

Welcome to your CDP Climate Change Questionnaire 2021

C0. Introduction

C0.1

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

Corning Incorporated, hereinafter referred to as "Corning," traces its origins to a glass business established in 1851. The present corporation was incorporated in New York state in December 1936. The company's name was changed from Corning Glass Works to Corning Incorporated on April 28, 1989. Corning is a leading innovator in materials science. For almost 170 years, Corning has combined its unparalleled expertise in glass science, ceramic science, and optical physics with deep manufacturing and engineering capabilities to develop category-defining products that transform industries and enhance people's lives. We succeed through sustained investment in research and development, a unique combination of material and process innovation, and deep, trust-based relationships with customers who are global leaders in their industries. Corning's capabilities are versatile and synergistic, allowing the company to evolve to meet changing market needs, while also helping our customers capture new opportunities in dynamic industries. Today, Corning's markets include optical communications, mobile consumer electronics, display, automotive, and life sciences. Corning's industry-leading products include damage-resistant cover glass for mobile devices; precision glass for advanced displays; optical fiber, wireless technologies, and connectivity solutions for state-of-the-art communications networks; trusted products to accelerate drug discovery and delivery; and clean-air technologies for cars and trucks. Corning operates in five reportable segments: Display Technologies, Optical Communications, Environmental Technologies, Specialty Materials and Life Sciences and manufactures products at 122 plants in 15 countries and regions. (2020 Form 10-K, page 2, corning.com).

C0.2

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

	Start date	End date	Indicate if you are providing emissions data for past reporting years
Reporting year	January 1, 2019	December 31, 2019	No

C0.3

(C0.3) Select the countries/areas for which you will be supplying data.

Brazil
China
Denmark
France
Germany
India
Israel
Italy
Japan
Mexico
Netherlands
Poland
Republic of Korea
South Africa
Taiwan, Greater China
Turkey
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

C1. Governance

C1.1

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

Yes

C1.1a

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

Position of individual(s)	Please explain
Board-level committee	<p>The function of Corning's Corporate Responsibility and Sustainability Committee of the Board of Directors includes assisting the Board in reviewing with the corporation's management strategies, plans, policies, and actions related to our sustainability program and environmental responsibilities. This review includes sustainability goals, environmental and social policies and practices, and energy and water management strategies, among other areas of focus. An example of a decision the Corporate Responsibility and Sustainability Committee of the Board made is that the committee reviewed and approved Corning's public sustainability goals. The director of sustainability presents annually to the committee. This presentation includes a dashboard indicating the implementation and performance against objectives for all sustainability-related goals. Additionally, the director of global environment and sustainability has the responsibility to track and report on greenhouse gas emissions, among other environmental areas, and presents annually to the committee. The Corporate Responsibility and Sustainability Committee provides oversight of Corning's environmental and health and safety policies. Please visit the Governance section of our Investor Relations page at www.corning.com to view the Corporate Responsibility and Sustainability Committee charter.</p>

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 – all meetings	<p>Reviewing and guiding strategy Monitoring implementation and performance of objectives</p>	<p>The director of sustainability presents annually to the committee. This presentation includes a dashboard indicating the implementation and performance against objectives for all sustainability-related goals. Additionally, the director of global environment and sustainability has the responsibility to track and report on greenhouse gas emissions, among other environmental areas, and presents annually to the committee. The director's presentation gives an overview of strategies and actions Corning has put in place to reduce greenhouse gas emissions and</p>

		recommends strategies that will create a positive and sustainable impact by Corning for years to come. The committee members provide their feedback on the information presented.
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C1.2

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

Name of the position(s) and/or committee(s)	Responsibility	Frequency of reporting to the board on climate-related issues
Other C-Suite Officer, please specify Chief Strategy Officer	Both assessing and managing climate-related risks and opportunities	Quarterly
Sustainability committee	Both assessing and managing climate-related risks and opportunities	Quarterly
Other, please specify Director of Sustainability	Both assessing and managing climate-related risks and opportunities	Annually
Other, please specify Director of Global Environment and Sustainability	Both assessing and managing climate-related risks and opportunities	Annually
Other, please specify Director of Global Energy Management	Both assessing and managing climate-related risks and opportunities	As important matters arise
Other, please specify Director of Sustainability, Life Sciences	Both assessing and managing climate-related risks and opportunities	Annually
Other, please specify Director of Sustainability, Optical Communications	Both assessing and managing climate-related risks and opportunities	Annually
Other, please specify Enterprise Risk Management Team	Both assessing and managing climate-related risks and opportunities	Annually

C1.2a

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

Corning's Sustainability Steering Committee is comprised of executives from several functional areas and the committee has the responsibility to sponsor and steer Corning's Sustainability Working Committee (SWC), including review and approval of overall work efforts. The Corning SWC is a cross-functional and cross-organizational committee that meets monthly and proposes strategic and tactical sustainability work efforts to the Sustainability Steering Committee for review and approval. The members of the Sustainability Steering Committee were strategically selected to represent each relevant management area of Corning in relation to overall sustainability, which includes the assessment of climate-related risks and opportunities. The positions of the members and their climate-related responsibilities are as follows:

