation plans around it, are always important points of consideration in our business unit and enterprise risk management process.
Chronic physical	Relevant, always included	Chronic physical risks, such as higher temperatures, increased precipitation and flood risk, increased drought risk, and increased frequency of severe weather events involving aspects such as hail, wind, and tropical cyclones, are included in our ERM, primarily in the impact of changing climate patterns on our plants. For example, in 2020 Owens Corning began working with The Ohio State University to evaluate and expand our efforts in assessing the resiliency of our strategies against a range of climate-related scenarios and time

		horizons. These scenarios focus on risks and opportunities globally and at the business level. The scope of this work includes a physical climate risk assessment for our locations, considering relevant physical risk indicators across a variety of emissions scenarios, considering multiple time horizons out to 2051 and will help in informing relevant risk registers. Long-term temperature change and changes in water availability are also issues that we evaluate and discuss. We regularly consider the safety risks related to the forecasted impact of long-term changes in weather patterns. For example, we are concerned about the impact of heat-related illnesses in light of rising temperatures. In response, we have taken several actions to mitigate the risk of illness, including summer/heat stress prevention educational efforts, preventive and proactive tools (hydration focus, electrolyte drinks/popsicles, work balancing, cooling PPE, fans/air movers, work and break scheduling, etc.) These efforts position puts us in a proactive position as OSHA considers promulgating a climate-influenced heat stress regulatory standard for the US. Our risk assessments and corresponding financial assessments include costs of preventing heat-related illnesses, as well as the costs avoided through prevention. Living Safely is one of Owens Corning's core company values, and we are unconditionally committed to occupational health and safety.

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

Acute physical

Flood (coastal, fluvial, pluvial, groundwater)

Primary potential financial impact

Increased direct costs

Company-specific description

Many of Owens Corning's business activities involve substantial investments in manufacturing facilities and many products are produced at a limited number of locations. For example, some insulation products are only made at a small number of facilities, where disruption could lead to delayed fulfilment of customer orders. These facilities could be materially damaged by natural disasters such as floods, tornadoes, hurricanes and earthquakes or by sabotage. We have experienced flooding at plants in New Jersey, Texas, and India. Owens Corning could incur uninsured losses and liabilities which increase direct costs such as loss of physical assets/inventory, as well as disruptions in production capacity which could increase indirect costs such as business interruption/ lost sales, as well as additional indirect cost incurred through higher insurance premiums to cover a site which is seen as at-risk after a flooding event. In addition, natural disasters pose a significant threat to the safety of our employees, contractors, and customers. We engage with our third-party loss prevention engineering firm to equip our locations to have minimal losses and best endure weather-related incidents. As climate change occurs, these risks could become more likely and also make insuring these risks less feasible. For example, at one Owens Corning facility the company experienced a catastrophic flood resulting from a named storm approximately 10 years ago. The ~190,000 square foot building is located in New Jersey, and is flood-prone due to its proximity to a river system and the Atlantic Ocean. As such, continuing to purchase flood insurance for this facility has become more challenging and recently the insurance capacity available for purchase was reduced. Combined with a potential increase in likelihood of this risk due to the impact of climate change, this situation is even more important to mitigate appropriately. Other natural disasters could also impact OC locations in a similar manner.

Time horizon

Long-term

Likelihood

Unlikely

Magnitude of impact

Low

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

300,000,000

Potential financial impact figure – maximum (currency)

700,000,000

Explanation of financial impact figure

Based on the nature of our businesses the unmitigated financial risk would occur when multiple sites are impacted by one event, thus impacting the ability to rely on our network of facilities. Many of Owens Corning's products are produced at a limited number of locations, and an extreme weather event could lead to disruption. The estimated exposure assumes no more than three facilities are impacted concurrently by the same natural catastrophe. The assumption of three facilities for this value was selected because our locations are diverse enough within their geographic regions that any extreme weather event would be unlikely to impact any more than a maximum of three sites. It is estimated this unmitigated impact for up to three sites would be $300 million - $700 million USD, and this range is based on loss of physical assets/inventory, as well as disruptions in production capacity which could increase indirect costs such as business interruption/ lost sales, at between 1 and 3 sites. The impact figure is a range to account for variation in the potential financial impacts for individual affected sites.

Cost of response to risk

21,500,000

Description of response and explanation of cost calculation

Owens Corning mitigates this risk through the purchase of insurance, loss prevention engineering, strategic location evaluation among other process such as strategic sourcing and supply chain planning. The cost calculation of $21,500,000 references the approximate cost to insure the company against natural disasters such as floods, tornadoes, hurricanes and earthquakes, as well as considerations of other average costs to manage or mitigate the risk incurred annually, such as engineering efforts designed to mitigate risks from natural disasters including elevating critical electronic systems above the ground level. One case of this mitigation plan in action can be seen when the previously mentioned (see company-specific description section above) Owens Corning facility experienced a catastrophic flood resulting from a named storm approximately 10 years ago. The ~190,000 square foot building is located in New Jersey, and is flood-prone due to its proximity to a river system and the Atlantic Ocean. The impact of this storm meant the company had to rebuild much of the site’s systems to bring it back online, and Owens Corning needed to do so in a way that mitigated future storm risk. The company was faced with the task of building back in a resilient way that mitigates risk. We achieved this through risk management actions such as purchasing additional insurance, and using the rebuild as an opportunity to redesign the electrical systems: much of the electrical system was elevated to be more resilient against potential future floods. As a result, this site was able to come back online and is now more resilient, which we define as being more prepared for future flood events, having responded to the physical risk with appropriate mitigation measures. The site has not experienced a major flooding event since these changes were made.

Comment

Identifier

Risk 2

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Current regulation

Enhanced emissions-reporting obligations

Primary potential financial impact

Increased indirect (operating) costs

Company-specific description

While Owens Corning always strives to go beyond compliance, many of Owens Corning's products are made from heavy manufacturing processes that generate carbon emissions. Owens Corning is subject to or has chosen to voluntary participate in Emissions Trading Schemes (ETS) around the world, including in Europe, Canada, United States and South Korea. Expansions to these schemes, or similar trading schemes being setup in other nations could impact Owens Corning by increasing our operating costs in those countries by reducing our carbon allowances.

Facilities under EU ETS continue to improve their energy and GHG efficiency. However, allowances are decreasing year on year by a flat rate without consideration of production increase. This explains the emissions being higher than allowances. With the further reductions in allowances through Phase 4 of the European ETS, our annual allowances were reduced, which requires us to purchase credits. Phase 4 applies to the period 2021 to 2030. We had ten plants in 2022 that were impacted by the EU ETS: Composites plants L'Ardoise, Besana, and Apeldoorn, and Insulation plants Tessenderlo, Klasterec, Hallekis, Hassleholm, Parainen, Vilnius, and Trzemeszno. Both composite glass and insulation production create GHG emissions.

Time horizon

Long-term

Likelihood

Virtually certain

Magnitude of impact

Medium-high

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

65,771,000

Potential financial impact figure – maximum (currency)

121,723,000

Explanation of financial impact figure

Facilities under EU ETS continue to improve their energy and GHG efficiency. However, allowances are decreasing year on year by a flat rate without consideration of production increase. This explains the emissions being higher than allowances. In most cases the, difference is compensated by surplus allowances from previous years. With the further reductions in allowances through Phase 4 of the ETS, we forecast that our carryover allowances will be reduced after 2021, requiring us to purchase allowances. Phase 4 is imminent and applies to the period 2021-2030.

We estimate that, if no further corrective actions are taken, we will see an average shortage of about 82,777 tonnes of CO2e per year from 2023 to 2030. With an estimated cost per ton of CO2e rising to 101-200 euros per tonne by 2030, and an average low cost of 92.26 euros per ton for 2023-2030, and an average high cost of 170.75 euros per ton for 2023-2030, the potential impact over that 8-year period could be between €61.1 - €113.07 million, or $65.771 - $121.723 million at current exchange rates. (1.0765 US Dollars per Euro as of June 12, 2023). This figure assumes business-as-usual operations in the future, which does not reflect Owens Corning's climate strategy: we have a proactive strategy to drastically reduce our emissions, evidenced by our Science-Based Target aligned with the 1.5-degree scenario, in which we commit to reducing our Scope 1 and 2 emissions 50% by 2030, against a 2018 base year.

Cost of response to risk

16,000,000

Description of response and explanation of cost calculation

A primary way we have been managing this risk is by emission reduction projects. In 2022, we implemented 12 projects, generating annual energy savings of over 17,000 MWh and reducing greenhouse gas emissions by over 4,400 MT per year. Generally, we invest in energy/GHG reduction projects costing ~$2-3MM/year. In 2022, we invested $9k in waste heat recovery, $435k in lighting, $540k in pumps, motors and drives, and similar infrastructure improvements, and $973k in process optimizations for a total of $1.957MM invested in efficiency and GHG reduction projects across the company. If the average annual investment in energy GHG reduction projects is $2 million per year between 2023-2030, we would expect to invest approximately $16,000,000 in energy and GHG reduction projects. In addition to energy efficiency and GHG reduction efforts, changes to the manufacturing process are needed to make significant reduction in carbon emissions, and these changes will require more investment.

One case study of a change implemented to manage emission-limiting risk in the EU ETS can be seen in a furnace rebuild undertaken in 2019 in our Trzemeszno, Poland location, in which a fuel-fired furnace was transitioned to an Electric Arc Furnace (EAF). As part of our response to this we expect to reduce our CO2 emissions by 75-80% with this line compared to a traditional coke-fired furnace line. As a result, the new line's EAF

will reduce carbon intensity by roughly 10% for all Paroc Insulation in Europe. The new EAF is the third stone wool electric furnace for Owens Corning in Europe and the second on the Owens Corning site in Poland. As we plan for the growth of the EU ETS in the long-term, we are managing this risk with financial planning and operations changes like the electrification of furnaces. Reduction of CO2 emissions will reduce the amount of allowances Owens Corning will need to purchase.

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

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

More aggressive energy efficiency building codes and regulations to mitigate climate risk drive the sale and use of Owens Corning's insulation and other energy saving products and systems. OC has identified and is working with the U.S. Government to update energy codes through three federal mortgage offerings: U.S. Federal Housing Authority (FHA), US Veterans Affairs Department (VA), and the U.S. Department of Agriculture (USDA) Each federal mortgage offering has minimum requirements building energy efficiency, including energy codes. These agencies reference old energy codes that should be updated to reference the 2021 International Energy Conservation Code

(IECC). These updates would lead to increased revenue for the company due to the increased demand for our energy-efficient insulation products for homes built to qualify for FHA, VA, and USDA loans across the U.S., creating an incentive for builders in states with older energy codes to build beyond their state code standards, thereby using more of our products.

During the Biden administration, OC has been collaborating with Trade Associations and NGOs, primarily through the North American Insulation Manufacturers' Association (NAIMA), to ask the administration to update energy code standards to the 2021 IECC for FHA, VA, and USDA mortgages. These are important because at the state level, states' energy codes are often still referencing old energy codes from 2009 or earlier. The federal mortgage code update would incentivize builders in these states to build to the 2021 IECC code to enable their homes to qualify for FHA/VA/USDA mortgages, and in doing so these builders would have higher demand for insulation products.

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)

Potential financial impact figure – minimum (currency)

48,300,000

Potential financial impact figure – maximum (currency)

64,400,000

Explanation of financial impact figure

The range of values provided for this opportunity represent the opportunity for additional pounds of insulation being added in new construction for the states with older codes updating to the projected next code level, based on an analysis of state building code data. This is the desired outcome of the FHA, VA, and USDA mortgage energy code strategy. It should be noted that this comparative pounds of insulation analysis from the older to newer codes for the states is 'book to book', meaning the assumption is that buildings are all built to the code level: this may not represent actual builder practices in each state but is assumed for this estimate.

When assessing expected new homes in states where federal mortgage energy

efficiency requirements would impact housing insulation levels, we project ~140 million lbs of insulation being added in new constructions over the next 3 years. Given this figure and assuming Owens Corning to have 30-40% market share, based on our historic share of the US insulation market, we can then estimate 42-56 million pounds of additional insulation being demanded if this opportunity is realized. Given an internal data-based calculation which finds that on average $1.15 of revenue is earned per pound of insulation sold in the US, the size of this opportunity is then calculated to be $48.3 – 64.4 MM.

Cost to realize opportunity

3,655,599

Strategy to realize opportunity and explanation of cost calculation

Owens Corning actively engages with NGO's, State and federal agencies and legislative bodies through its Governmental Affairs organization for increased climate, energy conservation, and fire and life safety requirements. In 2022, we continued to partner with builders throughout the US and Canada who are building in a wide variety of climates, regions and communities. The cost of $3.656 million to realize this opportunity represents the amount spent in 2022 lobbying the various legislative bodies, and in exploring and forming partnerships with organizations and various trade associations who also participate in advocacy. Lobbying and interest representation was $ 689,090 in 2022, and spending with trade associations and tax-exempt groups was around $2.976 million, for a total of $3.656 million spent to realize advocacy efforts.

Improving building codes is a significant element of our company's strategy as it can drive insulation sales growth. One example in recent years which can be used as a case study can be seen in the 2021 update to energy efficiency standards for all federal buildings. In previous years, federal buildings' energy efficiency standards were fragmented across agencies, and were not referencing the 2021 IECC. OC identified this as an opportunity, and worked to unify the federal agencies' energy efficiency standards and mainstream them to drive insulation sales and energy efficient structures. To achieve this, OC worked with NGOs like NAIMA to ask the Biden administration to make these updates to federal buildings' energy codes, and in 2021 the update was made. As a result, all new federal buildings must meet 2021 IECC standard and/or the 2019 ASHRAE 90.1, and these more efficient energy standards will drive increased demand for our energy-efficient insulation products.

Comment

Identifier

Opp2

Where in the value chain does the opportunity occur?

Direct operations

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

Demand for products in our roofing business is generally driven by both residential repair and remodeling activity and by new residential construction. As the effects of climate change are felt in the increased frequency and severity of storms, Owens Corning as a building materials company may see an increased demand for our products in our roofing business due to storm related roof damage. As a company with the majority of our roofing business located within the United States, we are therefore affected by the effects of weather in the US, which vary by region. Storms are one of the drivers of roofing product sales, along with renovation and new home builds. Because of this, we are in a position to increase sales of roofing products when seasonal storms such as hail and hurricanes affect the US, especially the South which is prone to severe weather, and increases in these weather events would lead to higher sales. All of our architectural laminate shingles are designed to protect against high winds seen in these conditions. Our TruDefinition® Duration FLEX®, and TruDefinition® Duration STORM® shingles also meet the industry's highest classification for impact resistance, and are preferred products in many hail-prone regions. With elevated storm activity, our entire shingle product line could see increased revenues.

Time horizon

Long-term

Likelihood

About as likely as not

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

1

Potential financial impact figure – maximum (currency)

70,000,000

Explanation of financial impact figure

The unpredictability of the storm season has continued to be a significant factor in the volatility of the roofing market. Storm activity accounts for less than 10% of Owens Corning's revenue. Specific to hurricanes, external sources suggest that destructive storms will increase in frequency and/or severity due to climate change. The IPCC projects "an 80% increase in the frequency of Saffir-Simpson category 4 and 5 Atlantic hurricanes over the next 80 years," and NOAA projects "Tropical cyclone intensities globally will likely increase on average (by 1 to 10% according to model projections for a 2 degree Celsius global warming). This change would imply an even larger percentage increase in the destructive potential per storm, assuming no reduction in storm size." Going by these sources, this range of values represents up to a 10% increase in storm activity in the long term. For every 5% increase in storm activity we estimate an increase in demand for roofing products which would increase revenue by approximately $35 million: thus the top estimated value in this range is $70 million for a 10% increase.

Cost to realize opportunity

0

Strategy to realize opportunity and explanation of cost calculation

Owens Corning has a strong network of facilities throughout the United States. Through sophisticated supply chain planning, production across our facilities can be redirected to serve a storm damaged market. For example, hurricane Katrina led to a surge in demand for replacement shingles due to storm damage. As a result, shingles from different plants within the same region needed their coloring to be completely interchangeable, so if shingles from two or more different plants end up on the same roof, they would match color as intended. This resulted in the development of "regional shingles", which is a shingle produced at different manufacturing facilities, tested and proven to be color-matched to allow mixing between all or some of the producing manufacturing facilities in a specific region. With state-of-the-art technology and stringent testing requirements, Owens Corning Roofing is able to provide regional shingles that allow more efficient service during storm surge demand, more flexibility for multiple locations, and easy inventory management. We developed and rolled out the regional shingle approach for our roofing locations in 2005, and maintain this strategy today. As a result, our regional shingle gives us the flexibility to have a competitive advantage in storm reaction time, as shingle demand can be met from multiple sites, should severe weather lead to a surge in demand.

Cost to realize opportunity is $0 incremental management costs. Increased freight costs are able to be passed through in price when serving storm-ravaged areas. Furthermore, increased storm activity is a passive change in market conditions and has no associated cost to realize.

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

No, but our strategy has been influenced by climate-related risks and opportunities, and we are developing a climate transition plan within two years

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

Owens Corning is committed to taking meaningful climate action informed by science to limit global warming to 1.5°C above pre-industrial levels. This ambition led to the development of our 2030 GHG emissions reduction goal for our Scope 1 and 2 emissions, which is approved by the Science-Based Targets Initiative as aligned with the 1.5° scenario, and calls for 50% absolute reductions in our Scope 1 and 2 emissions by 2030. Our current Scope 3 target calls for a 30% reduction by 2030, and is approved by the Science-Based Targets Initiative as well. In 2022, we reduced our Scope 1 and 2 emissions by 22% from our base year of 2018. Our Scope 3 emissions were higher by 9% in the same timeframe, but we have a strategic roadmap to achieve our 2030 goal.

We are proud to be among the companies heeding the call for greater urgency and impact, continuing to use the latest climate science in setting targets for greenhouse gas emissions reductions, and measuring and reporting our progress in the science-led decarbonization of our company. As we, and other great companies around the world, look to imagine a decarbonized future, we are energized by all levers yet to be pulled on the path to carbon neutrality, and look forward to a global consensus definition of carbon neutrality for companies (currently under development).

Historically, our process for setting climate targets has not involved Annual General Meeting Resolutions: we leverage our existing sustainability governance structure, in which the Board of Directors, CEO, and CSO all collaborate on creating our company's sustainability vision and values, developing sustainability strategy and policies, and redefining targets or goals. This approach has been successful, as we have both set and met stringent climate goals.

Regarding the global low carbon transition, Owens Corning expects to publish a low-carbon transition plan within the next two years, as consensus grows in transition plan methodologies and related net-zero commitments. Our existing 2030 GHG reductions target for Scope 1 and 2 is aligned with the 1.5° scenario, and therefore the further consideration of a 1.5° world by 2050 - and our company's role within it - is a logical

next step in our approach to climate action.