- The Chief Strategy Officer holds a position on this committee due to the responsibility for overseeing overall company sustainability initiatives that include climate-related issues.
- The Senior Vice President, Human Resources (including Diversity, Equity, and Inclusion) holds a position on this committee due to the responsibility for overseeing employee rights, compensation and benefits, labor practices, and human rights policies.
- The Chief Supply Chain Officer holds a position on this committee due to the responsibility for overseeing sourcing and procurement of supplier and vendor services as well as climate-related and human rights issues in the supply chain.
- The Chief Technology Officer holds a position on this committee due to the responsibility for managing Corning's innovation portfolio and creating new growth drivers for the company, including climate-related opportunities.
- The Chief Engineer holds a position on this committee due to the responsibility for managing the corporate Manufacturing, Technology, and Engineering organization, which includes Global Environment and Sustainability and Global Energy Management; the Chief Engineer reports to the Chief Technology Officer.
- The Vice President, Investor Relations holds a position on this committee due to the responsibility for communicating our sustainability strategy, including climate-related issues, to investors, and understanding and analyzing sustainable investing funds' priorities and expectations.
- The Vice President and Corporate Secretary holds a position on this committee due to the responsibility for ensuring that corporate governance is addressed appropriately in Corning's sustainability program.
- The Senior Vice President & Corporate Controller holds a position on this committee due to the responsibility for managing corporate accounting, compliance, and external reporting functions.
- The Division Vice President, Corporate Communications holds a position on this committee due to the responsibility for managing the communication of our sustainability strategy and other climate-related topics to our stakeholders.
- The Vice President, Manufacturing holds a position on this committee due to the responsibility for ensuring our sustainability strategy is reflected and incorporated into our manufacturing operations.
- The Division Vice President, Finance for Enterprise Risk & Intelligence holds a position on this committee due to the responsibility for managing our Enterprise Risk Management program, which includes climate-related risks.

C1.3

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

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

C1.3a

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

Entitled to incentive	Type of incentive	Activity incentivized	Comment
All employees	Monetary reward	Emissions reduction project Energy reduction project Efficiency project	These efforts focus on supporting our emissions reduction and energy efficiency initiatives and communicating climate change issues.
Energy manager	Non-monetary reward	Emissions reduction project Energy reduction project Efficiency project Efficiency target	Energy managers at Corning's operating facilities work closely with the Global Energy Management organization and frequently receive recognition for successful energy project completion by having their projects shared as best practices via Corning's intranet.
Energy manager	Monetary reward	Emissions reduction project Energy reduction project Efficiency project Efficiency target	Energy managers at Corning's operating facilities work closely with the Global Energy Management organization and typically have performance targets regarding energy reduction projects and other aspects of the Global Energy Management program. When these targets are met, the energy managers are eligible for monetary rewards through Corning's performance incentive programs.

C2. Risks and opportunities

C2.1

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

Yes

C2.1a

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

	From (years)	To (years)	Comment
Short-term	0	1	
Medium-term	1	5	
Long-term	5	10	

C2.1b

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

Corning operates in rapidly changing economic, political, and technological environments that present numerous risks. Our operations and financial results are subject to risks and uncertainties that could adversely affect our business, financial condition, results of operations, cash flows, and our ability to successfully execute our Strategy & Growth Framework. (2020 Form 10-K, page 14)

We use the following process to determine which risks and/or opportunities could have a substantive strategic or financial impact on our business: implementing our Enterprise Risk Management (ERM) process, including an analysis of many factors that include probability and impact of risks, velocity of onset, risk response, and effectiveness, as well as other factors.

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

Annually

Time horizon(s) covered

Short-term

Medium-term

Long-term

Description of process

While the CEO and other members of our senior leadership team are responsible for the day-to-day management of risk, our Board is responsible for oversight of the Company's risk management program. The Board exercises this oversight responsibility directly and through its committees. Risks associated with current business status or strategic alternatives are subjected to analysis, discussion and deliberation by management and the Board. Once a strategy is in place, the Board reviews it with the CEO at every Board meeting and discusses any newly identified strategic risks. Operationally, management reports periodically to the Board on the Company's enterprise risk management (ERM) policies and procedures, and to the Audit, Information Technology, Finance, and Corporate Responsibility and Sustainability Committees on our top risks and compliance policies and practices. Management also provides a comprehensive annual report of top risks to the Board. Corning's ERM program utilizes (1) a Risk Council chaired by the Executive Vice President and Chief Financial Officer and composed of Corning management and staff to aggregate, prioritize and assess risks, including strategic, financial, operational, business, reputational, governance and managerial risks; (2) an internal audit department; and (3) a Compliance Council, which reports directly to each of the Audit Committee and Corporate Responsibility and Sustainability Committee and reviews the Company's compliance with laws and regulations of the countries in which we conduct business. The Audit Committee is responsible for reviewing the Company's ERM program and business continuity risk procedures, as well as disclosures about relevant risks made in our financial reports and filings. The Corporate Responsibility and Sustainability Committee monitors risks relating to environmental, social, and governance matters, which includes climate-related risks. (2021 Proxy Statement, pages 10, 28, 29)

Corning's processes for identifying, assessing, and responding to climate-related risks and opportunities are multidisciplinary and companywide. Corning's cross-functional and cross-organizational Sustainability Working Committee and Steering Committee implemented a sustainability materiality assessment, during which carbon emissions and water conservation were identified as important sustainability issues. In addition, the opportunity of sustainability-driven innovation was also identified as an important sustainability issue. The sustainability committees then developed both publicly communicated and internal goals for the most important sustainability issues. One publicly communicated goal was to incorporate Environmental, Social, and Governance (ESG) issues into our ERM process. Progress on this goal was made in 2020 and

continues in 2021. The Corning Sustainability Working Committee tracks progress on our sustainability goals monthly, and progress is reported to the Steering Committee quarterly and to the Corporate Responsibility and Sustainability Committee of the Board of Directors at least annually. In 2020, through the ERM process, Corning conducted an initial assessment of climate-related risks associated with acute and chronic physical risks as well as the four transition risks recommended by the Task Force on Climate-Related Financial Disclosures (TCFD). In 2021, the process was refined, improved, and expanded. Corning intends to continuously improve the process year over year and plans to reference the recommendations of TCFD to deepen our understanding of the potential impacts of climate-change risk on Corning.