C3.2

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

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

C3.2a

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

Climate-related scenario	Scenario analysis coverage	Temperature alignment of scenario	Parameters, assumptions, analytical choices
Physical climate scenarios RCP 2.6	Company-wide		In 2020, Owens Corning began working The Ohio State University to evaluate efforts in assessing resiliency of current strategies against a range of climate-related scenarios and time horizons. The scenario analyses focused on "Shared Socioeconomic Pathways" (SSPs) for the scenario analysis: SSP1-2.6, SSP2-4.5, and SSP5-8.5. The use of these SSP models aligns our analyses with the most recent 2021 IPCC sixth assessment report (AR6). These initial analyses referenced time horizons of the current period, 2036, and 2051. The initial scenario analysis work focused on two areas: physical climate risks posed to our company locations, and potential impacts of climate change on demand for our roofing products influenced by severe weather activity. In the first project, OSU conducted a climate scenario analysis for physical climate risk across facilities over the same emission pathways and time horizons. The findings will , be incorporated into our risk assessment for our plants. Variables assessed included factors like winds, cyclones and severe weather, flood risk, drought risk, and maximum temperature. Each of these factors can change for each facility in response to different climate scenarios, and awareness of these potential changes at the site level is a key step to ensuring preparedness at the enterprise level. We are currently

			evaluating more detailed analysis for specific facilities. For the second scenario analysis, OSU was able to model the potential changes to US roofing product demand by region for each emission pathway and time horizon. This 2021 analysis will help us evaluate how drivers of roofing shingle demand potentially change as variables like wind, tropical cyclones, and hail fluctuate in different climate scenarios. Outcomes of this analysis will provide Owens Corning the ability to ensure our production capability can adapt to climate change and ensure we successfully serve our markets as their demand for roofing products changes due to climate change. We are still evaluating how best to incorporate these findings within our business units' decision making process.
Physical climate scenarios RCP 4.5	Company-wide		In 2020, Owens Corning began working The Ohio State University to evaluate efforts in assessing resiliency of current strategies against a range of climate-related scenarios and time horizons. The scenario analyses focused on "Shared Socioeconomic Pathways" (SSPs) for the scenario analysis: SSP1-2.6, SSP2-4.5, and SSP5-8.5. The use of these SSP models aligns our analyses with the most recent 2021 IPCC sixth assessment report (AR6). These initial analyses referenced time horizons of the current period, 2036, and 2051. The initial scenario analysis work focused on two areas: physical climate risks posed to our company locations, and potential impacts of climate change on demand for our roofing products influenced by severe weather activity. In the first project, OSU conducted a climate scenario analysis for physical climate risk across facilities over the same emission pathways and time horizons. The findings will , be incorporated into our risk assessment for our plants. Variables assessed included factors like winds, cyclones and severe weather, flood risk, drought risk, and maximum temperature. Each of these factors can change for each facility in response to different climate scenarios, and awareness of these potential changes at the site level is a key step to ensuring

			preparedness at the enterprise level. We are currently evaluating more detailed analysis for specific facilities. For the second scenario analysis, OSU was able to model the potential changes to US roofing product demand by region for each emission pathway and time horizon. This 2021 analysis will help us evaluate how drivers of roofing shingle demand potentially change as variables like wind, tropical cyclones, and hail fluctuate in different climate scenarios. Outcomes of this analysis will provide Owens Corning the ability to ensure our production capability can adapt to climate change and ensure we successfully serve our markets as their demand for roofing products changes due to climate change. We are still evaluating how best to incorporate these findings within our business units' decision making process.
Physical climate scenarios RCP 8.5	Company-wide		In 2020, Owens Corning began working The Ohio State University to evaluate efforts in assessing resiliency of current strategies against a range of climate-related scenarios and time horizons. The scenario analyses focused on "Shared Socioeconomic Pathways" (SSPs) for the scenario analysis: SSP1-2.6, SSP2-4.5, and SSP5-8.5. The use of these SSP models aligns our analyses with the most recent 2021 IPCC sixth assessment report (AR6). These initial analyses referenced time horizons of the current period, 2036, and 2051. The initial scenario analysis work focused on two areas: physical climate risks posed to our company locations, and potential impacts of climate change on demand for our roofing products influenced by severe weather activity. In the first project, OSU conducted a climate scenario analysis for physical climate risk across facilities over the same emission pathways and time horizons. The findings will , be incorporated into our risk assessment for our plants. Variables assessed included factors like winds, cyclones and severe weather, flood risk, drought risk, and maximum temperature. Each of these factors can change for each facility in response to different climate scenarios, and awareness of these potential

			changes at the site level is a key step to ensuring preparedness at the enterprise level. We are currently evaluating more detailed analysis for specific facilities. For the second scenario analysis, OSU was able to model the potential changes to US roofing product demand by region for each emission pathway and time horizon. This 2021 analysis will help us evaluate how drivers of roofing shingle demand potentially change as variables like wind, tropical cyclones, and hail fluctuate in different climate scenarios. Outcomes of this analysis will provide Owens Corning the ability to ensure our production capability can adapt to climate change and ensure we successfully serve our markets as their demand for roofing products changes due to climate change. We are still evaluating how best to incorporate these findings within our business units' decision making process.
Transition scenarios IEA APS	Company-wide		In 2020, Owens Corning began working The Ohio State University to evaluate efforts in assessing resiliency of current strategies against a range of climate-related scenarios and time horizons. The scenario analyses focused on "Shared Socioeconomic Pathways" (SSPs), which reference NDCs found in IEA APS, for the scenario analysis: SSP1-2.6, SSP2-4.5, and SSP5-8.5. The use of these SSP models aligns our analyses with the most recent 2021 IPCC sixth assessment report (AR6). These initial analyses referenced time horizons of the current period, 2036, and 2051. The initial scenario analysis work focused on two areas: physical climate risks posed to our company locations, and potential impacts of climate change on demand for our roofing products influenced by severe weather activity. In the first project, OSU conducted a climate scenario analysis for physical climate risk across facilities over the same emission pathways and time horizons. The findings will , be incorporated into our risk assessment for our plants. Variables assessed included factors like winds, cyclones and severe weather, flood risk, drought risk, and maximum temperature. Each of these factors can change for each facility in response to different

			climate scenarios, and awareness of these potential changes at the site level is a key step to ensuring preparedness at the enterprise level. We are currently evaluating more detailed analysis for specific facilities. For the second scenario analysis, OSU was able to model the potential changes to US roofing product demand by region for each emission pathway and time horizon. This 2021 analysis will help us evaluate how drivers of roofing shingle demand potentially change as variables like wind, tropical cyclones, and hail fluctuate in different climate scenarios. Outcomes of this analysis will provide Owens Corning the ability to ensure our production capability can adapt to climate change and ensure we successfully serve our markets as their demand for roofing products changes due to climate change. We are still evaluating how best to incorporate these findings within our business units' decision making process.

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

Focal questions for this work were:

What kind of physical risks do our sites have potential to be exposed to across a range of climate scenarios and timelines?

What kind of impacts on the roofing market might increased weather activity have, given a range of climate scenarios and timelines?

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

To address these questions, Owens Corning began work with The Ohio State University in 2020 to expand our efforts to assess the resilience of our strategies against a range of climate-related scenarios and time horizons. The scenario analyses focused on "Shared Socioeconomic Pathways" (SSPs) for the scenario analysis: SSP1-2.6, SSP2-4.5, and SSP5-8.5. The use of these SSP models aligns our analyses with the most recent 2021 IPCC sixth assessment report (AR6). These initial analyses referenced time

horizons of the current period, 2036, and 2051.

In the first project, climate scenario analysis was conducted for physical climate risk to our facilities over the same emission pathways and time horizons, and these facilities level findings will be incorporated into our risk determination for our plants. Variables assessed included factors like winds, cyclones and severe weather, flood risk, drought risk, and maximum temperature. Each of these factors can change for each facility in response to different climate scenarios, and awareness of these potential changes at the site level is a key step to ensuring preparedness at the enterprise level. We are currently developing an action plan to ensure consideration of all potential climate risks for relevant sites, which will help us to be more resilient against climate-related physical impacts in the long-term.

For the second scenario analysis, researchers modelled the potential changes to US roofing product demand by region for each emission pathway and time horizon. This analysis can help us to understand how drivers of roofing shingle demand could potentially change as variables like wind, tropical cyclones, and hail fluctuate in different climate scenarios.

The roofing finance team has used the scenario analysis report for perspective on climate and relative to the advancement of storm events that we are seeing in our data sets. In recent years storm events have continued to play a bigger part in our assessment and planning for market size and activity. The scenario analysis was part of a discussion of how Owens Corning should take action going forward.

Outcomes of this analysis can help Owens Corning to ensure our production capability can adapt to climate change and ensure we successfully serve our markets as their demand for roofing products changes due to climate change. The exact way in which these findings will be incorporated into our business decisions is still being determined, but undertaking the analysis was a key first step achieved in 2021. The results of this assessment help us to be better prepared to respond to a range of potential roofing market situations in future years, given the development of climate change and related storm impacts.

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	In response to the identified risk of potential for increased energy efficiency and emissions regulations and standards,

		Owens Corning has made dramatic improvements to its product lines across the enterprise, such as PINK Next Gen™ Fiberglas™, released in 2021, which is certified made with 100% renewable electricity through the use of power purchase agreements, and it has earned UL GREENGUARD® Gold certification for low volatile organic compounds. In addition, we are always working to develop new products to comply with climate-related regulation and reduce emissions. The validation of new, lower-GWP blowing agent formulation, such as those used in Foamular NGX, is one example of a new product with significantly lower global warming potential, and reduced Scope 1 emissions in production. The successful development of this product also addresses a short-term climate transition risk, by helping the company to stay ahead of regulations of this sort elsewhere. The time horizon for the conversion of our legacy blowing agent to the new Foamular NGX is active currently, with more activity expected to convert in the short term. In 2020, we also introduced Paroc® Natura™ insulation. This carbon-neutral certified line of stone wool insulation uses low-carbon melting technology, green electricity, recycled waste materials, and new technologies to minimize the amount of CO2 emitted during the manufacturing process. Owens Corning's Cool Roof shingles is an energy saving solution, some of which meet ENERGY STAR® requirements for solar reflectance. In 2021, OC launched Duration® COOL Plus Midnight color providing a new dark color offering in this energy saving line. OC offers a wide array of shingle choices that meet or exceed an aged SRI of 20 — the current aged Solar Reflectance Index minimum required for the Green Building Standards Code of Los Angeles County and Los Angeles City Cool Roofs Ordinance. In 2022, we introduced PINKBAR®+ Fiberglas™ Rebar, which is lighter and stronger than traditional steel rebar, offering sustainability advantages for optimal performance. Because of its lighter weight, it can be delivered with fewer trucks, which helps reduce the GHG emissions associated with transportation.

		These innovations help our customers save energy and avoid emissions.
Supply chain and/or value chain	Yes	We believe transportation of materials and engagement with a supplier can be done more efficiently if the supplier is nearby, which enhances sustainability across the supply chain and minimizes the impact of storms and natural disasters. Another example of how we manage climate-related risks in the value chain can be seen through our regional shingle strategy. Hurricane Katrina led to a surge in demand for replacement shingles due to storm damage. As a result, shingles from different plants within the same region needed their coloring to be completely interchangeable, so if shingles from two or more different plants end up on the same roof, they would match color as intended. This resulted in the development of “regional shingles”, which is a shingle produced at different manufacturing facilities, tested and proven to be color-matched to allow mixing between all or some of the producing manufacturing facilities in a specific region. With state-of-the-art technology and stringent testing requirements, Owens Corning Roofing is able to provide regional shingles that allow more efficient service during storm surge demand, more flexibility for multiple locations, and easy inventory management. We developed and rolled out the regional shingle approach for our roofing locations in 2005, and maintain this strategy today. As a result, our regional shingle gives us the flexibility to have a competitive advantage in storm reaction time, as shingle demand can be met from multiple sites, should severe weather lead to a surge in demand. Another way in which climate-related risks and opportunities influence our strategy in the value chain can be seen in the recent development of our 2030 long-term sustainability goals. A Sustainability Materiality Assessment yielded responsible sourcing as a material topic, along with combating climate change: these two areas combine to inform a 2030 goal to reduce Scope 3 emissions from our supply chain 30% by 2030 against a 2018 base year.
Investment in R&D	Yes	Owens Corning has invested in energy-efficient, performance-driven products such as Cool Roof Collection™ shingles and WindStrand® high performance glass fiber roving. Currently, Owens Corning is investing substantially in R&D to respond to the climate-related risks

		and opportunities that have been identified through our ERM. We intend to produce new processes and products in response to these risks and opportunities in the short term through the long term, as the world transitions to increased climate action. The risk management process has had a moderate impact on how funds are invested in R&D, as the risk management process often leads to mitigation needs and identified business opportunities. For example, the investment in R&D for WindStrand® was driven in part by climate change-related risk and opportunity evaluations. This innovative material allows wind blade manufacturers to use 30% fewer layers of material in the blade molds, while delivering the same quality and performance as standard fabrics. This in turn represents a 50% savings in labor and production time for the blades. In March 2021, we introduced WindStrand® 4000, as well as Ultrablade® 2 and Ultraspar™ 2, three high-performance materials that help wind blade manufacturers develop longer, stiffer, stronger blades. This in turn helps make wind energy more cost-effective. Another significant example of climate-related R&D with near term implications is the development of the newly announced Foamular NGX®, a foam insulation a greater than 80% reduction in global warming potential (GWP), compared to legacy FOAMULAR® insulation products. NGX was developed to comply with expected and actual blowing agent regulation, such as a phaseout in Canada that went into effect in 2021, and in several US states (CA, NY, NJ, MA, WA, VT, MD, and CO) that have enacted similar regulations to Canada. Foamular NGX® is available in Canada and all US states affected by the anticipated regulation, managing the transition risk. The investment in developing a product that meets and exceeds the stringent regulations going into effect in 2021 and 2022 reflects Owens Corning's continued commitment to offering building materials that merge the highest levels of performance and our corporate sustainability goals.
Operations	Yes	Identified climate related risks and opportunities have had a significant impact for Owens Corning. To help meet our 2030Science-Based Target for a 50% Scope 1 and 2 GHG reduction, which was developed in response to climate risks for our company, we have made major investments in renewable energy. In 2015, Owens Corning signed power

		purchase agreements for renewable electricity totaling 250 megawatts. In Q4 of 2016, two wind farms came online and are now providing renewable energy into the grid, impacting emissions and renewable energy in 2021. Furthermore, in 2021, we entered into two wind VPPAs, one in Finland and one in Sweden, which bring in 43 MW and 48 MW of renewable electricity capacity, respectively. We have also entered into a VPPA in Spain that is expected to come on line in stages throughout 2023 and 2024. The agreement involves three separate VPPAs with a contracted capacity of 81.9 MW, which are collectively expected to produce 223 GWh per year. Owens Corning continues to look for opportunities to expand our renewable portfolio in the short term, reviewing several on-site and off-site programs as we work towards our goal of 100% renewable electricity by 2030, and a 50% reduction in Scope 1 and 2 emissions in the same timeframe. In addition to growing our renewable electricity portfolio, in support of our goal of sourcing 100% renewable electricity by 2030, we are also changing our operations strategy in response to climate risks and opportunities through the electrification of assets. A recent example can be seen with construction of a new energy-efficient Electric Arc Furnace (EAF) in Trzemeszno, Poland, in 2019. We expect to reduce our CO2 emission by 75-80% with this line compared to a traditional coke-fired furnace line. Moreover, the new line's EAF will reduce carbon intensity by roughly 10% for all Paroc Insulation in Europe. The new EAF is the third stone wool electric furnace for Owens Corning in Europe and the second on the Owens Corning site in Poland. In 2021, we entered into VPPAs to source renewable electricity for the EAF, thereby avoiding grid emissions associated with electricity. As we plan for the further development of the EU ETS in the long-term (see risk 2 in 2.3a), we are proactively managing this risk with financial planning and operations changes like the electrification of the Trzemeszno furnace.

C3.4

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

	Financial planning elements that	Description of influence

	have been influenced	
Row 1	Revenues Direct costs Indirect costs Capital expenditures Acquisitions and divestments Assets Liabilities	Revenues: Owens Corning has incorporated climate risks and opportunities into our financial planning process. Our new product developments are factored into our forecasting, as previous climate related products, like ECOTOUCH® PINK® Insulation, were when they were being developed. Currently Low Carbon Products, which were introduced in 2017 and made up 27% of 2022 revenues, have also been included in future revenue projections at a forecasted rate of growth. These risks and opportunities have a moderate impact on revenues in the financial planning process. We also monitor products that avoid emissions in the value chain, such as fiberglass products, ENERGY STAR shingles, and several composites products. These products accounted for 63% of revenues in 2022. Direct Costs: Owens Corning incorporates the impact of the identified risks into its direct operating costs for financial planning models based on a number of factors including the likelihood, timeframe, and magnitude of the financial impact of the risk or opportunity. For example, in the event of reduced production capacity due to climate-related increases in storm activity and severity, Owens Corning would potentially see increased (Direct) Operating Costs with substantial magnitude of impact in the affected regions. The increase would be due to cleanup costs, as well as alternate transportation costs, increased maintenance, increased sourcing costs due to supply chain strain, and likely increased production costs as the repaired line is brought back up to production. This estimated impact would be included in the financial planning process in various scenarios and analyses. When Hurricane Sandy damaged our Kearny roofing plant, we had a good example to use to adjust our planning estimates for future potential severe weather events and their impact on operating costs. Indirect Costs: Indirect costs like insurance have been influenced by climate-related risks, such as extreme weather events and their increased likelihood. A recent example is that at one Owens Corning facility the company experienced a catastrophic flood approximately 10 years ago. In the years since the flood, purchasing flood insurance for this facility has become more difficult leading to constraints in capacity and increased premiums to achieve coverage. This indirect cost not only became more difficult to purchase, the available protection capacity was altered entirely due to the increased likelihood of climate-related weather events like flooding. This example influences indirect cost financial planning in any OC site with similar natural disaster risk.

		Capital Expenditures: CapEx is influenced by climate risks and opportunities. One particular example is a regulatory transition risk regarding our blowing agent blend, which is being phased out in the short term as a component of climate/environmental regulation. We included in the planning process a few years ago the new equipment required to use Foam blowing agent with a lower GWP, as the need for blowing agent changes was identified in our risk and opportunities analyses. The first such product with lower GWP blowing agent, Foamular NGX® ,was announced in mid-2020. All our plants in regions affected by existing or emerging regulation are capable of using the new blowing agent as of early 2022. As a result, we can manage this risk into the future, and are doing so already, as with the 2021 release of Foamular NGX® for Canada and the U.S. Our response to identified climate related risks and opportunities like these has had a substantial impact on our financial planning of capital allocation. Acquisitions & Divestments: Identified climate risks and opportunities have had a moderate impact on our financial planning for acquisitions and divestments. Over the last several years acquisitions have been an important part of our growth strategy. We look for acquisition opportunities with businesses that meet specific criteria: they must provide stable and attractive margins and strong synergies, address our target growth areas, and meet our strategic objectives. We evaluate our acquisition candidates through multiple lenses, including sustainability, and we ask a critical question: Will this business be better with us as its owner? As sustainability guides our operations, we want to be confident that we can improve the environmental, health, and safety (EHS) performance, employee experience, customer experience, and community impact of the companies that join us. Can we bring a new perspective on safety and health? Can we improve energy efficiency and lower waste in operations? Owens Corning has purchased several companies in the last 3 years. The acquired businesses successfully expand the capabilities and global reach of our three business segments (Composites, Insulation, and Roofing). Improving EHS performance and enhancing the employee experience are critical elements in our acquisition integration process. The identified climate change related opportunities, including more aggressive building codes, increased building materials demand due to potentially increased storm activity and severity, and improved demand for existing products due to our reputation for sustainable products were all factors in our acquisitions to expand our product line. These opportunities continue to be involved in our financial planning process as we continue to evaluate and analyze additional acquisition targets for the medium and long term.

		Assets & Liabilities: Climate risks and opportunities have had a moderate impact on our financial planning for assets and liabilities, primarily through our acquisitions. Owens Corning has purchased several companies in the last 4-5 years, including InterWrap, Pittsburgh Corning, Paroc, Vliepa, and several companies in 2022 including Natural Polymers and Weardeck. With these acquisitions, Owens Corning reported $10.752 billion in total assets in 2022. These companies were determined to be important to expand our portfolio of energy-saving and performance-driven products, an opportunity we consider in the Long-Term horizon. These opportunities continue to be involved in our financial planning process as we continue to evaluate and analyze additional acquisition targets.