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	<p>An example of a current regulation Corning is subject to is the emissions trading scheme in South Korea.</p> <p>We are globally subject to strict environmental regulations and regulatory changes that could result in fines or restrictions that interrupt our operations. Some of our manufacturing processes generate chemical waste, wastewater, other industrial waste, and/ or greenhouse gases, and we are subject to numerous laws and regulations relating to the use, storage, discharge, and disposal of such substances. Any failure on our part to comply with any present or future environmental regulations could result in the assessment of damages or imposition of fines against us or the suspension/cessation of production or operations. (2020 Form 10-K, page 17)</p>
Emerging regulation	Relevant, always included	<p>An example of an emerging regulation Corning could be subject to is new or revised emissions trading schemes and/or carbon taxes.</p> <p>We are globally subject to strict environmental regulations and regulatory changes that could result in fines or restrictions that interrupt our operations. Some of our manufacturing processes generate chemical waste, wastewater, other industrial waste, and/or greenhouse gases, and we are subject to numerous laws and regulations relating to the use, storage, discharge, and disposal of such substances. Any failure on our part to comply with any present or future environmental regulations could result in the assessment of damages or imposition of fines against us or the suspension/cessation of production or operations. (2020 Form 10-K, page 17)</p>

Technology	Relevant, always included	<p>An example of a potential technology risk would be if Corning’s online EHS Management Information System were to malfunction and we were unable to recover climate-related data that’s critical to tracking our progress.</p> <p>We are dependent on information technology systems and infrastructure, including cloud-based services (“IT systems”) to conduct its business. Our IT systems may be vulnerable to disruptions from human error, outdated applications, computer viruses, natural disasters, unauthorized access, cyber-attack and other similar disruptions. We have measures and defenses in place against such events, but we may not be able to prevent, immediately detect, or remediate all instances of such events. Any significant disruption, breakdown, intrusion, interruption or corruption of these systems or data breaches could cause the loss of data or intellectual property, equipment damage, downtime, and/or safety related issues and could have a material adverse effect on our business. (2020 Form 10-K, page 16)</p>
Legal	Relevant, always included	<p>An example of a potential legal risk would be noncompliance with tightening regulations on greenhouse gas emissions.</p> <p>We are globally subject to strict environmental regulations and regulatory changes that could result in fines or restrictions that interrupt our operations. Some of our manufacturing processes generate chemical waste, wastewater, other industrial waste, and/or greenhouse gases, and we are subject to numerous laws and regulations relating to the use, storage, discharge, and disposal of such substances. We cannot provide assurance that environmental claims will not be brought against us or that government regulators will not take steps toward adopting more stringent environmental standards. Any failure on our part to comply with any present or future environmental regulations could result in the assessment of damages or imposition of fines against us or the suspension/cessation of production or operations. (2020 Form 10-K, page 17)</p>
Market	Relevant, always included	<p>An example of a potential market risk is a change in market share based on customers’ preference for low-carbon or low-climate impact products.</p>
Reputation	Relevant, always included	<p>An example of potential reputational risk would be public disclosure of noncompliance with environmental or carbon-related regulations.</p> <p>With the increase of customer interest in sustainable business practices, Corning faces a risk to our reputation if we are not in compliance with environmental regulations. (2020 Form 10-K, page 17)</p>

Acute physical	Relevant, sometimes included	An example of a potential acute physical risk would be disruption to our manufacturing operations due to a flood, earthquake, tsunami, hurricane, typhoon, fire, windstorm, or other extreme weather event.
Chronic physical	Relevant, sometimes included	An example of a potential chronic physical risk would be disruption or relocation of manufacturing due to sea level rise at facilities located in coastal areas.

C2.3

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

Yes

C2.3a

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

Identifier

Risk 1

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Emerging regulation

Carbon pricing mechanisms

Primary potential financial impact

Increased indirect (operating) costs

Company-specific description

If a country or region in which Corning operates in were to impose a carbon pricing mechanism, there would be a direct increase to our costs. Some of our manufacturing processes generate chemical waste, wastewater, other industrial waste, and/or greenhouse gases, and we are subject to numerous laws and regulations relating to the use, storage, discharge, and disposal of such substances. In addition, environmental regulations could require us to acquire costly equipment, incur other significant compliance expenses, or limit or restrict production or operations and thus materially and negatively affect our financial condition and results of operations. Changes in regulations and the regulatory environment in the U.S. and other countries, such as those resulting from the regulation and impact of global warming and CO2 abatement, may affect our businesses and their results in adverse ways by, among other things, substantially increasing manufacturing costs, limiting availability of scarce resources,

especially energy, or requiring limitations on production and sale of our products or those of our customers. (2020 Form 10-K, page 17)

Time horizon

Medium-term

Likelihood

More likely than not

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

Corning is looking into estimating full figures for future reporting years.

Cost of response to risk

Description of response and explanation of cost calculation

Currently, Corning considers the cost of response to this risk as confidential.

Comment

Identifier

Risk 2

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Legal

Other, please specify

Exposure to environmental remediation

Primary potential financial impact

Increased direct costs

Company-specific description

Some of our manufacturing processes generate chemical waste, wastewater, other industrial waste, and/ or greenhouse gases, and we are subject to numerous laws and regulations relating to the use, storage, discharge, and disposal of such substances. We have installed anti-pollution equipment for the treatment of chemical waste and wastewater at our facilities. We have taken steps to control the amount of greenhouse gases created by our manufacturing operations. However, we cannot provide assurance that environmental claims will not be brought against us or that government regulators will not take steps to adopt more stringent environmental standards. Any failure on our part to comply with any present or future environmental regulations could result in the assessment of damages or imposition of fines against us or the suspension/cessation of production or operations. In addition, environmental regulations could require us to acquire costly equipment, incur other significant compliance expenses, or limit or restrict production or operations and thus materially and negatively affect our financial condition and results of operations. Changes in regulations and the regulatory environment in the U.S. and other countries and regions, such as those resulting from the regulation and impact of global warming and CO2 abatement, may affect our businesses and their results in adverse ways by, among other things, substantially increasing manufacturing costs, limiting availability of scarce resources, especially energy, or requiring limitations on production and sale of our products or those of our customers. (2020 Form 10-K, page 17)

Time horizon

Short-term

Likelihood

Very unlikely

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

68,000,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

The financial impact figure is based on an accrual for the estimated liability for environmental clean-up and related litigation. Corning includes this figure only as an example of a previous cost associated with environmental regulation.

It is Corning's policy to accrue for its estimated liability related to Superfund sites and

other environmental liabilities related to property owned by Corning based on expert analysis and continual monitoring by both internal and external consultants. As of Dec. 31, 2020, and 2019, Corning had accrued approximately \$68 million (undiscounted) and \$41 million (undiscounted), respectively, for the estimated liability for environmental clean-up and related litigation. Based upon the information developed to date, management believes that the accrued reserve is a reasonable estimate of the company's liability and that the risk of an additional loss in an amount materially higher than that accrued is remote. (2020 Form 10-K, page 21)

Cost of response to risk

Description of response and explanation of cost calculation

Currently, Corning considers the cost of response to this risk as confidential.

Comment

Identifier

Risk 3

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Legal

Exposure to litigation

Primary potential financial impact

Increased direct costs

Company-specific description

Some of our manufacturing processes generate chemical waste, wastewater, other industrial waste, and/or greenhouse gases, and we are subject to numerous laws and regulations relating to the use, storage, discharge, and disposal of such substances. We have installed anti-pollution equipment for the treatment of chemical waste and wastewater at our facilities. We have taken steps to control the amount of greenhouse gases created by our manufacturing operations. However, we cannot provide assurance that environmental claims will not be brought against us or that government regulators will not take steps to adopt more stringent environmental standards. Any failure on our part to comply with any present or future environmental regulations could result in the assessment of damages or imposition of fines against us or the suspension/cessation of production or operations. In addition, environmental regulations could require us to acquire costly equipment, incur other significant compliance expenses or limit or restrict production or operations and thus materially and negatively affect our financial condition and results of operations. Changes in regulations and the regulatory environment in the U.S. and other countries, such as those resulting from the regulation and impact of

global warming and CO2 abatement, may affect our businesses and their results in adverse ways by, among other things, substantially increasing manufacturing costs, limiting availability of scarce resources, especially energy, or requiring limitations on production and sale of our products or those of our customers. (2020 Form 10-K, page 17)

Time horizon

Short-term

Likelihood

About as likely as not

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

Corning is looking into estimating full figures for future reporting years.

Cost of response to risk

Description of response and explanation of cost calculation

Currently, Corning considers the cost of response to this risk as confidential.

Comment

Identifier

Risk 4

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Acute physical

Increased severity and frequency of extreme weather events such as cyclones and floods

Primary potential financial impact

Increased direct costs

Company-specific description

Natural disasters such as floods, earthquakes, tsunamis and windstorms or other catastrophic event that results in the destruction or disruption of any of our critical facilities could severely affect our ability to conduct normal business operations and, as a result, our future financial results could be materially and adversely affected. For example, certain manufacturing sites require high quality, continuous, and uninterrupted power and access to industrial water. Unplanned outages could have a material negative impact on our operations and ability to supply our customers.

Time horizon

Medium-term

Likelihood

Likely

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

Corning is looking into estimating full figures for future reporting years.

Cost of response to risk

Description of response and explanation of cost calculation

Currently, Corning considers the cost of response to this risk as confidential.

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?

No

C2.4b

(C2.4b) Why do you not consider your organization to have climate-related opportunities?

	Primary reason	Please explain
Row 1	Opportunities exist, but none with potential to have a substantive financial or strategic impact on business	<p>Corning assesses each of our operating facilities for opportunities for improved management of climate-related issues annually through the implementation of an environmental management system developed in accordance with ISO 14001-2015. Opportunities are identified, assessed, and implemented to improve our operations. Corning generally implements those that meet our criteria for capital improvements. These improvements are beneficial to the environment and to our operations; however, we have not found them to have a substantive financial or strategic impact on the business at the corporate level.</p> <p>In addition, through Corning's sustainability materiality assessment and its integration of ESG issues into our Enterprise Risk Management process, we have identified opportunities (such as sustainability-driven innovation), which may have a strategic impact on our business in the future. Corning continues to work on opportunity identification and quantification for inclusion in future disclosures. We intend to align future disclosures with TCFD.</p>

C3. Business Strategy

C3.1

(C3.1) Have climate-related risks and opportunities influenced your organization's strategy and/or financial planning?

Yes

C3.1b

(C3.1b) Does your organization intend to publish a low-carbon transition plan in the next two years?

Intention to publish a low-carbon transition plan	Intention to include the transition plan as a scheduled resolution item at Annual General Meetings (AGMs)	Comment

Row 1	Yes, in the next two years	No, we do not intend to include it as a scheduled AGM resolution item	In 2021, we will undertake a strategic review that will result in our describing how we plan to reduce our contribution to climate change and better align our operations with the Paris Agreement. We expect to publish this description in our next sustainability report issued in 2022. (Corning Sustainability Report 2020, page 16)
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C3.2

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

Yes, qualitative

C3.2a

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

Climate-related scenarios and models applied	Details
Other, please specify The Climate Registry	<p>Corning has integrated environmental, social, and governance-related risks into our enterprise risk management process. We followed guidance provided by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) and the World Business Council for Sustainable Development (WBCSD). Going forward, we will reference the recommendations of the Task Force for Climate-Related Financial Disclosures to deepen our understanding of the potential impacts of climate-change risk on Corning. (Corning Sustainability Report 2020, page 38)</p> <p>Various aspects of climate change were considered when Corning conducted a thorough analysis of crucial equipment damage for two optical fiber manufacturing plants in the event of power outages.</p> <p>Inputs considered: Reliability of the grid, and the use of diesel generators using current and future loads during snow events, heavy rainfall, etc.</p> <p>Assumptions: Alternate primary power sources, including sustainable energy alternatives are used in the event of power outages. Time frame of outages were considered as well (5 minutes, 20 minutes, 1 day, 1 month).</p> <p>Time horizons considered: Short term (1-2 years) has been considered to be extremely relevant to the company as shutdown of any Corning manufacturing facilities can cause significant negative impacts to our operations.</p> <p>Areas considered: Two optical manufacturing plants in North Carolina.</p>