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
Row 1	No, but we plan to in the next two years

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

2019

Target coverage

Company-wide

Scope(s)

Scope 1

Scope 2

Scope 2 accounting method

Market-based

Scope 3 category(ies)

Base year

2018

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

2,813,111

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

963,720

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

2,026,093

Base year Scope 3, Category 2: Capital goods emissions covered by target (metric tons CO2e)

219,941

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)

391,854

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

130,071

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

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

13,708

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

25,083

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target (metric tons CO2e)

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

321,120

Base year Scope 3, Category 10: Processing of sold products emissions covered by target (metric tons CO2e)

410,382

Base year Scope 3, Category 11: Use of sold products emissions covered by target (metric tons CO2e)

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

202,469

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 14: Franchises emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 15: Investments emissions covered by target (metric tons CO2e)

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

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

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

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

3,776,832

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)

100

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)

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)

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)

100

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)

100

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)

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)

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)

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)

Base year Scope 3, Other (upstream) emissions covered by target as % of total base year emissions in Scope 3, Other (upstream) (metric tons CO2e)

Base year Scope 3, Other (downstream) emissions covered by target as % of total base year emissions in Scope 3, Other (downstream) (metric tons CO2e)

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

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

100

Target year

2030

Targeted reduction from base year (%)

50

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

1,888,416

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

2,243,458

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

715,231

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

Scope 3, Category 2: Capital goods emissions in reporting year covered by target (metric tons CO2e)

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)

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

Scope 3, Category 5: Waste generated in operations emissions in reporting year covered by target (metric tons CO2e)

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

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

Scope 3, Category 8: Upstream leased assets emissions in reporting year covered by target (metric tons CO2e)

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

Scope 3, Category 10: Processing of sold products emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 11: Use of sold products emissions in reporting year covered by target (metric tons CO2e)

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

Scope 3, Category 13: Downstream leased assets emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 14: Franchises emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 15: Investments emissions in reporting year covered by target (metric tons CO2e)

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

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

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

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

2,958,689

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]

43.3242993069

Target status in reporting year

Underway

Please explain target coverage and identify any exclusions

Owens Corning used the Absolute Emissions Contraction Method from the Science Based Target Initiative to set aggressive 2030 GHG emissions goals. Our approved targets are a commitment to reduce absolute Scope 1 and 2 GHG emissions 50% by 2030 from a 2018 base year and to reduce absolute Scope 3 GHG emissions 30% within the same timeframe. The Scope 1 & 2 target was determined by the Science Based Target Initiative to be in line with 1.5°C trajectory, and the Scope 3 target was determined to be in line with the Well-Below 2°C trajectory.

During 2022, SCS Global Services' Greenhouse Gas Verification program conducted a verification of Owens Corning's end-of-year 2022 emissions against the requirements of the Carbon Disclosure Project and the WRI/WBCSD GHG Protocol. The Verification Statement documents that SCS Global Services has conducted verification activities in compliance with ISO 14064-3:2006 Specification with guidance for the validation and verification of greenhouse gas assertions. The statement also attests that a Type 2 assurance engagement was performed on Owens Corning's performance against AccountAbility's AA1000 Principles (2018) to a moderate level. Energy use, Scope 1 and 2 greenhouse gas emissions, Scope 3 greenhouse gas emission categories 1, 3, 4, 6, 7, 9 and 12, employee engagement (% responding and % actively engaged) and types and amounts of philanthropic contributions have all been assured to a high level. All other data within the Report, including but not limited to, performance data and progress towards 2030 goals were assured to at least a moderate level.)

SCS's review of the management systems, governance documents, data collection methods, and KPI calculations have found no material errors. Owens Corning's reporting of 2022 Scope 3 greenhouse gas emissions, water use, waste, air pollution, VOCs, social performance indicators, and progress towards 2030 sustainability goals were assured at a moderate-level and no material errors or misstatements were identified. Owens Corning reported Scope 1, 2, and scope 3 categories 1, 3, 4, 6, 7, 9 and 12 GHG emissions, energy use, employee engagement (% responding and % actively engaged),and types and amounts of philanthropic contributions was assured at a high-level and this data can be considered reliable.

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

For our Scope 1 and 2 science-based target, we disclose short, medium, and long-term strategies which detail our plan to achieve the target.
Short-Term:
■ Continue converting the blowing agent used in manufacturing our XPS foam products to blowing agents with lower global warming potential (GWP).
■ Enter into additional power purchase agreements (PPAs) and virtual power purchase agreements (VPPAs) to reduce Scope 2 emissions.
■ Drive improvements through the pursuit of circular innovations within our research and development portfolio to reduce emissions from input materials.
■ Follow energy intensity strategies we have established for energy reduction and energy recovery, discussed in detail on page 54.
■ Adjust operating process conditions by increasing renewable energy ratio in our hot processes (e-boost) to reduce use of
natural gas.
Medium-Term:
■ Ensure systematic knowledge sharing across our network of facilities.
■ Consider additional renewable energy opportunities on a global basis, including longer-term agreements.
■ Continue converting the blowing agent used in manufacturing our XPS foam products to those with lower GWP. By working to develop products with reduced operational emissions and lower embodied carbon, we can make great progress toward achieving our GHG reduction goals.
■ Reduce fossil fuels by switching our natural gas processes over to electricity (for example, converting to electric melters and dryers in nonwovens production) or other innovative technologies like hydrogen or biogas, that could provide benefits across all three of our businesses.
■ Improve energy efficiency through a 20% reduction in absolute energy consumption by 2030, enabled through Total Productive Maintenance and improvements to our production processes.
■ Continue to innovate within our research and development portfolio to reduce emissions from input materials through circular innovations.
Long-Term:
■ Drive innovation in manufacturing technologies to enable conversion from fossil fuel to carbon-neutral and renewable energy to power our manufacturing processes.
■ Drive innovation through research and development on future XPS foam products to bring the GWP of blowing agent blends down even further. Work to develop and implement last-mile solutions for remaining operational emissions through exploration of new equipment, processes, and still-emerging renewable fuel technologies.

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

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

2019

Target coverage

Company-wide

Scope(s)

Scope 3

Scope 2 accounting method

Scope 3 category(ies)

Category 1: Purchased goods and services
Category 2: Capital goods
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 10: Processing of sold products
Category 12: End-of-life treatment of sold products

Base year

2018

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

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

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

2,026,093

Base year Scope 3, Category 2: Capital goods emissions covered by target (metric tons CO2e)

219,941

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)

391,854

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

130,071

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

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

13,708

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

25,083

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target (metric tons CO2e)

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

321,120

Base year Scope 3, Category 10: Processing of sold products emissions covered by target (metric tons CO2e)

410,382

Base year Scope 3, Category 11: Use of sold products emissions covered by target (metric tons CO2e)

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

202,469

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 14: Franchises emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 15: Investments emissions covered by target (metric tons CO2e)

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

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

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

3,740,720

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

3,740,720

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

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

Base year Scope 3, 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)

100

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)

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)

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)

100

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)

100

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)

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)

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)

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)

Base year Scope 3, Other (upstream) emissions covered by target as % of total base year emissions in Scope 3, Other (upstream) (metric tons CO2e)

Base year Scope 3, Other (downstream) emissions covered by target as % of total base year emissions in Scope 3, Other (downstream) (metric tons CO2e)

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

100

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 (%)

30

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

2,618,504

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

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

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

2,350,004

Scope 3, Category 2: Capital goods emissions in reporting year covered by target (metric tons CO2e)

94,788

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)

329,862

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

151,712

Scope 3, Category 5: Waste generated in operations emissions in reporting year covered by target (metric tons CO2e)

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

9,172

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

22,993

Scope 3, Category 8: Upstream leased assets emissions in reporting year covered by target (metric tons CO2e)

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

419,230

Scope 3, Category 10: Processing of sold products emissions in reporting year covered by target (metric tons CO2e)

470,168

Scope 3, Category 11: Use of sold products emissions in reporting year covered by target (metric tons CO2e)

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

228,375

Scope 3, Category 13: Downstream leased assets emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 14: Franchises emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 15: Investments emissions in reporting year covered by target (metric tons CO2e)

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

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

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

4,076,304

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

4,076,304

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]

-29.9036905551

Target status in reporting year

Underway

Please explain target coverage and identify any exclusions

Owens Corning used the Absolute Emissions Contraction Method from the Science Based Target Initiative to set aggressive 2030 GHG emissions goals. Our approved targets are a commitment to reduce absolute Scope 1 and 2 GHG emissions 50% by 2030 from a 2018 base year and to reduce absolute Scope 3 GHG emissions 30% within the same timeframe. The Scope 1 & 2 target was determined by the Science Based Target Initiative to be in line with 1.5°C trajectory, and the Scope 3 target was determined to be in line with the Well-Below 2°C trajectory.

During 2022, SCS Global Services' Greenhouse Gas Verification program conducted a verification of Owens Corning's end-of-year 2022 emissions against the requirements of the Carbon Disclosure Project and the WRI/WBCSD GHG Protocol. The Verification Statement documents that SCS Global Services has conducted verification activities in compliance with ISO 14064-3:2006 Specification with guidance for the validation and verification of greenhouse gas assertions. The statement also attests that a Type 2 assurance engagement was performed on Owens Corning's performance against AccountAbility's AA1000 Principles (2018) to a moderate level. Energy use, Scope 1 and 2 greenhouse gas emissions, Scope 3 greenhouse gas emission categories 1, 3, 4, 6, 7, 9 and 12, employee engagement (% responding and % actively engaged) and types and amounts of philanthropic contributions have all been assured to a high level. All other data within the Report, including but not limited to, performance data and progress towards 2030 goals were assured to at least a moderate level.)

SCS's review of the management systems, governance documents, data collection methods, and KPI calculations have found no material errors. Owens Corning's reporting of 2022 Scope 3 greenhouse gas emissions, water use, waste, air pollution, VOCs, social performance indicators, and progress towards 2030 sustainability goals were assured at a moderate-level and no material errors or misstatements were identified. Owens Corning reported Scope 1, 2, and scope 3 categories 1, 3, 4, 6, 7, 9 and 12 GHG emissions, energy use, employee engagement (% responding and % actively engaged),and types and amounts of philanthropic contributions was assured at a high-level and this data can be considered relia

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

For our Scope 3 science-based target, we disclose short, medium, and long-term strategies which detail our plan to achieve the target.

Short-Term:

■ Create a sustainability governance framework and infrastructure within our sourcing and supply chain organizations to promote collaboration and visibility of sustainable sourcing impact.

■ Develop training and key supplier management systems to drive Scope 3 reductions, building on segmentation work that identified suppliers with high Scope 3 reduction potential.

■ Collaborate between the sourcing and supply chain organizations to develop a tool to track progress toward value chain decarbonization.

■ Realize Scope 3 improvements from new power purchase agreements (PPAs) and virtual power purchase agreements (VPPAs) that enable sourcing 100% renewable electricity, which reduces Scope 3 emissions from fuel- and energy-related activities by decreasing emissions generated from the extraction, transportation, and processing of fuel sources used to produce electricity.

■ Pursue circular economy initiatives that could reduce upstream Scope 3 emissions by using more recycled inputs to production, such as end-of-life recycling of asphalt shingles back into our manufacturing processes.

Medium-Term:

■ Continue to realize Scope 3 emissions improvements from sourcing 100% renewable electricity.

■ Leverage the Citi Sustainable Supply Chain Finance program to collaborate with suppliers and incentivize emissions reductions.

■ Realize Scope 3 emissions reductions through lower-GWP blowing agents in foam products, which in addition to reducing operational emissions, also emit lower levels of GHG in their end of-life.

■ Continue to pursue circular initiatives to reduce upstream emissions from raw material inputs to manufacturing.

■ Further optimize logistics operations to reduce the emissions of upstream and downstream transportation fleet.

■ In addition to Scope 3 savings from renewable electricity in relation to non-renewable electricity, also realize scope 3 upstream emissions savings from the electrification of processes, such as glass furnaces, coke cupolas, and material handling equipment, to reduce upstream Scope 3 emissions from sourcing and processing of coke and natural

gas.
Long-Term:
■ Continue to transparently engage with suppliers to reduce value chain emissions wherever feasible.

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

C4.2

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

Target(s) to increase low-carbon energy consumption or production

C4.2a

(C4.2a) Provide details of your target(s) to increase low-carbon energy consumption or production.

Target reference number
Low 1

Year target was set
2019

Target coverage
Company-wide

Target type: energy carrier
Electricity

Target type: activity
Consumption

Target type: energy source
Renewable energy source(s) only

Base year
2018

Consumption or production of selected energy carrier in base year (MWh)
3,411,069

% share of low-carbon or renewable energy in base year
49

Target year

2030

% share of low-carbon or renewable energy in target year

100

% share of low-carbon or renewable energy in reporting year

56

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

13.7254901961

Target status in reporting year

Underway

Is this target part of an emissions target?

Our goal to source 100% renewable electricity by 2030 is a major part of our strategy to achieve our Science-Based Target of reducing our absolute scope 1 and 2 emissions by 50% in 2030, against a 2018 base year.

Is this target part of an overarching initiative?

Science Based Targets initiative

Please explain target coverage and identify any exclusions

For our 2030 energy goal, we have moved away from the primary energy weighted-average intensity measure previously used. Switching to 100% renewable electricity, coupled with energy intensity improvements, is critical to achieving our science-based target of a 50% absolute reduction in our greenhouse gas emissions (Scope 1 and Scope 2) by 2030 based on 2018. We are focusing on changing the kind of energy we are using, as a key lever in reducing our use of non-renewable energy, in addition to our work to use less energy overall.

Some of our existing glass melters are powered by natural gas or coke, and investment in technology to convert to electric power is a complementary component of our renewable energy strategy. Our goal to source 100% renewable electricity by 2030 is also complemented by a goal to increase energy efficiency by 20% in 2030 compared to 2018. These two approaches, along with fuel switching and other low- or no-carbon fuels and technologies, will put us on the path to eventually eliminating our use of fossil fuels.

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

To expand our renewable energy platform, we have entered into four VPPAs that have added 341 MW of annual capacity. These include 125 MW of wind energy in Texas and 125 MW of wind energy in Oklahoma (both signed in 2015), as well as 43 MW of wind energy in Finland and 48 MW of wind energy in Sweden. The VPPA in Sweden reached its commercial date of operation in 2021, and Finland reached commercial date of operation in 2022. Owens Corning aspires to have contracts in place covering 100% of our global enterprise electricity by 2025, and we intend to have those contracts operational by 2030. We have also entered into a VPPA in Spain that is expected to come on line in stages throughout 2023 and 2024. The agreement involves three

separate VPPAs with a contracted capacity of 81.9 MW, which are collectively expected to produce 223 GWh per year. This agreement, along with the wind-driven VPPAs in Finland and Sweden, means that 100% of Owens Corning's European production sites and science & technology centers will be covered by contracts and VPPAs supplying guarantees of origin enabling renewable electricity. For every MWh of electricity generated by the renewable installations, we receive one EAC, which we then apply to the manufacturing of our products.
We retire all the EACs generated from our PPAs and VPPAs, which reduces our environmental footprint and the embodied carbon of our products. Guarantees of origin (GOs) are the type of EAC we receive from our Finland and Sweden wind VPPAs.
As of the end of 2022, these GOs cover 100% of the electricity demand at our site in Trzemeszno, Poland. This is a significant development for Owens Corning, as the Trzemeszno plant was the single largest user of electricity within the company and is associated with an electric grid with high levels of emissions. Due to these factors, the switch to renewable electricity for this site is especially impactful.

List the actions which contributed most to achieving this target

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	31	
To be implemented*	12	1,675.87
Implementation commenced*	7	2,079.58
Implemented*	12	4,409.31
Not to be implemented	9	

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 buildings

Lighting

Estimated annual CO2e savings (metric tonnes CO2e)

1,802.27

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)

158,072

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

435,000

Payback period

1-3 years

Estimated lifetime of the initiative

6-10 years

Comment

2 lighting projects comprise these summary figures

Initiative category & Initiative type

Energy efficiency in buildings

Motors and drives

Estimated annual CO2e savings (metric tonnes CO2e)

353.07

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)

322,639

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

539,965

Payback period

1-3 years

Estimated lifetime of the initiative

11-15 years

Comment

3 total motors and drives projects comprise these summary figures

Initiative category & Initiative type

Energy efficiency in production processes

Waste heat recovery

Estimated annual CO2e savings (metric tonnes CO2e)

44.64

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)

7,000

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

9,479

Payback period

1-3 years

Estimated lifetime of the initiative

16-20 years

Comment

1 Project

Initiative category & Initiative type

Energy efficiency in production processes

Process optimization

Estimated annual CO2e savings (metric tonnes CO2e)

2,209.33

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

Scope 1

Scope 2 (market-based)

Voluntary/Mandatory

Voluntary

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

521,282

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

972,838

Payback period

1-3 years

Estimated lifetime of the initiative

16-20 years

Comment

Six total process optimization projects comprise these summary figures

C4.3c

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

Method	Comment
Compliance with regulatory requirements/standards	Owens Corning has policies and procedures in place to ensure that our operations are conducted in compliance with all relevant laws and regulations. Through these efforts, we are able to meet our high standards for corporate sustainability and environmental stewardship. EHS professionals conduct internal environmental assessments at both the site and business levels. Our manufacturing facilities are subject to national, regional, and local laws and regulations related to the presence of hazardous materials, pollution, and protection of the environment. These laws and regulations cover air emissions, discharges to water, management of hazardous materials, handling and disposal of solid wastes, and remediation of contaminated sites. To ensure our compliance with these regulations, we rely on our EMS, which is based on the principles of ISO and helps our manufacturing facilities track progress toward our long-term sustainability goals, which require significant global reductions in our environmental impacts that go beyond compliance. Approximately 35% of our locations were certified to ISO 14001, which accounts for 49% of our employees. In addition, approximately 51% of our locations use our internal Owens Corning EMS, which is based on the principles of ISO 14001, accounting for 38% of our employees. Thus, 86% of our locations have implemented an environmental management system, accounting for 87% of our employees. Further, approximately 45% of our locations were certified to the ISO 9001 standard for a QMS

	(Quality Management System) in 2022, representing approximately 58% of our employees.
Dedicated budget for energy efficiency	Owens Corning has a dedicated budget for productivity enhancement including energy efficiency within each business unit, which vary in structure by business. For example, our composites business has a dedicated energy efficiency budget that is managed by the corresponding Energy Efficiency Program Managers. The energy portfolios are created through submission of a capital request form that evaluates ROI, location, impact of CO2, MWh reductions, timing of implementation, rebate opportunities, risk, as well as the ability to propagate initiatives across other Owens Corning plants. Next year, our insulation business will also include an energy efficiency-specific budget similar to the approach currently used by our composites business.
Employee engagement	Across our network of plants, designated energy leaders oversee the implementation of energy management activities and help identify areas for improvement. In addition, Owens Corning has energy managers who conduct assessments, facilitate Kaizen and Total Productive Maintenance activities, develop projects, and provide technical support. Several plants with medium and high energy usage also have energy teams that meet monthly Owens Corning ensures accountability and encourages further progress toward our sustainability goals. We believe that rewarding our employees for their dedication to sustainability is essential, and we recognize teams that help us meet our energy goals with companywide performance awards. In addition, sustainability goals are a factor in incentive compensation for our management team. For example, we incentivize our composites energy teams with cash rewards and recognition. Owens Corning also partners with over 250 like-minded organizations in the U.S. Department of Energy's Better Plants Program, which provides our energy leaders with tools, training and technical assistance.
Internal price on carbon	Like many companies around the world, Owens Corning has established an internal price for carbon emissions. Doing so helps us make smart decisions about our GHG reduction initiatives, as it enables us to frame challenges and opportunities in monetary terms, which are often more broadly understood than the concept of tons of emissions. In implementing an internal carbon price, we consider Scope 1, 2, and 3 emissions — the total impact of our operations and our supply chain. We have both internal and externally published reduction goals, which are aligned to drive strategy and action. We do not have an internal carbon tax or carbon charge allocated to our

	businesses. Quantifying the cost of carbon emissions with an internal carbon price helps us plan future scenarios and make informed business decisions. Our internal carbon price varies by region and considers a range of potential forecasted costs, ranging from $60 to $150 per metric ton depending on the location. A regional approach to internal carbon pricing allows us to be more accurate as we estimate and evaluate the cost of carbon for capital project planning in regions with varying carbon prices. It also places value on reducing carbon emissions in regions that do not yet have taxes or trading schemes.
Internal incentives/recognition programs	Owens Corning has annual Global sustainability awards that are available to all employees. Our awards include: 1. Environmental Leadership – This award is for an individual who showed environmental leadership through the lens of ideation, action, evaluation, and connection. Nominees were passionate about the environment, working beyond their expected responsibilities. They may have raised environmental awareness or actively participated in community environmental programs. In addition, they may have mentored other sites, colleagues, customers, or vendors in environmental leadership. These nominees led and inspired others to continuously improve OC's environmental performance. 2. Environmental Impact Improvement - This award is for an individual, team, or site that has implemented environmental processes or technology and reduced footprint or compliance risk. Nominees completed a project or established a practice that addressed a specific environmental problem in a new or innovative way. Improvements were sustainable and supported company and business strategic goals. Finally, the Composites business has an annual contest designed to drive participation for the Plant Energy Teams each year with cash awards with are managed by the Energy Efficiency Program Manager. This program evaluates, among other items: 1) Implementation of low/ no cost improvement projects 2) Energy intensity metric improvement year over year 3) Project listing for the coming year 4) Engagement in an energy program (see below) and communications 5) Implementing electrical reliability actions 6) Waste reduction improvement YoY

	Engagement in the Energy Program includes scoring for: 1) Holding site energy meetings with published minutes 2) Holding at least 1 energy kaizen or assessment 3) Participating in at least 1 kaizen event at another facility 4) Making at least 1 formal presentation for the internal energy network 5) Best practices shared across the network 6) Attending a given number of global energy network conference calls 7) Capital projects implementation 8) Completing greater than or equal to 24 hours of energy training 9) Communication internally and externally Next year, our insulation business will incorporate the same Plant Energy Team efficiency contest into their operations as well, which is a strong step to incentivize enterprise-wide energy efficiency progress.
Partnering with governments on technology development	Owens Corning continues to advocate for energy and building codes to include embodied carbon as a factor and metric when evaluating the various compliance options. In California, we have advocated for adoption of analytics that deliver the most energy savings, with a focus on peak load reduction, with longer-term inclusion of a carbon and embodied carbon component. The CA Energy Commission (CEC) included a carbon metric for their 2022 energy code, but this focuses on electric vs gas as fuel sources. Proposed legislation is now directing the CEC to include the embodied carbon of all materials, products, and equipment. In this equation, we expect fiberglass and mineral wool insulation to fare better than appliances, HVAC equipment or other measures. Owens Corning completed modeling and forecasting to lay out the problem for the CEC with respect to allowing solar/PV and battery technology into the energy code as a trade-off against envelope insulation and air sealing which deliver life-of-building energy savings and carbon reduction 24/7 – even when the power is off. The result was that the CEC created a separate category in the 2019 energy code for solar and battery storage, and no longer permitted solar to be used as a trade-off for building envelope insulation.

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

No taxonomy used to classify product(s) or service(s) as low carbon

Type of product(s) or service(s)

Other

Other, please specify

Fiberglass, extruded polystyrene (XPS) foam, cellular glass, and mineral wool, a subset of our Cool Roof Collection™ shingles product line that is ENERGY STAR rated and several composites products

Description of product(s) or service(s)

Types of emissions-avoiding products manufactured throughout our global operations include fiberglass, extruded polystyrene (XPS) foam, cellular glass, and mineral wool, a subset of our Cool Roof Collection™ shingles product line that is ENERGY STAR rated and several composites products. These products help customers avoid emissions, as Insulation by its nature reduces energy use along with corresponding emissions.

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

No

Methodology used to calculate avoided emissions

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

Functional unit used

Reference product/service or baseline scenario used

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

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

Explain your calculation of avoided emissions, including any assumptions

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

63

Level of aggregation

Group of products or services

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

No taxonomy used to classify product(s) or service(s) as low carbon

Type of product(s) or service(s)

Buildings construction and renovation

Other, please specify

Several insulation products and select shingle products from our facility in California

Description of product(s) or service(s)

A growing number of Owens Corning® products, including some of our high-density insulation products and shingles, are certified as made with 100% renewable electricity and are part of a reduced embodied-carbon portfolio. These products were certified in accordance with SCS Global Services' certification protocol. The certifications are made possible by power purchase agreements Owens Corning signed in 2015, which enabled new wind capacity in Texas and Oklahoma.

We currently have 15 products that are certified:

- EcoTouch® Metal Building Insulation.
- EcoTouch® Flexible Duct Media Insulation.
- Pink® Next Gen™ Fiberglas™ Insulation.
- Unbonded Loosefill Insulation.
- Thermafiber® Insulation.
- Thermafiber® Formaldehyde-Free Insulation.
- QuietR® Duct Board Insulation.
- QuietR® Spiral Duct Liner.
- FOAMULAR® NGX™ XPS Insulation.
- Fiberglas™ 700 Series Insulation Board.
- Fiberglas™ Insul-Quick® Insulation.
- Ceiling Board.
- Duration®, Oakridge®, and Supreme® 3-Tab shingles from our facility in California.

These certified products, which make up 27% of our total revenues, alert commercial

architects, specifiers, builders, and homeowners to lower-carbon product options as they seek to build greener structures. They also help architects design buildings with reduced life cycle impacts, in keeping with the recognized goals of the Architecture 2030 Challenge and U.S. Green Building Council's LEED® certification.

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

No

Methodology used to calculate avoided emissions

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

Functional unit used

Reference product/service or baseline scenario used

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

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

Explain your calculation of avoided emissions, including any assumptions

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

27

Level of aggregation

Group of products or services

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

No taxonomy used to classify product(s) or service(s) as low carbon

Type of product(s) or service(s)

Buildings construction and renovation

Other, please specify

Insulation produced in North America in 2021

Description of product(s) or service(s)

This group of products represents insulation produced in North America in 2021: it is a combination of glass wool batt & roll insulation, unbonded loosefill insulation, and XPS foam insulation.

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

Bespoke methodology calculating emissions savings from electricity and natural gas used for heating and cooling homes when insulating the home.

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

Use stage

Functional unit used

Pounds (lbs) of glass wool and loose fill insulation annually produced, and board-feet of foam annually produced in the case of our XPS foam products, used to insulate a house

Reference product/service or baseline scenario used

Uninsulated home baseline assumed Electricity and Natural gas emissions from heating and cooling per year

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

Use stage

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

1,050,000

Explain your calculation of avoided emissions, including any assumptions

This is a bespoke methodology calculating emissions savings from electricity and natural gas used for heating and cooling two modeled homes when insulating the homes. We enter into the model details on the production of glass wool insulation, unbonded loosefill insulation and XPS foam insulation, with key assumptions made around the electricity (in our assumptions home 1 uses 3.5 MMBTu/year and home 2 uses 4 MMBTu/year) and natural gas (in our assumptions home 1 uses 112.5 MMBTU/year and home 2 uses 127.9 MMBTU/year) demand of the homes per year, and assuming a 60 year lifespan of the homes. Outputs of this model determine the estimated CO2e emissions savings for North American insulation products produced in 2022.

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

16.9

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?

Yes, an acquisition
Yes, a divestment

Name of organization(s) acquired, divested from, or merged with

Acquired: Fiberteq, llc., Weardeck (from JR Plastics Corp), Natural Polymers, Pultron Composites (Joint Venture with Operational Control).
Divested: Gous-Kroustalny, PAROC-Izoplit, Chambery-France

Details of structural change(s), including completion dates

Owens Corning acquired Natural Polymers, a manufacturer of spray insulation, on August 1, 2022 to expand our sustainable building materials portfolio (their spray foam is has the lowest VOCs in the industry). Link to our press release: https://newsroom.owenscorning.com/all-news-releases/news-details/2022/Owens-Corning-Completes-Acquisition-of-Natural-Polymers/default.aspx. Owens Corning acquired Fiberteq, a manufacturer of wet-formed fiberglass mat, on July 15, 2022. Owens Corning acquired the Weardeck product from JR Plastics Corp on June 1, 2022. Link to press release: https://newsroom.owenscorning.com/all-news-releases/news-details/2022/Owens-Corning-Completes-Acquisition-of-WearDeck/default.aspx Owens Corning and Pultron Composites formed a joint venture to manufacture fiberglass Rebar. Link to press release: https://newsroom.owenscorning.com/all-news-releases/news-details/2022/Owens-Corning-and-Pultron-Composites-Form-Joint-Venture-to-Produce-Fiberglass-Rebar/default.aspx

In accordance with World Resources Institute (WRI) protocols, we collected or estimated all utility and production data back to either our base year of 2018 or the year they opened. The revenue denominator we use to calculate our 2030 environmental sustainability goals has been updated to include the acquisition back to the base year of 2018.

Owens Corning Divested from all operations in Russia (Gous-Kroustalny, an original

Owens Corning Plant, and Izoplit, originally a PAROC plant), due to Russia's invasion of Ukraine on December 5th, 2022: https://newsroom.owenscorning.com/all-news-releases/news-details/2022/Owens-Corning-Completes-Sale-of-Russian-Operations/default.aspx. Both of these plants were large emitters.

Owens Corning also divested from our plant in Chambery, France which made thermoplastic fiberglass, completed on July 1st: "On July 1, the company completed the sale of its European dry-use chopped strand (DUCS) manufacturing assets located in Chambéry, France. This transaction resulted in a divestiture of approximately $100 million of annual sales. Consistent with its strategy to accelerate growth and generate higher and more sustainable margins, the company will convert the other two DUCS facilities to produce glass fiber supporting building and construction applications."

C5.1b

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

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

C5.1c

(C5.1c) Have your organization’s base year emissions and past years’ emissions been recalculated as a result of any changes or errors reported in C5.1a and/or C5.1b?

	Base year recalculation	Scope(s) recalculated	Base year emissions recalculation policy, including significance threshold	Past years’ recalculation
Row 1	Yes	Scope 1 Scope 2, location-based Scope 2, market-based Scope 3	In accordance with World Resources Institute (WRI) protocols, we collected or estimated all utility and production data back to either our base year of 2018 or the year they opened. The revenue denominator we use to calculate our 2030 environmental sustainability goals has been updated to include the acquisition back to the base year of 2018.	Yes

C5.2

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

Scope 1

Base year start

January 1, 2018

Base year end

December 31, 2018

Base year emissions (metric tons CO2e)

2,813,111

Comment

Scope 2 (location-based)

Base year start

January 1, 2018

Base year end

December 31, 2018

Base year emissions (metric tons CO2e)

1,520,332

Comment

Scope 2 (market-based)

Base year start

January 1, 2018

Base year end

December 31, 2018

Base year emissions (metric tons CO2e)

963,720

Comment

Scope 3 category 1: Purchased goods and services

Base year start

January 1, 2018

Base year end

December 31, 2018

Base year emissions (metric tons CO2e)

2,026,093

Comment

Scope 3 category 2: Capital goods

Base year start

January 1, 2018

Base year end

December 31, 2018

Base year emissions (metric tons CO2e)

219,941

Comment

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

Base year start

January 1, 2018

Base year end

December 31, 2018

Base year emissions (metric tons CO2e)

391,854

Comment

Scope 3 category 4: Upstream transportation and distribution

Base year start

January 1, 2018

Base year end

December 31, 2018

Base year emissions (metric tons CO2e)

130,071

Comment

Scope 3 category 5: Waste generated in operations

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 6: Business travel

Base year start

January 1, 2018

Base year end

December 31, 2018

Base year emissions (metric tons CO2e)

13,708

Comment

Scope 3 category 7: Employee commuting

Base year start

January 1, 2018

Base year end

December 31, 2018

Base year emissions (metric tons CO2e)

25,083

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, 2018

Base year end

December 31, 2018

Base year emissions (metric tons CO2e)

321,120

Comment

Scope 3 category 10: Processing of sold products

Base year start
January 1, 2018

Base year end
December 31, 2018

Base year emissions (metric tons CO2e)
410,382

Comment

Scope 3 category 11: Use of sold products

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

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

Base year start
January 1, 2018

Base year end
December 31, 2018

Base year emissions (metric tons CO2e)
202,469

Comment

Scope 3 category 13: Downstream leased assets

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 14: Franchises

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 15: Investments

Base year start

Base year end

Base year emissions (metric tons CO2e)

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.

The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)

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)

2,243,458

Start date

January 1, 2022

End date

December 31, 2022

Comment

Past year 1

Gross global Scope 1 emissions (metric tons CO2e)

2,408,720

Start date

January 1, 2021

End date

December 31, 2021

Comment

Past year 2

Gross global Scope 1 emissions (metric tons CO2e)

2,455,658

Start date

January 1, 2020

End date

December 31, 2020

Comment

Past year 3

Gross global Scope 1 emissions (metric tons CO2e)

2,674,017

Start date

January 1, 2019

End date

December 31, 2019

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

Owens Corning is committed to following the GHG Protocol Scope 2 Guidance and reports market-based Scope 2 emissions gathered from utilities by Schneider Electric, along with location-based Scope 2 emissions. Owens Corning's GHG emissions were verified by SCS Global Services in 2022.

C6.3

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

Reporting year

Scope 2, location-based

1,247,267

Scope 2, market-based (if applicable)

715,231

Start date

January 1, 2022

End date

December 31, 2022

Comment

Past year 1

Scope 2, location-based

1,345,291

Scope 2, market-based (if applicable)

879,004

Start date

January 1, 2021

End date

December 31, 2021

Comment

Past year 2

Scope 2, location-based

1,311,621

Scope 2, market-based (if applicable)

798,794

Start date

January 1, 2020

End date

December 31, 2020

Comment

Past year 3

Scope 2, location-based

1,425,736

Scope 2, market-based (if applicable)

895,728

Start date

January 1, 2019

End date

December 31, 2019

Comment

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)

2,350,004

Emissions calculation methodology

Hybrid method

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

100

Please explain

The climate change category of Purchased Goods & Services (PG&S) is interpreted as the cradle-to-supplier-gate GWP impact of the representative raw material inputs used to manufacture Owens Corning products. In order to quantify these emissions, a hybrid method, consisting of a direct, material-based method and an indirect, product-based method, has been used for the calculation of emissions from this category. This is primarily due to the availability and useability of primary data. As primary data varies by the type of supplied input material (i.e., chemicals, minerals, facing materials and packaging), total category emissions are represented as the sum of emissions from two sub-category groups, one from each calculation methodology, in addition to a third group to account for other, special cases of PG&S for which emissions haven't otherwise been accounted but are material to Scope 3 (i.e., OEM production of XPS foam). An overview of these groups can be found below.

▪ group I. Chemicals and Minerals - material-based methodology
▪ group II. Facing materials and Packaging - product-based (legacy) methodology
▪ group III. Other - customized calculation using product-based methodology

Group 1: The source of data used to calculate group I emissions is from SAP Spend Analytics reports, which are categorically and hierarchically structured procurement datasets containing the amount of spend and corresponding invoice quantity for each commodity material purchased for each business, region and facility per quarter.

Group 2: In order to maintain representation in overall results, the product-based method continues to be used to calculate the cradle-to-gate emissions of packaging and facing materials for several glass wool residential insulation products produced during the twelve-month period considered for the 2022 reporting year.

Group 3: An additional, material source of Scope 3 PG&S emissions not included in groups I or II is the OEM production of XPS foam in Nanjing, China. A set of emissions factors representing the OEM's cradle-to-gate production of XPS foam were determined by performing a sequence of calculations.

Capital goods

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

94,788

Emissions calculation methodology

Spend-based method

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

100

Please explain

Determination of scope 3 emissions associated with capital goods was performed using an EIO-LCA based method and was calculated using the EIO-LCA on-line tool developed by Carnegie Mellon University. Primary data was collected internally on the total spend for capital expenditure for the twelve-month period ending September 30,

2022(i.e., Oct. 1, 2021 to Sept. 30, 2022 or 2021_Q4-2022_Q3). This was in the form of multiple SAP datasets since Owens Corning's facilities use different versions of SAP. Each spend SAP dataset, contains enumerated assets, which have been categorized into one of five asset classes. These five categories are as follows: Miscellaneous Construction (MC); Machinery and Equipment (MAE); Office Equipment (OE); Land (L); and Transportation Equipment (TE). This categorization was followed by identification of the NAICS industry sector associated with each asset category. The acquisition value total for each category was used as the indicator of economic activity. For each of the five categories and for each of the three SAP datasets, the sum of the asset acquisition value was taken. Each of the six summed values was then multiplied by the GWP per dollar of economic activity associated with the category's respective sector.

The eio-lca online tool measures economic activity in 2002 USD. As a result, acquisition values in USD 2021 were multiplied by a CPI deflator index of 0.66 to convert from USD 2021 to USD 2002, and acquisition values in USD 2022 were multiplied by a CPI deflator index of 0.61 to convert from USD 2022 to USD 2002. Index values were determined using the CPI deflator calculator found at (http://stats.areppim.com/index.html). These values were the input values for economic activity.

Links to the indicated items in the methodology section:
1. http://www.eiolca.net/
1a. http://www.eiolca.net/cgi-bin/dft/use.pl
2. https://www.census.gov/eos/www/naics/
3. http://stats.areppim.com/index.html

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

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

329,862

Emissions calculation methodology

Average data method

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

100

Please explain

The calculation for Scope 3 GHG emissions for Fuel- & Energy- Related Activities (F&ERA) has been carried out by calculating impacts from both upstream and downstream activities associated with electricity generation; these are termed "Scope 3u" and "Scope 3d T&D," respectively. "Scope 3u" accounts for upstream activities, which are cradle-to-generation in scope; these include the activities from fuel resource extraction and transportation up to, but not including, the point of power generation.

"Scope 3d T&D" accounts for downstream activities, which are generation-to-consumption in scope; these include the activities of transmission and distribution, which are downstream of electricity generation. For U.S. facilities, data for these T&D line losses were calculated using U.S. EPA's eGRID. For non-U.S. facilities, T&D factors were calculated using IEA datasets. A method of differences approach was used to calculate the CO2e emissions from the upstream activities. First, the cradle-to-transmission impacts were calculated using LCIA factors from the geographic-specific (for U.S. facilities, NERC region-specific) "electricity, high voltage, production mix" activity datasets obtained from the "ecoinvent v3.9.1 cutoff cumulated LCIA matricies."1 Second, in order to isolate the emissions for just the upstream activities, generation-only emission rates were subtracted from the respective ecoinvent LCIA factor determined in the
first step. For Owens Corning U.S. facilities, data for generation-only emission rates was obtained from eGRID20202, and for
international facilities, data was obtained from IEA3. For downstream activities, the emissions calculated were those associated with T&D line losses. For facilities in the U.S., line loss factors were calculated using eGRID2020, and for international facilities, line loss factors were obtained from IEA3 datasets. For certain facilities, emission factors developed for the 2016 reporting year were used since electricity data in ecoinvent v3.9.11 had not been updated for their corresponding geographies to represent the 2019 datayear, the data year used in IEA 20213. This applied to facilities located in Brazil, China and India. For the 2016-2022 reporting years, the table below summaries the emission factors used, and the inputs used for their calculation for U.S. and non-U.S. facilities.

Upstream transportation and distribution

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

151,712

Emissions calculation methodology

Distance-based method

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

100

Please explain

Data was collected internally from OC transportation management systems and logistics analysts on shipments associated with the inbound transportation of supplied input materials during the twelve-month period ending September 30, 2022 corresponding to OC locations within North America. Within the dataset are records, each of which contains information about the transportation of an input material. Each shipment record is uniquely characterized by a combination of calendar year and quarter, source and destination point, and information identifying the carrier and equipment used. Quantified

for each record for associated shipments, furthermore, is the total weight transported, total distance transported and the count or number of shipments. Additionally, included are the related, calculated metrics of average weight and distance per shipment. For each shipment record, total transport activity was taken as the product of the total weight of material transported and the distance (km) transported with the transported distance being defined as the average distance per shipment. The mode of transport was identified for each shipment record as either truck, flatbed, rail, air or ocean freight. The corresponding emission factor (kg CO2e/tkm) for each mode of transport was assigned using default emission factors from the GLEC Framework appropriate for the region. Additional considerations were taken with adjustments made to the assigned emission factor to account for equipment, route or regionally specific aspects following guidance from the Framework. For each shipment record, the product of the total transport activity and the assigned mode's emission factor (kg CO2e/tkm) was taken to determine the total GHG emissions (MT CO2e) for the record. In instances where a representative mode could not clearly be identified (e.g., intermodal, multimodal or modes not otherwise specified) such that a corresponding emission factor could readily be multiplied, a default mode was assigned for the shipment record where the truck mode of transport and its corresponding emission factor applicable to the region was used as a conservative estimate. The sum of the GHG emissions across all shipment records for the appropriate twelve-month period was taken to determine GHG emissions (MT CO2e) generated from the inbound transportation of supplied input materials.

Waste generated in operations

Evaluation status

Not relevant, explanation provided

Please explain

Our waste streams, which are primarily forms of glass, are inert and have negligible emissions

Business travel

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

9,172

Emissions calculation methodology

Distance-based method

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

100

Please explain

Rental car mileage and commercial air travel miles and emissions were received from our travel vendor. For employee vehicle reimbursement related to business mileage,

Owens Corning used an extract of miles from our travel system and determined emissions based on a standard emission rate provided by the U.S. EPA Greenhouse Gas Emissions from a Typical Passenger Vehicle Guide.