	<p>The assessment was implemented by a cross-functional, geographically diverse team of statistical modeling subject matter experts that used Monte Carlo simulations to compute and track power outage scenarios. A supplementary company-wide model can also be developed to score and rank risk profiles for each of the 70 manufacturing plants globally.</p> <p>The results of the scenario analysis have provided key information used in the development of business objectives and strategy and we are now focused on ensuring that negative impacts from sudden disruptions are always mitigated through constant modeling of our facilities. For example, we ran simulations where loss of power could shut down a facility in North Carolina. In response, we ensured that this was mitigated by implementing measures to have a consistent source of energy, such as bio-diesel generators on site, and solar farms that can provide a consistent supply of energy.</p>
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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	<p>Corning® Gorilla® Glass has been designed into more than eight billion devices and is produced with waste reduction in mind. Corning recycles at least 20% of waste glass from our manufacturing processes back into our products. We also work with outside vendors to recycle glass that cannot meet our high-quality standards so the material can have a new life. (Corning Sustainability Report 2020, page 10)</p> <p>Corning is helping create cleaner air with Corning® DuraTrap® GC Filters, our latest evolution in automotive exhaust filtration for emissions control and clean-vehicle technology. As drivers seek greater fuel economy and engine performance, high performance gasoline engines are growing in popularity, but they also produce higher levels of fine-particulate emissions. Policymakers in China and Europe are enforcing a significant reduction of the particulates emitted by gasoline vehicles, including hybrids, with new emission standards. Automakers are using Corning’s gasoline particulate filters to help significantly reduce gasoline and hybrid vehicles’ fine particulate tailpipe</p>

		emissions and successfully meet the stringent particulate emissions limits. Corning received the American Ceramic Society's 2020 Corporate Technical Achievement Award for the development, introduction, and societal impact of DuraTrap® GC Filters. (Corning Sustainability Report 2020, page 10)
Supply chain and/or value chain	Yes	All Corning suppliers are expected to demonstrate social and environmental responsibility, as outlined in our Supplier Code of Conduct. It requires that suppliers comply with environmental regulations and reduce their negative impacts on the environment. Also, to strengthen our ability to rely on only ethical sources of conflict minerals, Corning joined the Responsible Minerals Initiative (RMI), a global organization focused on responsible mineral sourcing issues. Through the RMI, we collaborate with industry peers on best practices and access resources. We require supplier compliance with the Responsible Minerals Assurance Process, which includes an independent third-party audit process of smelters and refiners. We monitor supplier performance via RMI's conflict minerals reporting template. When needed, we request corrective action, which may include removing smelters from our supply chain. (Corning Sustainability Report 2020, pages 29-30)
Investment in R&D	Yes	Corning continues assessing our top innovation programs on an ongoing basis to identify sustainability enhancements. In 2021, we plan to leverage design-for-sustainability methods to define and embed sustainability advancements across the entire product lifecycle. Corning Life Sciences will pilot this new innovation approach. We will continue to develop and patent technologies that use more sustainable resources, consume less energy, help clean and protect the environment, and require less harmful constituent materials. We will embed our sustainability approach into the research and development process for new products. (Corning Sustainability Report 2020, pages 11, 40)
Operations	Yes	We use our Global Energy Management (GEM) program to strategically manage our global energy use to optimize energy productivity, power supply reliability, and environmental impact, while also managing water, waste, and emissions. Corning has five environmental strategies implemented through the GEM program: <ol style="list-style-type: none"> 1. Continuously improve energy, water, and natural resource management 2. Incorporate energy, water, and natural resource

		<p>innovation in product development, product design, and manufacturing processes</p> <p>3. Engage employees and suppliers in energy, water, and natural resource management</p> <p>4. Meet customer requirements regarding energy, water, and natural resource use</p> <p>5. Analyze and communicate our progress, successes, and innovation in sustainable practices to internal and external stakeholders</p> <p>(Corning Sustainability Report 2020, page 13-14)</p>
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C3.4

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

	Financial planning elements that have been influenced	Description of influence
Row 1	<p>Revenues</p> <p>Direct costs</p> <p>Capital expenditures</p> <p>Acquisitions and divestments</p>	Currently, this information is confidential.

C3.4a

(C3.4a) Provide any additional information on how climate-related risks and opportunities have influenced your strategy and financial planning (optional).

In 2020, Corning adopted 12 sustainability goals addressing 10 of our material issues to drive progress where we believe our company can achieve the most significant environmental and social impact. We believe that implementing these ESG-related business practices will enable us to strengthen and grow our business. Our progress toward these goals also will address societal needs identified in the Sustainable Development Goals (SDGs), as established by the United Nations in 2015 as a “blueprint to achieve a better and more sustainable future for all.” We acknowledge both our responsibility and our ability to do our part to address these goals. Given the scale of progress needed, we recognize that goal setting will be an ongoing process. We will continually reevaluate ESG issues most important to our stakeholders and business and will periodically update our goals accordingly. (Corning Sustainability Report 2020, page 45)

C4. Targets and performance

C4.1

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

No target

C4.1c

(C4.1c) Explain why you did not have an emissions target, and forecast how your emissions will change over the next five years.