Employee commuting

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

22,993

Emissions calculation methodology

Average data method

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

100

Please explain

Owens Corning uses a simplified version of the Scope 3 GHG Protocol's average-data method to calculate employee commuting emissions. We use the U.S. EPA Greenhouse Gas Emissions from a Typical Passenger Vehicle (https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P100U8YT.pdf) to determine an estimate of 404 grams of CO2 per mile. Starting with Worldmapper Commuting Time By Country (http://www.worldmapper.org/display.php?selected=141) data, we multiply those times by the number of Owens Corning employees by country to estimate our employees' average roundtrip commuting distance in miles, assuming an average speed of 30 mph. Each country's roundtrip commuting distance is multiplied by the OECD average number of days worked per year for that country (http://stats.oecd.org/index.aspx?DataSetCode=ANHRS) and Owens Corning's annual employee count. In 2022, due to lingering impacts from Covid-19, we adjusted the total headcount used for the purposes of calculating commuting emissions downward for those locations that had less employees coming to the office. As shown in the backup file, Owens Corning's World Headquarters average employees on site in 2022 was only 33% of the total occupancy, while our Granville S&T center averaged only 59% total occupancy. The corresponding headcount for the United States in the calculation was reduced by these amounts. Per our HR department, headcount was consistent through the year at our plants, so we did not adjust downward the impacts for commuting for other locations.

Upstream leased assets

Evaluation status

Not relevant, explanation provided

Please explain

All our relevant leased assets have been accounted for under Scope 2 emissions. We account for both their estimated electricity usage and estimated GHG Emissions based

on the square footage of space while utilizing factors from the Energy Star Portfolio Manager (1) Energy Star Portfolio Manager - Energy Star Score for Warehouses in the United States for warehouses, (2) Energy Star Portfolio Manager - Energy Use in Office Buildings for building types of office and other. The data is subsequently calculated using factors from the US EPA EGRID and 2018 International Energy Agency (IEA) Electricity Emission Factors for CO2 factors as appropriate.

Downstream transportation and distribution

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

419,230

Emissions calculation methodology

Distance-based method

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

100

Please explain

Datasets were collected internally from OC transportation management systems and logistics analysts on shipments associated with the outbound distribution of finished goods during the twelve-month period ending 9/30/2022. Datasets are regionally defined, corresponding to OC locations within the regions of North America and Europe (NA-EU), Mexico and Brazil (MX-BR), and China (CN).

Within each dataset, reported on worksheet rows are records, each of which contains information about the transportation of a produced product. Quantified for each record for associated shipments is the total weight transported, total distance transported and the count or number of shipments. For the NA-EU and MX-BR datasets, additionally included are the related, calculated metrics of average weight and average distance per shipment.

For each shipment record, total transport activity was taken as the product of the total weight of material transported and the distance (km) transported with the transported distance being defined as the average distance per shipment for the NA-EU and MX-BR datasets and the indicated lane distance for the CN dataset. The mode of transport was identified for each shipment record as either truck, flatbed, rail, air or ocean freight. The corresponding emission factor (kg CO2e/tkm) for each mode of transport was assigned using default factors from the GLEC Framework appropriate for the region. Additional considerations were taken with adjustments made to the assigned factor to account for equipment, route or regionally specific aspects following guidance from the Framework.

For each shipment record, the product of the total transport activity and the assigned mode's emission factor (kg CO2e/tkm) was taken to determine the total GHG emissions

(MT CO2e) for the record. In instances where a representative mode could not clearly be identified (e.g., intermodal, multimodal or modes not otherwise specified) such that a corresponding emission factor could readily be multiplied, a default mode was assigned for the shipment record where the truck mode of transport and its corresponding emission factor applicable to the region was used as a conservative estimate. The total GHG emissions across all shipment records for the appropriate twelve-month period was taken to determine GHG emissions (MT CO2e) generated from the outbound distribution of finished goods.

Processing of sold products

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

470,168

Emissions calculation methodology

Spend-based method

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

100

Please explain

Scope 3 emissions were calculated and determined for Owens Corning's composites business only, which primarily manufactures intermediate products. These glass fibers are, primarily, used by customers in order to make glass-fiber reinforced plastic (GFRP) materials. Calculation of Scope 3 emissions involved identifying the NAICS sector associated with GFRP manufacturing followed by developing a process scaling-factor based on the total economic flow of the NAICS sector for glass fiber manufacturing (i.e., 327212: "Other pressed and blown glass and glassware manufacturing") within the sector for GFRP manufacturing. The total economic activity generated when the Net Sales of Composites for the twelve-month period ending September 30, 2022, in USD 2002, was used as the indicator of final demand economic activity within the 327212 industry sector was determined from the eiolca.net tool.

Use of sold products

Evaluation status

Not relevant, explanation provided

Please explain

None of our products have end-use energy consumption. The impact from the use of sold products is avoided emissions. We estimate that the insulation we produced in North American in 2021 reduced GHG emissions for homeowners by approximately 10.5 million metric tons a year and 632 million metric tons over a 60-year building life.

End of life treatment of sold products

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

228,375

Emissions calculation methodology

Average data method

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

100

Please explain

Scope 3 emissions associated with the EoL of fiberglass insulation and XPS insulation products manufactured during the twelve-month period ending September 30, 2022 (i.e., Oct. 1, 2021 to Sept. 30, 2022 or 2021_Q4-2022_Q3) were calculated. EoL emission factors were determined from cradle-to-grave EPDs, and the LCAs upon which they are based, on Owens Corning® fiberglass insulation and XPS insulation. The 3rd party verified LCAs were internally conducted for these products in 2012 and 2013, respectively, and were updated in 2017 and 2018. These factors (i.e., from the updated LCAs) were used in conjunction with production volumes for these two insulation materials to determine the scope 3 emissions when the production volume quantities are disposed as waste-to-landfill. Scope 3 EoL emissions were determined for Owens Corning insulation manufacturing operations, and, more specifically, only for fiberglass and XPS insulation.

Downstream leased assets

Evaluation status

Not relevant, explanation provided

Please explain

Owens Corning does not have any downstream leased assets.

Franchises

Evaluation status

Not relevant, explanation provided

Please explain

Owens Corning does not have any franchises.

Investments

Evaluation status

Not relevant, explanation provided

Please explain

Owens Corning is not a private or public financial institution. All investments in new businesses are accounted for under Scope 1 or Scope 2.

Other (upstream)

Evaluation status

Please explain

Other (downstream)

Evaluation status

Please explain

C6.5a

(C6.5a) Disclose or restate your Scope 3 emissions data for previous years.

Past year 1

Start date

January 1, 2021

End date

December 31, 2021

Scope 3: Purchased goods and services (metric tons CO2e)

2,230,464

Scope 3: Capital goods (metric tons CO2e)

92,210

Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)

368,340

Scope 3: Upstream transportation and distribution (metric tons CO2e)

150,379

Scope 3: Waste generated in operations (metric tons CO2e)

Scope 3: Business travel (metric tons CO2e)

3,852

Scope 3: Employee commuting (metric tons CO2e)

22,912

Scope 3: Upstream leased assets (metric tons CO2e)

Scope 3: Downstream transportation and distribution (metric tons CO2e)
403,012

Scope 3: Processing of sold products (metric tons CO2e)
429,416

Scope 3: Use of sold products (metric tons CO2e)

Scope 3: End of life treatment of sold products (metric tons CO2e)
219,661

Scope 3: Downstream leased assets (metric tons CO2e)

Scope 3: Franchises (metric tons CO2e)

Scope 3: Investments (metric tons CO2e)

Scope 3: Other (upstream) (metric tons CO2e)

Scope 3: Other (downstream) (metric tons CO2e)

Comment

Past year 2

Start date
January 1, 2020

End date
December 31, 2020

Scope 3: Purchased goods and services (metric tons CO2e)
1,878,263

Scope 3: Capital goods (metric tons CO2e)
129,523

Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)
345,165

Scope 3: Upstream transportation and distribution (metric tons CO2e)

134,899

Scope 3: Waste generated in operations (metric tons CO2e)

Scope 3: Business travel (metric tons CO2e)

3,370

Scope 3: Employee commuting (metric tons CO2e)

22,508

Scope 3: Upstream leased assets (metric tons CO2e)

Scope 3: Downstream transportation and distribution (metric tons CO2e)

331,860

Scope 3: Processing of sold products (metric tons CO2e)

371,481

Scope 3: Use of sold products (metric tons CO2e)

Scope 3: End of life treatment of sold products (metric tons CO2e)

196,019

Scope 3: Downstream leased assets (metric tons CO2e)

Scope 3: Franchises (metric tons CO2e)

Scope 3: Investments (metric tons CO2e)

Scope 3: Other (upstream) (metric tons CO2e)

Scope 3: Other (downstream) (metric tons CO2e)

Comment

Past year 3

Start date

January 1, 2019

End date

December 31, 2019

Scope 3: Purchased goods and services (metric tons CO2e)

1,997,339

Scope 3: Capital goods (metric tons CO2e)

164,772

Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)

412,130

Scope 3: Upstream transportation and distribution (metric tons CO2e)

163,653

Scope 3: Waste generated in operations (metric tons CO2e)

Scope 3: Business travel (metric tons CO2e)

13,931

Scope 3: Employee commuting (metric tons CO2e)

23,861

Scope 3: Upstream leased assets (metric tons CO2e)

Scope 3: Downstream transportation and distribution (metric tons CO2e)

270,517

Scope 3: Processing of sold products (metric tons CO2e)

407,629

Scope 3: Use of sold products (metric tons CO2e)

Scope 3: End of life treatment of sold products (metric tons CO2e)

190,965

Scope 3: Downstream leased assets (metric tons CO2e)

Scope 3: Franchises (metric tons CO2e)

Scope 3: Investments (metric tons CO2e)

Scope 3: Other (upstream) (metric tons CO2e)

Scope 3: Other (downstream) (metric tons CO2e)

Comment

C6.7

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

No

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

0.00030311

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

2,958,689

Metric denominator

unit total revenue

Metric denominator: Unit total

9,761,000,000

Scope 2 figure used

Market-based

% change from previous year

21

Direction of change

Decreased

Reason(s) for change

Change in renewable energy consumption
Other emissions reduction activities
Change in revenue

Please explain

In 2022, Owens Corning reported 9.8 Billion in revenue, an increase of 15% from 2021. Meanwhile, Scope 1&2 emissions fell 10% due to increased usage of renewable energy, and several energy efficiency projects.

Progress toward our GHG emissions goals is made possible through several key programs, including the following:
- Implementation of energy-efficiency initiatives across our enterprise
- Evaluation of combined heat and power
- Heat recovery
- Expansion of renewable sources to replace grid energy
- Blowing agent conversion

In 2022, we implemented 12 projects, generating annual energy savings of over 17,000 MWh and reducing greenhouse gas
emissions by over 4,400 MT per year. These projects include lighting retrofits, pump optimizations, heat recovery, insulation improvements, and process optimizations.

Through our PPAs and VPPAs, Owens Corning retired 1,199,397 renewable energy credits for a total of 531,148 metric tons of avoided CO2e in 2022, versus 399,932 metric tons in 2021.

C7. Emissions breakdowns

C7.1

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

Yes

C7.1a

(C7.1a) Break down your total gross global Scope 1 emissions by greenhouse gas type and provide the source of each used greenhouse warming potential (GWP).

Greenhouse gas	Scope 1 emissions (metric tons of CO2e)	GWP Reference
CO2	1,481,093.86	IPCC Fifth Assessment Report (AR5 – 100 year)
CH4	645.9	IPCC Fifth Assessment Report (AR5 – 100 year)
N2O	670.87	IPCC Fifth Assessment Report (AR5 – 100 year)
HFCs	760,743.9	IPCC Fifth Assessment Report (AR5 – 100 year)
Other, please specify HFO	303.58	Other, please specify Proprietary hydrofluoroolefin (HFO) blend from chemical supplier

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)
Belgium	20,793.303
Brazil	27,922.853
Canada	211,861.121
Chile	18.286
China	71,868.757
Czechia	6,499.932
Finland	28,586.289
France	31,429.338
India	45,833.237
Italy	46,005.362
Lithuania	52,775.014
Mexico	127,997.714
Netherlands	18,926.425
Poland	77,642.044
Republic of Korea	40,916.617
Spain	98.646
Sweden	79,904.827
United Kingdom of Great Britain and Northern Ireland	3,011.279
United States of America	1,350,641.86
Germany	725.208

C7.3

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

By business division

C7.3a

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

Business division	Scope 1 emissions (metric ton CO2e)
Corporate	9,480.405
Composite Solutions Business	566,876.428
Foam	764,245.016

Insulation Systems Business	720,619.504
Roofing	182,236.76

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)
Belgium	13,147.229	0
Brazil	7,111.185	7,111.185
Canada	29,779.538	701.067
Chile	55.541	55.541
China	83,230.094	83,230.094
Czechia	13,958.454	0
Finland	4,130.39	52.425
France	4,253.337	148.763
India	129,323.339	129,323.339
Italy	19,445.082	33,418.968
Lithuania	3,343.531	0
Mexico	74,884.84	19,349.614
Netherlands	6,381.808	0
Poland	117,364.962	751.217
Singapore	549.765	581.912
Republic of Korea	45,688.041	45,688.041
Spain	200.046	0
Sweden	774.926	284.618
United Kingdom of Great Britain and Northern Ireland	1,332.843	0
United States of America	692,053	394,533.783
Germany	259.136	0

C7.6

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

By business division

C7.6a

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

Business division	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Composite Solutions Business	492,817.82	436,416.255
Roofing	104,008.966	103,744.601
Corporate	39,496.781	39,433.479
Foam	16,498.269	9,288.189
Insulation Systems Business	594,445.251	126,348.043

C7.7

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

Not relevant as we do not have any subsidiaries

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	167,074.62	Decreased	5.08	In 2022, we maintained our PPA in North America, and added three European locations to our green electricity sourcing program: Trzemeszno Poland, Bruggen Germany, and Vilnius Lithuania. These three sites avoided 167,074.62 mt of CO2e through sourcing renewable electricity.

				Dividing the decrease between 2021 and 2022 (167,074.62 mt CO2e) over the 2021 Scope 1 and Scope 2 combined total of 3,287,724 gives a decrease of 5.08% in mt CO2e attributable to sourcing renewable electricity for these locations. (167,074.62 / 3,287,724) * 100 = 5.08% decrease
Other emissions reduction activities	64,764.72	Decreased	1.97	Owens Corning's emission reduction activities during 2022 had an impact of (64,764.72 mt) of CO2e, which represents a 1.97% reduction compared to 2021. In 2022 the company completed 12 energy reduction projects resulting in improved energy efficiency at plants and an impact of (4,409 mt CO2e). Owens Corning also increased volume of low-GWP blowing agent blends at multiple plants which manufactured higher levels of our low-GWP foam product Foamular NGX in 2022 than in 2021, impacting our GHG emissions by (60,355.72 mt CO2e). Dividing the decrease between 2021 and 2022 (64,764.72 mt CO2e) over the 2021 Scope 1 and Scope 2 combined total of 3,287,724 gives a decrease of 1.97% in mt CO2e attributable to these activities. (64,764.72 / 3,287,724) * 100 = 1.97% decrease
Divestment	0	No change	0	
Acquisitions	0	No change	0	
Mergers	0	No change	0	
Change in output	97,195.65	Decreased	2.96	Our total GHG decrease from 2021 to 2022 due to a change in output is 97,195.65 mt CO2e. Dividing the

				decrease between 2021 and 2022 (97,195.65 mt CO2e) over the 2021 Scope 1 and Scope 2 combined total of 3,287,724 gives an decrease of 2.96% in CO2e. (97,195.65 / 3,287,724) * 100 = 2.96% decrease
Change in methodology	0	No change	0	
Change in boundary	0	No change	0	
Change in physical operating conditions	0	No change	0	
Unidentified	0	No change	0	
Other	0	No change	0	

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	No
Generation of electricity, heat, steam, or cooling	No

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)	HHV (higher heating value)	0	6,830,144	6,830,144
Consumption of purchased or acquired electricity		1,899,558	1,463,846	3,363,404
Consumption of purchased or acquired heat		0	4,804	4,804
Consumption of purchased or acquired steam		0	0	0
Total energy consumption		1,899,558	8,298,794	10,198,352

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	No
Consumption of fuel for the generation of heat	No

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	No

C8.2c

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

Sustainable biomass

Heating value

HHV

Total fuel MWh consumed by the organization

0

Comment

Other biomass

Heating value

HHV

Total fuel MWh consumed by the organization

0

Comment

Other renewable fuels (e.g. renewable hydrogen)

Heating value

HHV

Total fuel MWh consumed by the organization

0

Comment

Coal

Heating value

HHV

Total fuel MWh consumed by the organization

633,776.53

Comment

The Climate Registry: 2021 Gen. Reporting Protocol - USA Industrial

Oil

Heating value

HHV

Total fuel MWh consumed by the organization

22,631.86

Comment

Number 2 Fuel Oil: US EPA MRR: Final Rule (40 CFR 98) - Industrial Sector 2013 Kerosene: US EPA MRR: Final Rule (40 CFR 98) - Industrial Sector 2013 Diesel: US EPA MRR: Final Rule (40 CFR 98) - Industrial Sector 201

Gas

Heating value

HHV

Total fuel MWh consumed by the organization

6,173,735.66

Comment

Gasoline: US EPA MRR: Final Rule (40 CFR 98) - Industrial Sector 2013 Natural Gas: US EPA MRR: Final Rule (40 CFR 98) - Industrial Sector 2013 Propane: US EPA MRR: Final Rule (40 CFR 98) - Industrial Sector 2013 Liquefied Petroleum Gas (LPG): US EPA MRR: Final Rule (40 CFR 98) - Industrial Sector 2013 Liquefied Natural Gas (LNG): The Climate Registry: 2020 Gen. Reporting Protocol - USA Transport Jet Fuel (Jet A or A-1): The Climate Registry: 2020 Gen. Reporting Protocol - USA Transport

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

Heating value

HHV

Total fuel MWh consumed by the organization

0

Comment

Total fuel

Heating value

HHV

Total fuel MWh consumed by the organization

6,830,144.05

Comment

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

United States of America

Sourcing method

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

Energy carrier

Electricity

Low-carbon technology type

Wind

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

1,018,031.76

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)

2016

Comment

Owens Corning has PPAs for 250 megawatts of renewable electricity - 125 megawatts of wind energy in Texas, and another 125 megawatts in Oklahoma. Through our PPAs,

Owens Corning retired 1,018.,032 renewable energy credits (RECs) for a total of 373,590 metric tons of avoided CO2 e in 2022

Country/area of low-carbon energy consumption

United States of America

Sourcing method

Purchase from an on-site installation owned by a third party (on-site PPA)

Energy carrier

Electricity

Low-carbon technology type

Solar

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

1,517.42

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)

2015

Comment

In Toledo, Ohio, U.S., our 2.4-megawatt solar array provided approximately 18% of the power for our world headquarters in 2022.

Country/area of low-carbon energy consumption

United States of America

Sourcing method

Purchase from an on-site installation owned by a third party (on-site PPA)

Energy carrier

Electricity

Low-carbon technology type
Solar

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
3,512.65

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)
2013

Comment
The 2.7-megawatt solar panels installed at our insulation plant in Delmar, New York, U.S., provided approximately 7% of its required electricity.

Country/area of low-carbon energy consumption
Belgium

Sourcing method
Purchase from an on-site installation owned by a third party (on-site PPA)

Energy carrier
Electricity

Low-carbon technology type
Wind

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
9,039.8

Tracking instrument used
GO

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

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)

2013

Comment

Our Tessenderlo, Belgium, location sourced approximately 12% of its electricity from wind turbines onsite and off-site.

Country/area of low-carbon energy consumption

Belgium

Sourcing method

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

Energy carrier

Electricity

Low-carbon technology type

Hydropower (capacity unknown)

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

69,611.15

Tracking instrument used

GO

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

Belgium

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)

Comment

Our Tessenderlo site in Belgium has a contract with a supplier for hydropower supported by EAC's for the remainder of their electric power demand.

Country/area of low-carbon energy consumption

Netherlands

Sourcing method

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

Energy carrier

Electricity

Low-carbon technology type

Wind

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

21,078.85

Tracking instrument used

GO

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

Netherlands

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)

Comment

Our Apeldoorn site in the Netherlands has a contract with a supplier for wind energy supported by EACs.

Country/area of low-carbon energy consumption

Czechia

Sourcing method

Default delivered electricity from the grid (e.g. standard product offering by an energy supplier), supported by energy attribute certificates

Energy carrier

Electricity

Low-carbon technology type

Hydropower (capacity unknown)

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

33,942.76

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)

Comment

Our Klasterec site in the Czech Republic has a contract with a supplier for hydropower supported by EACs.

Country/area of low-carbon energy consumption

United States of America

Sourcing method

Purchase from an on-site installation owned by a third party (on-site PPA)

Energy carrier

Electricity

Low-carbon technology type

Solar

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

190.1

Tracking instrument used

Contract

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)

2009

Comment

The roofing plant in Kearny, New Jersey, U.S., sourced around 2% of its required electricity from roof solar panels in 2021.

Country/area of low-carbon energy consumption

France

Sourcing method

Direct line to an off-site generator owned by a third party with no grid transfers (direct line PPA)

Energy carrier

Electricity

Low-carbon technology type

Hydropower (capacity unknown)

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

79,703.72

Tracking instrument used

Contract

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

France

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)

Comment

Our facility in L'Ardoise, France, sourced 100% renewable electricity through the Compagnie Nationale du Rhône's (CNR) Caderousse hydroelectric project, which harnesses energy from the Rhône River

Country/area of low-carbon energy consumption

Belgium

Sourcing method

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

Energy carrier

Electricity

Low-carbon technology type

Renewable energy mix, please specify

(Blend of mostly hydropower, as well as wind and some solar power)

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

1,043.35

Tracking instrument used

GO

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

Belgium

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)

Comment

Our Zele site in Belgium had its 2022 electricity voluntarily supplied with renewables from the utility.

Country/area of low-carbon energy consumption

Sweden

Sourcing method

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

Energy carrier

Electricity

Low-carbon technology type

Hydropower (capacity unknown)

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

47,189.94

Tracking instrument used

GO

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

Sweden

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)

Comment

Our Paroc locations in Sweden: Hallekis, Hassleholm, and Skovde, have 100 percent of their electric power supplied by hydro-electric power.

Country/area of low-carbon energy consumption

Finland

Sourcing method

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

Energy carrier

Electricity

Low-carbon technology type

Hydropower (capacity unknown)

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

55,955.2

Tracking instrument used

GO

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

Finland

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)

Comment

Our Paroc locations in Finland: Parainen, and Parainen S&T, have 100 percent of their electric power supplied by hydro-electric power.

Country/area of low-carbon energy consumption

Spain

Sourcing method

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

Energy carrier

Electricity

Low-carbon technology type

Hydropower (capacity unknown)

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

1,298.32

Tracking instrument used

GO

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

Spain

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)

Comment

Our location in San Vicente Spain sources electricity through Guarantees of Origin with a hydroelectric supplier

Country/area of low-carbon energy consumption

United States of America

Sourcing method

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

Energy carrier

Electricity

Low-carbon technology type

Nuclear

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

17,009.72

Tracking instrument used

Contract

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)

Comment

Owens Corning's Gastonia, North Carolina facility has 100 percent of its electric power supplied by nuclear power.

Country/area of low-carbon energy consumption

United Kingdom of Great Britain and Northern Ireland

Sourcing method

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

Energy carrier

Electricity

Low-carbon technology type

Nuclear

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

6,826.29

Tracking instrument used

Contract

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

United Kingdom of Great Britain and Northern Ireland

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)

Comment

Owens Corning's Liversedge, UK facility has 100 percent of its electric power supplied by nuclear power.

Country/area of low-carbon energy consumption

Germany

Sourcing method

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

Energy carrier

Electricity

Low-carbon technology type

Renewable energy mix, please specify

Majority is hydro with the remainder wind

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

829.02

Tracking instrument used

GO

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

Germany

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)

Comment

Our site in Bruggen Germany sources electricity through Guarantees of Origin.

Country/area of low-carbon energy consumption

Lithuania

Sourcing method

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

Energy carrier

Electricity

Low-carbon technology type

Hydropower (capacity unknown)

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

22,366

Tracking instrument used

GO

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

Lithuania

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)

Comment

Our location in Vilnius, Lithuania sources electricity through Guarantees of Origin with a hydroelectric supplier

Country/area of low-carbon energy consumption

Poland

Sourcing method

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

Energy carrier

Electricity

Low-carbon technology type

Renewable energy mix, please specify

Bio Gas, Biomass, Geothermal, Hydro, Solar, Wind

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

186,395

Tracking instrument used

GO

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

Sweden

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)

Comment

Our location in Trzmeszno, Poland sources electricity through Guarantees of Origin

C8.2g

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

Country/area

Belgium

Consumption of purchased electricity (MWh)

79,694.3

Consumption of self-generated electricity (MWh)

0

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]

79,694.3

Country/area

Brazil

Consumption of purchased electricity (MWh)

76,145.4

Consumption of self-generated electricity (MWh)

0

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]

76,145.4

Country/area

Canada

Consumption of purchased electricity (MWh)

248,044.58

Consumption of self-generated electricity (MWh)

0

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]

248,044.58

Country/area
Chile

Consumption of purchased electricity (MWh)
132.36

Consumption of self-generated electricity (MWh)
0

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]

132.36

Country/area
China

Consumption of purchased electricity (MWh)
134,801.63

Consumption of self-generated electricity (MWh)
0

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]

134,801.63

Country/area
Czechia

Consumption of purchased electricity (MWh)
33,942.76

Consumption of self-generated electricity (MWh)
0

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]

33,942.76

Country/area

Finland

Consumption of purchased electricity (MWh)

55,955.2

Consumption of self-generated electricity (MWh)

0

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

231.41

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

0

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

56,186.61

Country/area

France

Consumption of purchased electricity (MWh)

82,766.58

Consumption of self-generated electricity (MWh)

0

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]

82,766.58

Country/area
Germany

Consumption of purchased electricity (MWh)
829.02

Consumption of self-generated electricity (MWh)
0

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]

829.02

Country/area
India

Consumption of purchased electricity (MWh)
186,729.75

Consumption of self-generated electricity (MWh)
0

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]

186,729.75

Country/area
Italy

Consumption of purchased electricity (MWh)
73,195.72

Consumption of self-generated electricity (MWh)

0

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]

73,195.72

Country/area

Lithuania

Consumption of purchased electricity (MWh)

22,366

Consumption of self-generated electricity (MWh)

0

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]

22,366

Country/area

Mexico

Consumption of purchased electricity (MWh)

187,377.83

Consumption of self-generated electricity (MWh)

0

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]

187,377.83

Country/area

Netherlands

Consumption of purchased electricity (MWh)

21,078.85

Consumption of self-generated electricity (MWh)

0

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]

21,078.85

Country/area

Poland

Consumption of purchased electricity (MWh)

186,395

Consumption of self-generated electricity (MWh)

0

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

3,315.94

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

0

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

189,710.94

Country/area

Singapore

Consumption of purchased electricity (MWh)

1,426.26

Consumption of self-generated electricity (MWh)

0

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]

1,426.26

Country/area

Republic of Korea

Consumption of purchased electricity (MWh)

97,844.16

Consumption of self-generated electricity (MWh)

0

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]

97,844.16

Country/area

Spain

Consumption of purchased electricity (MWh)

1,298.32

Consumption of self-generated electricity (MWh)

0

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]

1,298.32

Country/area

Sweden

Consumption of purchased electricity (MWh)

47,189.94

Consumption of self-generated electricity (MWh)

0

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

1,256.33

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

0

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

48,446.27

Country/area

United Kingdom of Great Britain and Northern Ireland

Consumption of purchased electricity (MWh)

6,826.29

Consumption of self-generated electricity (MWh)

0

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]

6,826.29

Country/area

United States of America

Consumption of purchased electricity (MWh)

1,819,364.24

Consumption of self-generated electricity (MWh)

0

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]

1,819,364.24

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

High assurance

Attach the statement

2022-Owens-Corning-Sustainability-Report.pdf

Page/ section reference

Independent Assurance Statement, pages 311-315

Scope
p. 311: Scope. AA1000 to moderate level.
p. 311: Energy use, Scope 1 and 2 greenhouse gas emissions, Scope 3 greenhouse gas emission categories 1, 3, 4, 6, 7, 9 and 12 have all been assured to a high level
p. 311: All other data … were assured to at least a moderate level.

Standards
p. 311: AA1000 Assurance Standard AA1000AS v3 (2020)
p. 311: ISO 14064-3:2006 Specification with guidance for the validation and verification of GHG assertions.

Relevant standard

AA1000AS

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

High assurance

Attach the statement

2022-Owens-Corning-Sustainability-Report.pdf

Page/ section reference

Independent Assurance Statement, pages 311-315

Scope
p. 311: Scope. AA1000 to moderate level.
p. 311: Energy use, Scope 1 and 2 greenhouse gas emissions, Scope 3 greenhouse gas emission categories 1, 3, 4, 6, 7, 9 and 12 have all been assured to a high level
p. 311: All other data … were assured to at least a moderate level.

Standards
p. 311: AA1000 Assurance Standard AA1000AS v3 (2020)
p. 311: ISO 14064-3:2006 Specification with guidance for the validation and verification of GHG assertions.

Relevant standard

AA1000AS

Proportion of reported emissions verified (%)

100

Scope 2 approach

Scope 2 location-based

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

High assurance

Attach the statement

2022-Owens-Corning-Sustainability-Report.pdf

Page/ section reference

Independent Assurance Statement, pages 311-315

Scope
p. 311: Scope. AA1000 to moderate level.
p. 311: Energy use, Scope 1 and 2 greenhouse gas emissions, Scope 3 greenhouse gas emission categories 1, 3, 4, 6, 7, 9 and 12 have all been assured to a high level
p. 311: All other data … were assured to at least a moderate level.

Standards
p. 311: AA1000 Assurance Standard AA1000AS v3 (2020)
p. 311: ISO 14064-3:2006 Specification with guidance for the validation and verification of GHG assertions.

Relevant standard
AA1000AS

Proportion of reported emissions verified (%)
100

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
High assurance

Attach the statement
2022-Owens-Corning-Sustainability-Report.pdf

Page/ section reference
Independent Assurance Statement, pages 311-315

Scope
p. 311: Scope. AA1000 to moderate level.
p. 311: Energy use, Scope 1 and 2 greenhouse gas emissions, Scope 3 greenhouse gas emission categories 1, 3, 4, 6, 7, 9 and 12 have all been assured to a high level
p. 311: All other data … were assured to at least a moderate level.

Standards
p. 311: AA1000 Assurance Standard AA1000AS v3 (2020)

p. 311: ISO 14064-3:2006 Specification with guidance for the validation and verification of GHG assertions.

Relevant standard

ISO14064-3

Proportion of reported emissions verified (%)

100

Scope 2 approach

Scope 2 location-based

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

High assurance

Attach the statement

2022-Owens-Corning-Sustainability-Report.pdf

Page/ section reference

Independent Assurance Statement, pages 311-315

Scope
p. 311: Scope. AA1000 to moderate level.
p. 311: Energy use, Scope 1 and 2 greenhouse gas emissions, Scope 3 greenhouse gas emission categories 1, 3, 4, 6, 7, 9 and 12 have all been assured to a high level
p. 311: All other data … were assured to at least a moderate level.

Standards
p. 311: AA1000 Assurance Standard AA1000AS v3 (2020)
p. 311: ISO 14064-3:2006 Specification with guidance for the validation and verification of GHG assertions.

Relevant standard

ISO14064-3

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: Purchased goods and services
Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2)
Scope 3: Upstream transportation and distribution
Scope 3: Business travel
Scope 3: Employee commuting
Scope 3: Downstream transportation and distribution
Scope 3: End-of-life treatment of sold products

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

High assurance

Attach the statement

2022-Owens-Corning-Sustainability-Report.pdf

Page/section reference

Independent Assurance Statement, pages 311-315

Scope
p. 311: Scope. AA1000 to moderate level.
p. 311: Energy use, Scope 1 and 2 greenhouse gas emissions, Scope 3 greenhouse gas emission categories 1, 3, 4, 6, 7, 9 and 12 have all been assured to a high level
p. 311: All other data … were assured to at least a moderate level.

Standards
p. 315: AA1000 Assurance Standard AA1000AS v3 (2020)
p. 315: ISO 14064-3:2006 Specification with guidance for the validation and verification of GHG assertions.

Relevant standard

AA1000AS

Proportion of reported emissions verified (%)

100

Scope 3 category

Scope 3: Purchased goods and services
Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2)
Scope 3: Upstream transportation and distribution
Scope 3: Business travel
Scope 3: Employee commuting
Scope 3: Downstream transportation and distribution
Scope 3: End-of-life treatment of sold products

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

High assurance

Attach the statement

2022-Owens-Corning-Sustainability-Report.pdf

Page/section reference

Independent Assurance Statement, pages 311-315

Scope
p. 311: Scope. AA1000 to moderate level.
p. 311: Energy use, Scope 1 and 2 greenhouse gas emissions, Scope 3 greenhouse gas emission categories 1, 3, 4, 6, 7, 9 and 12 have all been assured to a high level
p. 311: All other data … were assured to at least a moderate level.

Standards
p. 311: AA1000 Assurance Standard AA1000AS v3 (2020)
p. 311: ISO 14064-3:2006 Specification with guidance for the validation and verification of GHG assertions.

Relevant standard

ISO14064-3

Proportion of reported emissions verified (%)

100

Scope 3 category

Scope 3: Capital goods
Scope 3: Processing of sold products

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Moderate assurance

Attach the statement

2022-Owens-Corning-Sustainability-Report.pdf

Page/section reference

Independent Assurance Statement, pages 311-315
Scope
p. 311: Scope. AA1000 to moderate level.
p. 311: Energy use, Scope 1 and 2 greenhouse gas emissions, Scope 3 greenhouse gas emission categories 1, 3, 4, 6, 7, 9 and 12 have all been assured to a high level
p. 311: All other data … were assured to at least a moderate level.

Standards:
p. 311: AA1000 Assurance Standard AA1000AS v3 (2020); ISO 14064-3:2006 Specification with guidance for the validation and verification of GHG assertions.

Relevant standard

AA1000AS

Proportion of reported emissions verified (%)

100

Scope 3 category

Scope 3: Capital goods
Scope 3: Processing of sold products

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Moderate assurance

Attach the statement

2022-Owens-Corning-Sustainability-Report.pdf

Page/section reference

Independent Assurance Statement, pages 311-315
Scope
p. 311: Scope. AA1000 to moderate level.
p. 311: Energy use, Scope 1 and 2 greenhouse gas emissions, Scope 3 greenhouse gas emission categories 1, 3, 4, 6, 7, 9 and 12 have all been assured to a high level
p. 311: All other data … were assured to at least a moderate level.

Standards:
p. 311: AA1000 Assurance Standard AA1000AS v3 (2020); ISO 14064-3:2006 Specification with guidance for the validation and verification of GHG assertions.

Relevant standard

ISO14064-3

Proportion of reported emissions verified (%)

100

C10.2

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

Yes

C10.2a

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

Disclosure module verification relates to	Data verified	Verification standard	Please explain
C4. Targets and performance	Progress against emissions reduction target	AA1000AS, ISO14064-3	Independent Assurance Statement, pages 311-315 Scope The scope of Owens Corning's 2022 Sustainability Report and this assurance engagement includes all of Owens Corning's sites and activities under their operational control globally. A Type 2 assurance engagement was performed on Owens Corning's performance against AccountAbility's AA1000

			Principles (2018) to a moderate level (also known as limited level). Energy use, Scope 1 and 2 greenhouse gas emissions, the environmental disclosure KPIs in Scope 3 greenhouse gas emission categories 1,3,4,6,7,9, and 12... have all been assured to a high level. All other data within the Report, including but not limited to, performance data and progress towards 2030 goals were assured to a moderate level. In addition, SCS evaluated the Report's adherence to Global Reporting Initiative's Consolidated Set of GRI Sustainably Reporting Standards (2022). Standards SCS performed the assurance of the Owens Corning's 2022 Sustainability Report against the AA1000 Assurance Standard AA1000AS v3 (2020). Specific performance data were assessed utilizing internationally recognized standards, which included, but are not limited to the following: -AA1000 Accountability Principles (2018) -World Resources Institute's Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition), March 2004 along with Scope 2 and Scope 3 Guidance -ISO 14064-3:2006 Specification with guidance for the validation and verification of GHG assertions. 1
C4. Targets and performance	Financial or other base year data points used to set a science-based target	AA1000AS, ISO14064-3	Independent Assurance Statement, pages 311-315 Scope The scope of Owens Corning's 2022 Sustainability Report and this assurance engagement includes all of Owens Corning's sites and activities under their operational control globally. A Type 2 assurance engagement was performed on Owens Corning's performance against AccountAbility's AA1000 Principles (2018) to a moderate level (also known as limited level). Energy use, Scope 1 and 2 greenhouse gas emissions, the environmental

			disclosure KPIs in Scope 3 greenhouse gas emission categories 1,3,4,6,7,9, and 12... have all been assured to a high level. All other data within the Report, including but not limited to, performance data and progress towards 2030 goals were assured to a moderate level. In addition, SCS evaluated the Report's adherence to Global Reporting Initiative's Consolidated Set of GRI Sustainably Reporting Standards (2022). Standards SCS performed the assurance of the Owens Corning's 2022 Sustainability Report against the AA1000 Assurance Standard AA1000AS v3 (2020). Specific performance data were assessed utilizing internationally recognized standards, which included, but are not limited to the following: -AA1000 Accountability Principles (2018) -World Resources Institute's Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition), March 2004 along with Scope 2 and Scope 3 Guidance -ISO 14064-3:2006 Specification with guidance for the validation and verification of GHG assertions. 1
C5. Emissions performance	Progress against emissions reduction target	AA1000AS, ISO14064-3	independent Assurance Statement, pages 311-315 Scope The scope of Owens Corning's 2022 Sustainability Report and this assurance engagement includes all of Owens Corning's sites and activities under their operational control globally. A Type 2 assurance engagement was performed on Owens Corning's performance against AccountAbility's AA1000 Principles (2018) to a moderate level (also known as limited level). Energy use, Scope 1 and 2 greenhouse gas emissions, the environmental disclosure KPIs in Scope 3 greenhouse gas emission categories 1,3,4,6,7,9, and 12... have all been assured to a high level. All other data within the

			Report, including but not limited to, performance data and progress towards 2030 goals were assured to a moderate level. In addition, SCS evaluated the Report's adherence to Global Reporting Initiative's Consolidated Set of GRI Sustainably Reporting Standards (2022). Standards SCS performed the assurance of the Owens Corning's 2022 Sustainability Report against the AA1000 Assurance Standard AA1000AS v3 (2020). Specific performance data were assessed utilizing internationally recognized standards, which included, but are not limited to the following: -AA1000 Accountability Principles (2018) -World Resources Institute's Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition), March 2004 along with Scope 2 and Scope 3 Guidance -ISO 14064-3:2006 Specification with guidance for the validation and verification of GHG assertions.
C6. Emissions data	Year on year change in emissions (Scope 1 and 2)	AA1000AS, ISO14064-3	independent Assurance Statement, pages 311-315 Scope The scope of Owens Corning's 2022 Sustainability Report and this assurance engagement includes all of Owens Corning's sites and activities under their operational control globally. A Type 2 assurance engagement was performed on Owens Corning's performance against AccountAbility's AA1000 Principles (2018) to a moderate level (also known as limited level). Energy use, Scope 1 and 2 greenhouse gas emissions, the environmental disclosure KPIs in Scope 3 greenhouse gas emission categories 1,3,4,6,7,9, and 12... have all been assured to a high level. All other data within the Report, including but not limited to, performance data and progress towards 2030 goals were assured to a moderate level. In addition, SCS evaluated the Report's adherence to Global Reporting Initiative's Consolidated Set of GRI