	Primary reason	Five-year forecast	Please explain
Row 1	We are planning to introduce a target in the next two years	Corning continues to see moderate growth in our absolute emissions and our emissions compared to sales over the next five years as our business expands to keep pace with our customer requirements. We estimate our emissions growth will follow a similar trajectory of the 6% to 8% compound annual sales growth as outlined by our 2020-2023 Strategy & Growth Framework. (2020 Proxy Statement, page 9)	Corning continues to focus on building a credible greenhouse gas inventory and to voluntarily report its emissions to CDP and The Climate Registry. Our combined Scope 1 and 2 greenhouse gas inventory shows that greater than 95% of our emissions are associated with energy use. We continue to focus on establishing a credible greenhouse gas inventory for our Scope 1, 2, and 3 emissions. Corning is currently in the process of evaluating potential absolute emissions targets and anticipates using a 2021 baseline for this target to avoid anticipated COVID-19 impacts on its 2020 emissions. In our 2020 sustainability report, Corning announced plans to develop greenhouse gas emissions goals. When developed, goals will be reviewed with our company's sustainability committee and Board of Directors for the final action plan in setting these goals.

C4.2

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

No other climate-related targets

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	98	
To be implemented*	0	0
Implementation commenced*	0	0
Implemented*	92	4,395
Not to be implemented	0	

C4.3b

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

Initiative category & Initiative type

Energy efficiency in production processes
Waste heat recovery

Estimated annual CO2e savings (metric tonnes CO2e)

1,144

Scope(s)

Scope 1

Voluntary/Mandatory

Voluntary

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

50,000

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

139,000

Payback period

1-3 years

Estimated lifetime of the initiative

11-15 years

Comment

Initiative category & Initiative type

Energy efficiency in buildings

Lighting

Estimated annual CO2e savings (metric tonnes CO2e)

399

Scope(s)

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

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

215,500

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

649,000

Payback period

1-3 years

Estimated lifetime of the initiative

6-10 years

Comment

Initiative category & Initiative type

Energy efficiency in buildings

Other, please specify

High-volume, low-speed fan replacement

Estimated annual CO2e savings (metric tonnes CO2e)

85

Scope(s)

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

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

14,000

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

25,000

Payback period

1-3 years

Estimated lifetime of the initiative

11-15 years

Comment

Initiative category & Initiative type

Energy efficiency in buildings

Other, please specify

Power phase regulator

Estimated annual CO₂e savings (metric tonnes CO₂e)

16

Scope(s)

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

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

10,000

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

16,000

Payback period

1-3 years

Estimated lifetime of the initiative

11-15 years

Comment

Initiative category & Initiative type

Energy efficiency in buildings

Motors and drives

Estimated annual CO₂e savings (metric tonnes CO₂e)

274

Scope(s)

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

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

50,000

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

90,000

Payback period

1-3 years

Estimated lifetime of the initiative

6-10 years

Comment

Initiative category & Initiative type

Low-carbon energy generation
Solar heating and cooling

Estimated annual CO2e savings (metric tonnes CO2e)

630

Scope(s)

Scope 1

Voluntary/Mandatory

Voluntary

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

7,800

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

23,000

Payback period

1-3 years

Estimated lifetime of the initiative

16-20 years

Comment

Initiative category & Initiative type

Energy efficiency in production processes
Machine/equipment replacement

Estimated annual CO₂e savings (metric tonnes CO₂e)

1,302

Scope(s)

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

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

1,059,000

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

696,000

Payback period

<1 year

Estimated lifetime of the initiative

16-20 years

Comment

Initiative category & Initiative type

Low-carbon energy generation
Solar PV

Estimated annual CO₂e savings (metric tonnes CO₂e)

187

Scope(s)

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

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

80,000

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

450,000

Payback period

4-10 years

Estimated lifetime of the initiative

21-30 years

Comment

Initiative category & Initiative type

Energy efficiency in production processes
Process optimization

Estimated annual CO2e savings (metric tonnes CO2e)

358

Scope(s)

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

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

560,000

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

0

Payback period

<1 year

Estimated lifetime of the initiative

6-10 years

Comment

Low-cost, no-cost projects

C4.3c

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

Method	Comment
Dedicated budget for energy efficiency	The Global Energy Management group has a capital budget dedicated to energy and water efficiency and reduction projects to increase energy and water efficiency across Corning sites. There are four categories of projects eligible for funding: 1) building and/or process energy efficiency, 2) building and/or process water efficiency, 3) demonstration or new technology, and 4) measurement and/or metering.
Employee engagement	The Global Energy Management group has an internal social media platform page where employees can share best practices around energy and water efficiency. Corning also has an Employee Community Solar program for eligible

	New York state employees to sign up for a portion of a community solar array through their local utility account.
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C4.5

(C4.5) Do you classify any of your existing goods and/or services as low-carbon products or do they enable a third party to avoid GHG emissions?

Yes

C4.5a

(C4.5a) Provide details of your products and/or services that you classify as low-carbon products or that enable a third party to avoid GHG emissions.

Level of aggregation

Group of products

Description of product/Group of products

Corning's Environmental Technologies segment manufactures ceramic substrates and filter products for emissions control in mobile applications around the world. As global emissions control regulations tighten, Corning has continued to develop more effective and durable ceramic substrate and filter products for gasoline and diesel applications. For example, in response to the growing popularity of gasoline direct injection engines, Corning introduced gasoline particulate filters to help automakers reduce particulate emissions generated by these engines. Corning sells its ceramic substrate and filter products worldwide to catalyzers and manufacturers of emission control systems who then sell to automotive and diesel vehicle or engine manufacturers. Although most sales are made to the emission control systems manufacturers, the use of Corning substrates and filters is generally required by the specifications of the automotive and diesel vehicle or engine manufacturers. (corning.com)

Are these low-carbon product(s) or do they enable avoided emissions?

Avoided emissions

Taxonomy, project or methodology used to classify product(s) as low-carbon or to calculate avoided emissions

Other, please specify

Currently, Corning considers the methodology to calculate avoided emissions as confidential.

% revenue from low carbon product(s) in the reporting year

13

Comment

C5. Emissions methodology

C5.1

(C5.1) Provide your base year and base year emissions (Scopes 1 and 2).

Scope 1

Base year start

January 1, 2005

Base year end

December 31, 2005

Base year emissions (metric tons CO₂e)

289,236

Comment

Scope 2 (location-based)

Base year start

January 1, 2005

Base year end

December 31, 2005

Base year emissions (metric tons CO₂e)

722,884

Comment

Scope 2 (market-based)

Base year start

Base year end

Base year emissions (metric tons CO₂e)

Comment

Corning has not conducted market-based accounting for our Scope 2 emissions.

C5.2

(C5.2) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate emissions.

The Climate Registry: General Reporting Protocol

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

US EPA Emissions & Generation Resource Integrated Database (eGRID)

C6. Emissions data

C6.1

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

Reporting year

Gross global Scope 1 emissions (metric tons CO₂e)

678,029

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

Comment

Corning is working on evaluating our Scope 2 emissions using the market-based approach for future years.

C6.3

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

Reporting year

Scope 2, location-based

1,907,545

Comment

C6.4

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

Yes

C6.4a

(C6.4a) Provide details of the sources of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure.

Source

Select warehouses

Relevance of Scope 1 emissions from this source

Emissions are not relevant

Relevance of location-based Scope 2 emissions from this source

Emissions are not relevant

Relevance of market-based Scope 2 emissions from this source (if applicable)

Explain why this source is excluded

Emissions from select warehouses are excluded because they are currently not required to provide energy or emissions information to Corning's EHS Management Information System. The amount of emissions from these sources are considered outside of our relevance threshold and estimated to be not relevant.

Source

Select contract manufacturers

Relevance of Scope 1 emissions from this source

Emissions are not evaluated

Relevance of location-based Scope 2 emissions from this source

Emissions are not evaluated

Relevance of market-based Scope 2 emissions from this source (if applicable)

Explain why this source is excluded

Emissions from select contract manufacturers are excluded because they have not been evaluated. Corning is currently assessing contract manufacturers to determine the level of inclusion for each and plans to include relevant emissions in future CDP responses once the assessment is complete.

Source

Sales offices and small administrative offices

Relevance of Scope 1 emissions from this source

Emissions are not relevant

Relevance of location-based Scope 2 emissions from this source

Emissions are not relevant

Relevance of market-based Scope 2 emissions from this source (if applicable)

Explain why this source is excluded

Sales offices and small administrative offices are excluded where energy use is minimal and they are not currently required to provide emissions or energy information to Corning's EHS Management Information System. Office spaces are predominantly leased with energy provided through the lease and managed by a landlord.

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

Metric tonnes CO₂e

1,967,961

Emissions calculation methodology

Using Greenhouse Gas Protocol Technical Guidance for Calculating Scope 3 Emissions, we estimated purchased goods and services using the spend-based method.

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

0

Please explain

Capital goods

Evaluation status

Relevant, calculated

Metric tonnes CO₂e

1,402,084

Emissions calculation methodology

Using Greenhouse Gas Protocol Technical Guidance for Calculating Scope 3 Emissions, we estimated capital goods using the average spend-based method.

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

0

Please explain

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

Evaluation status

Relevant, calculated

Metric tonnes CO₂e

551,016

Emissions calculation methodology

Using Greenhouse Gas Protocol Technical Guidance for Calculating Scope 3 Emissions, we estimated fuel-and-energy related activities (not included in Scope 1 or 2) using the average-data method.

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

0

Please explain

Upstream transportation and distribution

Evaluation status

Relevant, calculated

Metric tonnes CO₂e

459,690

Emissions calculation methodology

Using Greenhouse Gas Protocol Technical Guidance for Calculating Scope 3 Emissions, we calculated upstream transportation and distribution using the spend-based method. We also had this category third-party verified.

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

0

Please explain

Waste generated in operations

Evaluation status

Relevant, calculated

Metric tonnes CO₂e

26,074

Emissions calculation methodology

Using Greenhouse Gas Protocol Technical Guidance for Calculating Scope 3 Emissions, we estimated waste generated in operations based on annual waste generation and global average waste disposal cost.

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

0

Please explain

Business travel

Evaluation status

Relevant, calculated

Metric tonnes CO₂e

120,172

Emissions calculation methodology

Using Greenhouse Gas Protocol Technical Guidance for Calculating Scope 3 Emissions, we calculated business travel using the spend-based method. We also had this category third-party verified.

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

100

Please explain

Employee commuting

Evaluation status

Relevant, calculated

Metric tonnes CO₂e

19,608

Emissions calculation methodology

Using Greenhouse Gas Protocol Technical Guidance for Calculating Scope 3 Emissions, we estimated employee commuting using the average-data method and total number of employees.

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

0

Please explain

Upstream leased assets

Evaluation status

Not relevant, explanation provided

Please explain

Leased assets are included in Corning's Scope 1 and Scope 2 emissions

Downstream transportation and distribution

Evaluation status

Not relevant, explanation provided

Please explain

Corning does not have visibility into vendor-paid downstream transportation

Processing of sold products

Evaluation status

Not relevant, explanation provided

Please explain

Corning's core products do not require substantive processing or transformation and therefore, no intermediate product emissions are reported. Corning's sold products can be included in other products before use. However, emissions subsequent to sale and before use by the end consumer are assessed to be immaterial and not relevant.

Use of sold products

Evaluation status

Not relevant, explanation provided

Please explain

Corning does not have any products that directly consume energy.

End of life treatment of sold products

Evaluation status

Relevant, calculated

Metric tonnes CO2e

1,053,225

Emissions calculation methodology

Using Greenhouse Gas Protocol Technical Guidance for Calculating Scope 3 Emissions, we estimated end of life treatment of sold products based on annual raw material usage.

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

0

Please explain

Downstream leased assets

Evaluation status

Not relevant, explanation provided

Please explain

Corning does not have any downstream leased assets.