			Sustainably Reporting Standards (2022). Standards SCS performed the assurance of the Owens Corning's 2022 Sustainability Report against the AA1000 Assurance Standard AA1000AS v3 (2020). Specific performance data were assessed utilizing internationally recognized standards, which included, but are not limited to the following: -AA1000 Accountability Principles (2018) -World Resources Institute's Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition), March 2004 along with Scope 2 and Scope 3 Guidance -ISO 14064-3:2006 Specification with guidance for the validation and verification of GHG assertions. 1
C6. Emissions data	Year on year change in emissions (Scope 3)	AA1000AS, ISO14064-3	independent Assurance Statement, pages 311-315 Scope The scope of Owens Corning's 2022 Sustainability Report and this assurance engagement includes all of Owens Corning's sites and activities under their operational control globally. A Type 2 assurance engagement was performed on Owens Corning's performance against AccountAbility's AA1000 Principles (2018) to a moderate level (also known as limited level). Energy use, Scope 1 and 2 greenhouse gas emissions, the environmental disclosure KPIs in Scope 3 greenhouse gas emission categories 1,3,4,6,7,9, and 12... have all been assured to a high level. All other data within the Report, including but not limited to, performance data and progress towards 2030 goals were assured to a moderate level. In addition, SCS evaluated the Report's adherence to Global Reporting Initiative's Consolidated Set of GRI Sustainably Reporting Standards (2022). Standards SCS performed the assurance of the Owens Corning's 2022 Sustainability Report against the

			AA1000 Assurance Standard AA1000AS v3 (2020). Specific performance data were assessed utilizing internationally recognized standards, which included, but are not limited to the following: -AA1000 Accountability Principles (2018) -World Resources Institute's Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition), March 2004 along with Scope 2 and Scope 3 Guidance -ISO 14064-3:2006 Specification with guidance for the validation and verification of GHG assertions. 1
C8. Energy	Renewable energy products	AA1000AS	independent Assurance Statement, pages 311-315 Scope The scope of Owens Corning's 2022 Sustainability Report and this assurance engagement includes all of Owens Corning's sites and activities under their operational control globally. A Type 2 assurance engagement was performed on Owens Corning's performance against AccountAbility's AA1000 Principles (2018) to a moderate level (also known as limited level). Energy use, Scope 1 and 2 greenhouse gas emissions, the environmental disclosure KPIs in Scope 3 greenhouse gas emission categories 1,3,4,6,7,9, and 12... have all been assured to a high level. All other data within the Report, including but not limited to, performance data and progress towards 2030 goals were assured to a moderate level. In addition, SCS evaluated the Report's adherence to Global Reporting Initiative's Consolidated Set of GRI Sustainably Reporting Standards (2022). Standards SCS performed the assurance of the Owens Corning's 2022 Sustainability Report against the AA1000 Assurance Standard AA1000AS v3 (2020). Specific performance data were assessed utilizing internationally recognized standards, which included, but are not limited to

			the following: -AA1000 Accountability Principles (2018) -World Resources Institute's Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition), March 2004 along with Scope 2 and Scope 3 Guidance -ISO 14064-3:2006 Specification with guidance for the validation and verification of GHG assertions. 1
C8. Energy	Energy consumption	AA1000AS	independent Assurance Statement, pages 311-315 Scope The scope of Owens Corning's 2022 Sustainability Report and this assurance engagement includes all of Owens Corning's sites and activities under their operational control globally. A Type 2 assurance engagement was performed on Owens Corning's performance against AccountAbility's AA1000 Principles (2018) to a moderate level (also known as limited level). Energy use, Scope 1 and 2 greenhouse gas emissions, the environmental disclosure KPIs in Scope 3 greenhouse gas emission categories 1,3,4,6,7,9, and 12... have all been assured to a high level. All other data within the Report, including but not limited to, performance data and progress towards 2030 goals were assured to a moderate level. In addition, SCS evaluated the Report's adherence to Global Reporting Initiative's Consolidated Set of GRI Sustainably Reporting Standards (2022). Standards SCS performed the assurance of the Owens Corning's 2022 Sustainability Report against the AA1000 Assurance Standard AA1000AS v3 (2020). Specific performance data were assessed utilizing internationally recognized standards, which included, but are not limited to the following: -AA1000 Accountability Principles (2018) -World Resources Institute's Greenhouse Gas Protocol: A Corporate Accounting and Reporting

			Standard (Revised Edition), March 2004 along with Scope 2 and Scope 3 Guidance -ISO 14064-3:2006 Specification with guidance for the validation and verification of GHG assertions. 1

[1]2022-Owens-Corning-Sustainability-Report.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
Canada federal Output Based Pricing System (OBPS) - ETS
EU ETS
Korea ETS
Québec CaT - 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

0.9

% of Scope 2 emissions covered by the ETS

0

Period start date

January 1, 2022

Period end date

December 31, 2022

Allowances allocated

26,778

Allowances purchased

0

Verified Scope 1 emissions in metric tons CO2e

19,335

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

1.4

% of Scope 2 emissions covered by the ETS

0

Period start date

January 1, 2022

Period end date

December 31, 2022

Allowances allocated

23,574

Allowances purchased

7,131

Verified Scope 1 emissions in metric tons CO2e

30,705

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

16.8

% of Scope 2 emissions covered by the ETS

0

Period start date

January 1, 2022

Period end date

December 31, 2022

Allowances allocated

264,092

Allowances purchased

130,338

Verified Scope 1 emissions in metric tons CO2e

376,047

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

3.7

% of Scope 2 emissions covered by the ETS

0

Period start date

January 1, 2022

Period end date

December 31, 2022

Allowances allocated

89,954

Allowances purchased

0

Verified Scope 1 emissions in metric tons CO2e

83,088

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

6.6

% of Scope 2 emissions covered by the ETS

0

Period start date

January 1, 2022

Period end date

December 31, 2022

Allowances allocated

147,056

Allowances purchased

0

Verified Scope 1 emissions in metric tons CO2e

147,856

Verified Scope 2 emissions in metric tons CO2e

0

Details of ownership

Facilities we own and operate

Comment

C11.1d

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

Owens Corning (OC) implemented a global strategy to reduce emissions of greenhouse gas across our operations. As a company, we focus on reducing the emissions from our raw materials and processing, increasing renewable energy sources, while also implementing low cost/no-cost solutions to drive reductions. For our 2030 goal, we have embraced a Science-Based Target for GHG in line with the most stringent standard, designed to limit global warming to 1.5° Celsius. Our 2030 goal is to reduce absolute Scope 1 and Scope 2 GHG emissions by 50% from 2018.

Carbon Emissions Trading Schemes (ETS) are tools that we can use to ensure that we reduce our GHG emissions and reduce our costs related to the trading scheme. While OC always strives to be a responsible corporate citizen, many of our products are made from heavy manufacturing processes that generate carbon emissions. OC has a long-term strategy to manage its greenhouse gas emissions focused on compliance with regulations and then driving cost reductions while taking advantage of market opportunities in areas where trading schemes are in existence. Our strategy for complying with the systems in which we participate includes tracking and reducing emissions.
To calculate emissions and allowances, we use a software application from Schneider Electric, Resource Advisor, to track environmental data at the plant level. The data are normalized on a unit of production basis to evaluate variations and potential areas of risk. If risks are identified, mitigation plans are developed. The plant-level environmental data are then aggregated at a business unit and corporate level. Every plant, business unit, and corporate organization is provided footprint files for comparisons and the ability to track against their goals. Using estimates for future production for our plants, we can calculate estimated associated emissions, then calculate how much in allowances we will need to purchase in future years.
Our strategy for reducing emissions includes energy reduction projects, using renewable electricity, and eliminating blowing agents with high global warming potential. In 2022, we implemented 12 projects, generating energy savings of over 17,000 MWh and reducing over 4,400 MT of GHG emissions per year. In 2022: we invested $435k in lighting, $540k in motors and drives, $973k in process optimizations, and ~$10k in waste heat recovery, for a total of $1.96MM invested in efficiency and GHG reduction projects across the company.
We have established a 2030 goal for 100% renewable electricity to help us sharply reduce emissions from our processes and products. We continue to review potential renewable energy projects domestically and internationally. In 2022, approximately 56% of our electricity across our portfolio globally came from renewable sources, such as wind, hydro, solar, and geothermal. This metric is defined as the renewable energy sourced from the grid and the energy enabled by our PPAs, including on-site generation. We have also committed to solve the technical, business, and commercial puzzles in both our global foam insulation operations and our products to eliminate blowing agents that have high global warming potential, a significant source of Scope 1 emissions for our operations.
Facilities under EU ETS continue to work to improve their energy and GHG efficiency. However, allowances are decreasing year on year by a flat rate without consideration of production increase. This explains the emissions being higher than allowances. In most cases the difference is compensated by surplus allowances from previous years. With the further reductions in allowances through Phase 4 of the ETS, our annual allowances were reduced, which requires us to purchase credits. To manage this risk, we are considering electrifications of assets in our EU locations in the medium term and have completed similar conversions in recent years.

Volatility in carbon market pricing creates additional risk. Our course of action in managing these risks involves: interacting with the commission regarding the implementation of the EU Green Deal and Fit-for-55 package; pursuit of R&D initiatives involving a change in material composition or in manufacturing processes to enable emissions reductions; and implementation of energy and GHG reduction projects.

One specific example of applying this strategy to proactively reduce emissions in regulated regions can be seen in the electrification of a furnace in Trzemeszno, Poland. Paroc built a new energy-efficient line at the site in 2019 and the upgrade of the production technology supports our growth strategy for Central and Western Europe and further expands our current operational capabilities. We expect to reduce our CO2 emission by 75-80% with this line compared to a traditional coke-fired furnace line. Moreover, the new line's Electric Arc Furnace (EAF) will reduce carbon intensity by roughly 10% for all Paroc Insulation in Europe.

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

Objective(s) for implementing this internal carbon price

Change internal behavior
Drive energy efficiency
Drive low-carbon investment
Identify and seize low-carbon opportunities
Navigate GHG regulations
Stakeholder expectations
Stress test investments
Reduce supply chain emissions

Scope(s) covered

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

Pricing approach used – spatial variance

Differentiated

Pricing approach used – temporal variance

Evolutionary

Indicate how you expect the price to change over time

We expect the price to increase over time as allowances available to companies are decreasing and more companies will need to purchase allowances in the future.

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

60

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

150

Business decision-making processes this internal carbon price is applied to

Capital expenditure

Procurement

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

No

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

Our internal price for carbon helps us make smart decisions about our GHG reduction initiatives, as it enables us to frame challenges and opportunities in monetary terms, which are often more broadly understood than the concept of tons of emissions. In implementing an internal carbon price, we consider Scope 1, 2, and 3 emissions — the total impact of our operations and our supply chain. We have both internal and externally published reduction goals, which are aligned to drive strategy and action. We do not have an internal carbon tax or carbon charge allocated to our businesses. Quantifying the cost of carbon emissions with an internal carbon price helps us plan future scenarios and make business decisions. Our internal carbon price varies by region and considers a range of potential forecasted costs, ranging from $60 per metric ton to $150 per metric ton, depending on the location. A regional approach to internal carbon pricing allows us to more accurately estimate and evaluate the cost of carbon for capital project planning in regions with varying carbon prices. We have also been able to quantify our current total risk in the event of an efficient, economy-wide carbon tax, and we can see how dramatically we have reduced that risk since 2007, our peak GHG emissions year. This also allows us to value our future forecasted emissions reductions as we work toward our 2030 goals. The process includes: - Calculate the difference in metric tons of CO2e from 2007 and 2022. - Multiply that amount by $150/metric tons.. - The result is the high-end estimate of potential carbon tax cost savings of emissions reduction activities. As an example of how we have used carbon pricing specific to our operations, we use bracketed shadow pricing to assess the reduction in potential

carbon-price risk attributable to sourcing renewable energy: in 2015 we signed PPAs that enabled 250MW of new wind capacity in Oklahoma and Texas which have the potential to generate 1.1 million MWh of electricity per year. In 2021, we expanded our renewable sourcing through virtual wind PPAs: one in Finland and one in Sweden, which will bring in 43 MW and 48 MW of renewable electricity capacity, respectively. We have also entered into a VPPA in Spain that is expected to come on line in stages throughout 2023 and 2024. The agreement involves three separate VPPAs with a contracted capacity of 81.9 MW, which are collectively expected to produce 223 GWh per year.

C12. Engagement

C12.1

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

Yes, our suppliers
Yes, our customers/clients
Yes, other partners in the value chain

C12.1a

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

Type of engagement

Engagement & incentivization (changing supplier behavior)

Details of engagement

Climate change performance is featured in supplier awards scheme

% of suppliers by number

100

% total procurement spend (direct and indirect)

100

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

Rationale for the coverage of your engagement

Engaging all of our suppliers around climate change and sustainability is an important strategy to meet our 2030 goal to reduce absolute scope 3 emissions by 30%. Our ability to meet our goal is enhanced when we can engage more suppliers around their emissions, ways to reduce emissions and ways to mainstream sustainability into their operations. Our annual supplier engagement event connects suppliers with employees to share ideas and discuss how to work even more closely together to achieve our shared sustainability goals.

During our 2022 supplier engagement event, suppliers were invited to presentations that included business updates by our corporate leaders and open panel discussions. During the business meeting, suppliers learned about Owens Corning's 2030 sustainability goals, including our inclusion and diversity goals, and how these pertain to our suppliers. Our chief sustainability officer hosted a discussion, which engaged and educated suppliers around key sustainability action items involving our supply chain, such as our work to transition to a circular economy model and how suppliers relate to our company's 30% Scope 3 absolute emissions reduction goal. Key Supplier Management will be a focus in our sourcing agenda for 2023, leading to accelerated sustainability impact and results.

Sustainability performance, including climate-related performance and initiatives, is one of the categories for our annual Supplier Awards. As we want to influence the sustainability performance of all our suppliers, any supplier can attend the event and all suppliers are eligible for the award, regardless of how critical the supplier is to our business. Through the awards scheme, our intention is to challenge and inspire our suppliers to engage with us proactively and to continue to improve their sustainability performance, which helps their business and ours.

Impact of engagement, including measures of success

The impact of the engagement is to help suppliers understand Owens Corning's sustainability strategy and what our suppliers can do to help us meet it. When our suppliers improve their own sustainability performance, they help us to achieve our Scope 3 Sustainability Goal, so this is a win/win situation for our value chain. Our Science-Based Scope 3 reduction target for 2030, a reduction in greenhouse gas emissions related to our purchased materials and services through collaboration with our suppliers to cut these emissions by 30%. In 2022, we measured a 9% increase in our Scope 3 emissions compared to the base year of 2018, which is an increase. Despite reductions in Scope 3 emissions from fuel- and energy-related activities, total annual Scope 3 emissions rose in 2022 due to increases in emissions from the categories of purchased goods and services, upstream transportation and distribution, and downstream transportation and distribution, which are categories strongly correlated to factors stemming from production increases and overall growth, such as third-party foam production.

Our method of engaging with our supply chain is essential to helping us to realize changes needed to meet our 2030 Scope 3 reduction goal. We also measure success by a reduction in risk. One way to measure risk is if our suppliers have and/or report on environmental goals. We track this information through our annual supplier survey. Our goal is a year over year increase in the percentage of suppliers that have a sustainability related goals. Our 2022 survey found that 80% of suppliers have sustainability-related organizational goals and policies. This value is equal to the 80% value observed in our 2021 survey, and although flat year-over-year, this high percentage is another sign of successful supplier incentivization and engagement, and improving above 80% in future engagement would indicate that our strategy to engage our suppliers around

sustainability is working. As a result of this engagement we have established ongoing relationships with these suppliers around sustainability topics such as emissions and climate change.

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

43.7

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

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

Engaging Customers through Building Science: Owens Corning's experts continually research and deploy building science to serve architects, buildings, occupants, and the environment. One of the primary ways Building Science is promoted within the company is through an internal team who specialize in engaging architects, engineers, and builders through informational sessions. This team uses engagement to educate actual and potential customers and architects about how to optimally use Owens Corning's energy-saving products to maximize their performance and contribute to green buildings. Engaging Architects, Engineers, and Construction customers around Building Science is crucial, as customers who are engaged around Building Science can have a 'ripple effect' on sustainable revenue. This is because the company prioritizes engaging with high-impact architects and engineers who, if successfully engaged, can spread practices and specifications that use OC products to a broader network. For example, if a major architecture firm is engaged and begins to specify using an OC insulation product as a result, that firm may share their approach with their satellite locations and other architectural firms in their region, magnifying the impact of the engagement.

OC also engages with customers around climate through direct and indirect outreach. When we engage with a customer around sustainability and climate, we share details with them about our company's sustainability commitment, and how we are working to

reduce our climate and environmental impact. To support this, we may also help them understand and use our Life Cycle Assessment (LCA) data, which gives them more context on the climate impacts of our products, with the rationale that transparency can be an advantage for customers who want value chain climate impact data. Some customers may seek to understand our climate and sustainability commitments through our EcoVadis scorecards as well. In 2022, we estimate we engaged 6.7% of our customer base in this way, through engagement with composites customers, including wind industry customers among others.

This metric is comprised of 37% associated with our insulation business through AEC team engagement, and 6.7% associated with composites customers who are engaged around climate change and sustainability in the use of our products, for a total of 43.7% .

Impact of engagement, including measures of success

The company's approach to engaging customers around Building Science includes lunch-and-learns, webinars, in-person seminars, workshops, and national and regional trade shows. The impact of this engagement is that the company can build trust with customers, and drive the use of Owens Corning energy-saving products in more green building applications, as more customers are engaged. In the aftermath of the Covid-19 pandemic, we have transitioned to a hybrid approach, conducting national webinars as well as in-person educational events. Metrics tracking customers' building science engagement include monitoring engagement numbers in people reached and events held. Successful engagement in a given year would be passing a threshold of at least 100 building science events, to ensure building science is reaching a sufficient number of stakeholders. In 2022, the company again held over 100 Building Science engagement events, indicating a successful level of engagement, and reached several thousand architects, engineers, and builders who currently use or could potentially use Owens Corning's insulation products. In 2022, the team also began to visit architect offices again to deliver in-person AIA accredited presentations, and this hybrid approach to virtual and in-person engagement will be a focus area for 2022 and onwards.

Engaging with customers around sustainability and climate is impactful as it helps to communicate our sustainability and climate commitments to our customers, and in turn helps them to understand and manage their scope 3 emissions. In 2022, we estimate we engaged 6.7% of our customer base through these engagements with composites customers, and while we see this as a good threshold for sustainability engagement relative to this area of the business, and an improvement in the 4% observed last year, we also expect to grow the level of customers with whom we engage around climate data and our sustainability commitments in future years.

C12.1d

(C12.1d) Give details of your climate-related engagement strategy with other partners in the value chain.

Owens Corning also undertakes climate-related engagement with other partners in the value chain in the form of building science and housing-oriented governmental and NGO engagement, which promote housing which is energy efficient and thereby reduce emissions . For example, in 2021 we continued to work with the Gary Sinise Foundation's RISE (Restoring Independence, Supporting Empowerment) program, which builds specially adapted and energy-efficient homes for severely wounded U.S. military members and their families. We donate insulation and roofing products for homes built through the program and work with contractors who volunteer in the construction of those homes, which includes leveraging our building science expertise around how to make the home optimally energy efficient through the use of our products, which reduces energy use and emissions. Our commitment to supporting safe, efficient housing for people in need makes R.I.S.E. a perfect fit for Owens Corning.

Another example of climate-related value chain engagement can be seen in our work with Natural Resources Canada, or NRCan. With the upcoming the PanCanadian Framework on Clean Growth and Climate Change, net zero-ready performance will be mandated for all new building by 2030. To respond to this situation, we partner with NRCan on several demonstration projects to help the building construction industry move toward net zero-ready performance. Two years ago, we began a two-year project with NRCan in Quebec to demonstrate and educate the building construction industry on building affordable net zero-ready homes in a large-scale setting. We are also working with NRCan on the prefabricated exterior energy retrofit (PEER) group project, which develops insulation systems and technologies for deep energy retrofits to get existing buildings in Canada up to net zero-ready performance. As a result of these engagements, Owens Corning is able to help drive awareness of climate-friendly buildings and to realize the opportunities presented by the PanCanadian Framework on Clean Growth and Climate Change. We also have participated in NRCan's Local Energy Efficiency Partnership (LEEP) program, accelerating uptake of innovative building enclosure products and technologies in the new and retrofit housing sectors. Lastly, we are an active partner supporting a pilot project from the CHBA, Towards Cost-Effective Net-Zero Energy Ready Residential Renovations, which receives funding from NRCan. The project's goal is to accelerate the deployment of very high-efficiency homes and buildings in Canada, and targets driving down costs and creating market confidence in net-zero energy ready retrofits.

C12.2

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

No, but we plan to introduce climate-related requirements within the next two years

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)

OwensCorning_Climate_Change_Statement.pdf

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

Our climate policy is stated on our sustainability website and is clearly in favor of reducing energy use and greenhouse gas emissions. Our policy work and engagement with trade groups is focused on these same goals, to help make it easy for consumers and industry professionals to employ energy efficiency and renewable energy practices in conjunction with Owens Corning or using Owens Corning's expertise and products. In addition, “expanding our impact through sustainability” is a company value. The Owens Corning company values underpin our company operations, and all decisions are made through the lens of our corporate values, including sustainability. From the standpoint of engaging with policy makers, our Government Affairs team controls all aspects of our communications and ensures that these activities are completely aligned with our climate policy. We regularly review language and activities with both external affairs and sustainability and conduct legal reviews of all external communications including letters, testimony and activities with outside advocates or NGOs. Owens Corning’s political advocacy objectives support initiatives aligned with the company’s core principles and strategic business objectives. Examples of global public policies that Owens Corning actively support include but are not limited to: government actions to address climate change, measures to increase the energy efficiency of buildings, and efforts that drive building energy code development and adoption. We also work in conjunction with the National Association of Manufacturers, the Business Roundtable, and similar industry organizations to advocate for affordable housing and other social justice concerns. In 2022, energy efficiency advocacy accounted for around $340,000 worth of related expenses, and our engagements in support of improved building energy codes accounted for around $170,000, with some overlap of spending between these areas.

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

Federal 45L New Home Tax Credit and 25C Retrofit Tax Credit

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

Subsidies on products or services

Policy, law, or regulation geographic coverage

National

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

United States of America

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

Support with no exceptions

Description of engagement with policy makers

In 2022, Owens Corning advocated in support of extension and enhancement of the tax credits for new and existing homes and buildings. These tax credits incentivize more efficient homes and buildings which increase sale of our products while reducing energy and carbon emissions from housing in the United States.

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

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

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

Engagements on regulations around state building requirements, including: 1) adoption of the 2021 IECC in states; 2) promote Passive House in state policy/code as foundational to decarbonization strategies.

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

Low-carbon products and services

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

Energy efficiency requirements

Policy, law, or regulation geographic coverage

Sub-national

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

United States of America

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

Support with no exceptions

Description of engagement with policy makers

The primary outcome of work at the state level is to update dated state building code requirements for new buildings, to require the 2021 IECC to require the 2021 IECC or 2019 ASHRAE 90.1 energy standards as mandatory minimums. As an example, over 20 local governments in Texas have adopted the 2021 IECC, exceeding the state code minimum. In the States, we promote Passive House in climate policy, focusing on affordable housing funded through low-income-housing-tax-credits, state government buildings, and energy and decarbonization "reach codes" that exceed the code minimum. In all these activities, we engage directly and indirectly through trade associations and NGOs.

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

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

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

Engagements on regulations around federal building requirements, including: 1) EPA Energy Star Homes; 2) DOE Zero Energy Ready Homes; 3) federal 45L new homes tax credit to meet #1 & #2 above 4) Manufactured Housing Energy Efficiency Standards; 5) Mainstreaming the 2021 IECC and 2019 ASHRAE 90.1 standards as the mandatory minimum in all new federal buildings;

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

Low-carbon products and services

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

Energy efficiency requirements

Policy, law, or regulation geographic coverage

National

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

United States of America

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

Support with no exceptions

Description of engagement with policy makers

The primary outcome is to update dated federal requirements for new buildings and voluntary federal program criteria for new residential and commercial buildings to require the 2021 IECC to require the 2021 IECC or 2019/2022 ASHRAE 90.1 energy standards as mandatory minimums or reach codes such as Passive House. This includes an exhaustive list of regulations and guidance, and focused on federally backed mortgages (FHA, VA, USDA), Manufactured Housing, and the Energy Star Homes (EPA) and Zero Energy Ready Homes (DOE) programs specs. It's critical to establish this baseline as foundational to future policy efforts related to climate and building decarbonization. Further, many states follow the federal actions and adopt similar policies. In all these activities, we engage directly and indirectly through trade associations and NGOs.

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

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

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

North American Insulation Manufacturers Association (NAIMA)

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

NAIMA works closely with worldwide manufacturers of fiberglass, rock wool and slag wool insulation products and other allied organizations to advance sustainable development through activities that promote the following as they relate to insulation: 1.

Pollution reduction through increased insulation 2. Energy efficiency awareness 3. Natural resource preservation. NAIMA unites with other international organizations to inform government agencies, environmental building organizations, manufacturing companies, consumers, and academia around the globe about the role insulation plays in energy efficient construction, the reduction of greenhouse gas emissions and mitigating climate change. Owens Corning recognizes NAIMA as a key partner for insulation manufacturing in North America. Our funding supports various NAIMA efforts, including efforts to improve energy efficiency. The North American Insulation Manufacturers Association (NAIMA) is made up of companies that manufacture fiberglass, rock wool, and slag wool insulation. Its members produce the majority of the insulation products used in the United States, Canada, and Mexico. NAIMA is primarily focused on promoting energy efficiency and the preservation of the environment, as well as the safe production and use of its members' products.

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

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

American Composite Manufacturers Association (ACMA)

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

ACMA has supported efforts to improve resilience of our nation's energy grid, surface transportation and water infrastructure through the promotion of fiber-reinforced polymer composites and advanced materials. The association and its member companies have advocated for the benefits of composites, such as corrosion resistance, ease of installation, extreme weather resilience and superior service life. The American Composites Manufacturers Association (ACMA) provides education, advocacy, and

representation for its member companies and associated markets, working to promote growth within the composites industry. ACMA is committed to driving industry innovation, providing members with a range of educational tools and certification programs. One example of how we work with ACMA is in the U.S., where Owens Corning collaborates with organizations such as the American Composite Manufacturers Association (ACMA), as well as other stakeholders in the wind industry value chain to develop solutions to effectively deal with the challenge of wind turbine waste at end of life. In addition to extending the service life of turbine blades, from 20 years to 30 or 40 years, we have been looking at ways to close the loop around reusability and recyclability where waste is concerned.

In 2022, ACMA kicked off their Climate Impacts Project to increase support to member companies in the area of life cycle assessment, including life cycle inventory, product category rules, and EPDs. Our employees are providing support and expertise to the project.

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

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

Business Roundtable

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

From the Business Roundtable website on climate change their position is: "Addressing climate change and its impacts demands a robust, coordinated effort with a sound policy portfolio. Business Roundtable CEOs are calling for a well-designed market-based mechanism and other supporting policies to provide certainty and unleash innovation to

lift America toward a cleaner, brighter future." (https://www.businessroundtable.org/climate) Owens Corning's funding of the Business Roundtable supports their efforts to drive creativity, innovation and economic opportunity. One specific example of recent work with Business Roundtable are efforts to advocate for affordable housing and other social justice concerns.

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

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 voluntary sustainability report

Status

Complete

Attach the document

2022-Owens-Corning-Sustainability-Report.pdf

Page/Section reference

The whole report relates to Climate Change and GHG. Specific sections include:
Board of Directors Accountability (including climate) - p. 161
Sustainability governance – p. 161
Product Innovation & Stewardship - p. 148
Energy - p. 51
Combating Climate Change - p. 60
Summary of Key Risks (includes climate as Emerging Risks) – p. 15
Appendix - Energy data - p, 277
Emission data - p. 284
Assurance statement - p. 311
TCFD framework discussion - p. 316

TCFD Index - p. 324

Content elements

Governance
Strategy
Risks & opportunities
Emissions figures
Emission targets
Other metrics

Comment

2022 Sustainability Report published May 2023

Publication

In mainstream reports

Status

Complete

Attach the document

2023-Owens-Corning-Bookmarked-Proxy-Statement.pdf

Page/Section reference

Pages 3-4 of PDF - Letter to shareholders, includes commitment to sustainability, 2030 sustainability goals,
Page 2 (p. 12 of PDF) - Doing Business in a Sustainable Way (includes discussion of sustainability and climate goals, sustainability reporting standards)
Page 4 (p. 14 of PDF) - ESG recognitions
Page 20 (30 of PDF) - Risk oversight details
Page 42 (52 of PDF) - discussion of ESG (including climate) goal as component of executive compensation program

Content elements

Governance
Strategy
Risks & opportunities
Emission targets

Comment

Annual proxy Statement filed April 2023

Publication

In mainstream reports

Status

Complete

Attach the document

2022-Annual-Report.pdf

Page/Section reference

Excerpts due to character limit:
P. 7-8 of PDF - Environmental Control, discussion of climate & sustainability goals
P. 9 of PDF - discussion of climate-related sustainability efforts
P. 16 of PDF - Climate change risk discussion
P. 18 of PDF - Proposed or future laws or regulations aimed at addressing climate change... may materially impact demand for our products or our cost of doing business.

Content elements

Governance
Strategy
Risks & opportunities
Emission targets

Comment

2022 FY Annual Report (Form 10-K)

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	Science Based Targets Network (SBTN) UN Global Compact	Science Based Targets Network (SBTN): Owens Corning is a member of the SBTN, which is part of the Global Commons Alliance. The SBTN includes international environmental nonprofit organizations, agencies, and mission-driven entities. Its goal is to empower individuals, companies, and governments to become stewards of the environment using science-based targets — measurable, actionable, and timebound objectives based on the best available science. The SBTN aims to develop methods and tools that help companies set goals and actions toward understanding and preventing negative impacts on nature and biodiversity by expanding on the successes of the Science Based Targets initiative (SBTi). This, in turn, fosters an atmosphere that builds

		momentum toward our collective goals. Owens Corning's membership with the SBTN is through being part of the SBTN Corporate Engagement Program (CEP), through which Owens Corning can work with SBTN during the development of their methods, tools, and guidance. Our membership can be seen at the following URL: https://sciencebasedtargetsnetwork.org/take-action-now/take-action-as-a-company/join-the-sbtn-corporate-engagement-program/corporate-engagement-program-members/ UN Global Compact: Since 2010, Owens Corning has been a signatory to the United Nations Global Compact (UNGC), a strategic, voluntary policy initiative for businesses committed to aligning their operations with 10 universally accepted principles in the areas of human rights, labor, environment, and anti-corruption. Owens Corning's membership with the UNGC is Participant, and our profile on the UNGC website, which includes a list of our Communications on Progress (CoP) are found at the following URL: https://unglobalcompact.org/what-is-gc/participants/11350-Owens-Corning

C15. Biodiversity

C15.1

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

	Board-level oversight and/or executive management-level responsibility for biodiversity-related issues	Description of oversight and objectives relating to biodiversity
Row 1	Yes, both board-level oversight and executive management-level responsibility	Oversight of sustainability — including all elements of our 2030 sustainability goals, which include targets for biodiversity — lies with the board of directors. In addition, our audit committee has oversight responsibilities for Environmental, Health, and Safety. Directors are expected to provide oversight, guidance, and direction on sustainability issues and opportunities that potentially impact our reputation and long-term economic viability. We have a sustainability governance structure to discuss and make decisions on all issues related to economic, environmental, and social aspects, which include biodiversity.

		At the executive level, vision and values related to sustainability are created by the CEO and the CSO. They also create, maintain, and promote sustainability strategy and policies, and they redefine targets and goals as needed. The board of directors endorsed and provided guidance on all of the goals when developing and setting our 2030 Sustainability Goals in 2019. This includes a target for biodiversity, which is to set targets based on an understanding of the full impact of our operations and supply chain on biodiversity by 2025.

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	Commitment to avoidance of negative impacts on threatened and protected species	SDG Other, please specify Commitment to collaborate with and eventually set targets through the Science-Based Targets Network (SBTN)

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

No, but we plan to within the next two years

Dependencies on biodiversity

Indicate whether your organization undertakes this type of assessment

No, but we plan to within the next two years

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

Key Biodiversity Area (KBAs)

Country/area

Republic of Korea

Name of the biodiversity-sensitive area

Asan Bay (including Asan-ho lake and Sapgyo-ho lake)
Type of KBA: Important Bird and Biodiversity Area (IBA)
Within 1km

Proximity

Up to 5 km

Briefly describe your organization's activities in the reporting year located in or near to the selected area

Status of management plan: Level 2: Pilot Assessment Complete 2022

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

Other, please specify

Education with employees around biodiversity awareness and consideration of potential site biodiversity improvements

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

Biodiversity triggers: Endangered and Vulnerable Species, migratory birds/congregations

Owens Corning works with third-party nonprofit organizations to conduct Biodiversity Impact Assessments, designed to help us address adverse impacts as part of our

Biodiversity Management
Plan. The Wildlife Habitat Council (WHC), an organization dedicated to promoting and certifying habitat conservation and management on corporate lands, is one of our key partners. In conjunction with the WHC, we are developing bespoke methodologies to consistently assess our impacts at our locations around the world.

In 2022, initial assessments were conducted for sites in Asan, South Korea; Guangde, China; and San Vicente, Spain. These assessments included actionable recommendations as the sites work to improve conditions for local species. Examples include:
■ Engage with employees around biodiversity awareness
■ Install green infrastructure, such as lighting improvements, green rooftops, and stormwater runoff collection, all of which can support native species
■ Potential restoration projects

Classification of biodiversity -sensitive area

Key Biodiversity Area (KBAs)

Country/area

Germany

Name of the biodiversity-sensitive area

Schwalm-Nette-Platte and Grenzwald
Type of KBA: Important Bird and Biodiversity Area (IBA)
Within 1km

Proximity

Adjacent

Briefly describe your organization's activities in the reporting year located in or near to the selected area

Status of management plan: Level 2: Planning

We upload site coordinates into the Integrated Biodiversity Assessment Tool (IBAT) to help us obtain information about a facility's proximity to nationally and regionally protected sites, key bird and biodiversity areas, and endangered or threatened species in the vicinity.

Biodiversity triggers: Bird species with most of their range restricted to a region, Regionally important congregations, Species threatened at the European Union level (IBA status B2, B3, and C6)

Indicate whether any of your organization's activities located in or near to the selected area could negatively affect biodiversity

Not assessed

Mitigation measures implemented within the selected area

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

Classification of biodiversity -sensitive area

Key Biodiversity Area (KBAs)

Country/area

United States of America

Name of the biodiversity-sensitive area

Fort Chaffee
Type of KBA: Important Bird and Biodiversity Area (IBA)
Within 1km

Proximity

Up to 5 km

Briefly describe your organization's activities in the reporting year located in or near to the selected area

Status of management plan: Level 2: Planning

We upload site coordinates into the Integrated Biodiversity Assessment Tool (IBAT) to help us obtain information about a facility's proximity to nationally and regionally protected sites, key bird and biodiversity areas, and endangered or threatened species in the vicinity.

Biodiversity triggers: Threatened Bird Species Population (IBA status A1)

Indicate whether any of your organization's activities located in or near to the selected area could negatively affect biodiversity

Not assessed

Mitigation measures implemented within the selected area

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

Classification of biodiversity -sensitive area

Key Biodiversity Area (KBAs)

Country/area

China

Name of the biodiversity-sensitive area

Anhui Chinese Alligator National Nature Reserve
Type of KBA: Alliance for Zero Extinction Area
Within the AZE boundaries

Proximity

Overlap

Briefly describe your organization's activities in the reporting year located in or near to the selected area

Our Insulation facility in Guangde, China, continues to participate in efforts to preserve the Yangtze alligator and the golden-headed box turtle, raising awareness about the species within the proximity of our plant and funding initiatives designed to preserve them in their habitat.

Biodiversity triggers: Endangered and Vulnerable Species

Indicate whether any of your organization's activities located in or near to the selected area could negatively affect biodiversity

Yes, and no mitigation measures have been implemented

Mitigation measures implemented within the selected area

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

Owens Corning works with third-party nonprofit organizations to conduct Biodiversity Impact Assessments, designed to help us address adverse impacts as part of our Biodiversity Management
Plan. The Wildlife Habitat Council (WHC), an organization dedicated to promoting and certifying habitat conservation and management on corporate lands, is one of our key partners. In conjunction with the WHC, we are developing bespoke methodologies to consistently assess our impacts at our locations around the world.

In 2022, initial assessments were conducted for sites in Asan, South Korea; Guangde, China; and San Vicente, Spain. These assessments included actionable recommendations as the sites work to improve conditions for local species. Examples include:

- Engage with employees around biodiversity awareness
- Install green infrastructure, such as lighting improvements, green rooftops, and

stormwater runoff collection, all of which can support native species
■ Potential restoration projects

Classification of biodiversity -sensitive area

Key Biodiversity Area (KBAs)

Country/area

China

Name of the biodiversity-sensitive area

Qingdao-Rizhao coastal wetland and islands
Type of KBA: Important Bird and Biodiversity Area
Within the IBA boundaries

Proximity

Overlap

Briefly describe your organization’s activities in the reporting year located in or near to the selected area

Status of management plan: Level 2: Planning
Jiaobei, China

We upload site coordinates into the Integrated Biodiversity Assessment Tool (IBAT) to help us obtain information about a facility’s proximity to nationally and regionally protected sites, key bird and biodiversity areas, and endangered or threatened species in the vicinity.

Biodiversity triggers: Endangered and Vulnerable Species

Indicate whether any of your organization’s activities located in or near to the selected area could negatively affect biodiversity

Not assessed

Mitigation measures implemented within the selected area

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

Classification of biodiversity -sensitive area

Key Biodiversity Area (KBAs)

Country/area

China

Name of the biodiversity-sensitive area

Qingdao-Rizhao coastal wetland and islands
Type of KBA: Important Bird and Biodiversity Area
Within the IBA boundaries

Proximity

Overlap

Briefly describe your organization's activities in the reporting year located in or near to the selected area

Status of management plan: Level 2: Planning
Qingdao, China
Biodiversity triggers: Endangered and Vulnerable Species

Indicate whether any of your organization's activities located in or near to the selected area could negatively affect biodiversity

Not assessed

Mitigation measures implemented within the selected area

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

Classification of biodiversity -sensitive area

Key Biodiversity Area (KBAs)

Country/area

Spain

Name of the biodiversity-sensitive area

Mountains for Barcelona
Type of KBA: Important Bird and Biodiversity Area
Within the IBA boundaries

Proximity

Overlap

Briefly describe your organization's activities in the reporting year located in or near to the selected area

Owens Corning operates a small manufacturing facility for our composites business in San Vicente, Spain.

Biodiversity triggers: Important area for species characteristic of the Mediterranean region, and cliffnesting species

Indicate whether any of your organization's activities located in or near to the selected area could negatively affect biodiversity

Yes, and no mitigation measures have been implemented

Mitigation measures implemented within the selected area

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

Owens Corning works with third-party nonprofit organizations to conduct Biodiversity Impact Assessments, designed to help us address adverse impacts as part of our Biodiversity Management
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In 2022, initial assessments were conducted for sites in Asan, South Korea; Guangde, China; and San Vicente, Spain. These assessments included actionable recommendations as the sites work to improve conditions for local species. Examples include:

■ Engage with employees around biodiversity awareness
■ Install green infrastructure, such as lighting improvements, green rooftops, and stormwater runoff collection, all of which can support native species
■ Potential restoration projects

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 Education & awareness Other, please specify Biodiversity Impact Assessments, Biodiversity Management Plan, Site-Level Programs such as Stormwater management and Native Prairies Land Management

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	Pressure indicators

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 voluntary sustainability report or other voluntary communications	Content of biodiversity-related policies or commitments Governance Impacts on biodiversity Details on biodiversity indicators Risks and opportunities Biodiversity strategy	See Protecting Biodiversity chapter, pages 71-78, for context on our work at the site level, our screenings for biodiversity exposures, detail on the site-level deep dives conducted with Wildlife Habitat Council, and our goal to set targets by 2025. [1]

[1] 2022-Owens-Corning-Sustainability-Report.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	Chief Executive Officer	Chief Executive Officer (CEO)