Franchises

Evaluation status

Not relevant, explanation provided

Please explain

Corning does not have any franchises.

Investments

Evaluation status

Relevant, not yet calculated

Please explain

In 2020, Corning acquired a majority equity ownership interest in Hemlock Semiconductor Company (Hemlock). Per GHG Protocol guidance, Corning will include Hemlock's Scope 1 and 2 emissions in Corning's Scope 1 and 2 emissions calculations starting in the 2020 reporting year. Hemlock reported its GHG emissions for 2019 in its 2020 Sustainability report, available at https://hscpoly.com/documents/2020_Hemlock-

Sustainability-Report.pdf

Corning holds investments in other companies through joint ventures and equity ownership. These investments vary significantly in terms of ownership percentage, company size, and company emissions. Corning is currently assessing these investments to determine the level of inclusion for each investment and plans to include the emissions calculation in future CDP responses once the assessment is complete.

Other (upstream)

Evaluation status

Not relevant, explanation provided

Please explain

Corning does not have any other relevant upstream emissions

Other (downstream)

Evaluation status

Not relevant, explanation provided

Please explain

Corning does not have any other relevant downstream emissions

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

224.77

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

2,585,574

Metric denominator

unit total revenue

Metric denominator: Unit total

11,503

Scope 2 figure used

Location-based

% change from previous year

6.92

Direction of change

Decreased

Reason for change

The decrease in intensity from 2018 to 2019 can largely be attributed to a decrease in emissions due to switching emissions factors and increase in revenue. In 2019, Corning switched emissions factors for Scope 2 emissions from The Climate Registry to eGRID for the U.S. and to IEA for non-U.S. countries. The decrease can also be attributed to several efficiency projects across the company, included switching from fluorescent lightbulbs to LED lightbulbs and a heat recovery system to take waste heat and generate steam for a production process.

Intensity figure

52.23

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

2,585,574

Metric denominator

full time equivalent (FTE) employee

Metric denominator: Unit total

49,500

Scope 2 figure used

Location-based

% change from previous year

1.33

Direction of change

Decreased

Reason for change

Despite the decrease in number of employees, the decrease in intensity from 2018 to 2019 can largely be attributed to a decrease in emissions due to switching emissions factors. In 2019, Corning switched emissions factors for Scope 2 emissions from The Climate Registry to eGRID for the U.S. and to IEA for non-U.S. countries. The decrease can also be attributed to several efficiency projects across the company, included

switching from fluorescent lightbulbs to LED lightbulbs and a heat recovery system to take waste heat and generate steam for a production process.

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 CO ₂ e)	GWP Reference
CO ₂	643,819	IPCC Fifth Assessment Report (AR5 – 100 year)
CH ₄	289	IPCC Fifth Assessment Report (AR5 – 100 year)
N ₂ O	405	IPCC Fifth Assessment Report (AR5 – 100 year)
HFCs	6,664	IPCC Fifth Assessment Report (AR5 – 100 year)
SF ₆	26,852	IPCC Fifth Assessment Report (AR5 – 100 year)

C7.2

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

Country/Region	Scope 1 emissions (metric tons CO ₂ e)
United States of America	340,290
Europe, Middle East and Africa (EMEA)	74,527
Asia Pacific (or JAPA)	259,460
Latin America (LATAM)	3,752

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)
Shared Functions	63,367
Display Technologies	225,474
Environmental Technologies	261,780
Life Sciences	63,924
Specialty Materials	26,877
Optical Communications	36,607

C7.5

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

Country/Region	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)	Purchased and consumed electricity, heat, steam or cooling (MWh)	Purchased and consumed low-carbon electricity, heat, steam or cooling accounted for in Scope 2 market-based approach (MWh)
United States of America	338,432		1,190,862	
Europe, Middle East and Africa (EMEA)	55,381		166,058	
Asia Pacific (or JAPA)	1,460,696		2,627,990	
Latin America (LATAM)	53,036		118,606	

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)
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Shared Functions	21,480	
Display Technologies	1,354,630	
Environmental Technologies	108,436	
Life Sciences	69,029	
Specialty Materials	46,998	
Optical Communications	306,972	

C7.9

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

Decreased

C7.9a

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

	Change in emissions (metric tons CO2e)	Direction of change	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption	36	Increased	0.001	This figure is calculated by taking the difference from the number of MWhs consumed from renewable energy sources in 2018 versus 2019. Depending on the location of the source, an emissions factor is applied to convert MWhs to metric tons CO2e. This number is then divided by 2018 total emissions. $(36/2726832)*100$
Other emissions reduction activities	3,093	Decreased	0.1	The figure is calculated by taking the difference from 2018 implemented emissions reduction initiatives and 2019 implemented emissions reduction initiatives, then dividing by 2018 total emissions. $(3093/2726832)*100$
Divestment				Not applicable
Acquisitions				Not applicable
Mergers				Not applicable

Change in output				Not applicable
Change in methodology	195,491	Decreased	7.2	The figure is calculated by taking the difference from 2018 emissions using previous emissions factors from The Climate Registry versus 2018 emissions using emissions factors from eGRID and IEA (2726832-2531341=195491 metric tons CO2e). The emissions value was calculated by taking the difference divided by our 2018 total emissions. $(195491/2726832)*100$
Change in boundary				Not applicable
Change in physical operating conditions				Not applicable
Unidentified	57,326	Increased	2.1	The figure is calculated by taking the difference in unidentified emissions from 2018 to 2019 and divided by 2018 total emissions. $(57326/2726832)*100$
Other				Not applicable

C7.9b

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

Location-based

C8. Energy

C8.1

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

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

C8.2

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

	Indicate whether your organization undertook this energy-related activity in the reporting year
Consumption of fuel (excluding feedstocks)	Yes
Consumption of purchased or acquired electricity	Yes
Consumption of purchased or acquired heat	No
Consumption of purchased or acquired steam	Yes
Consumption of purchased or acquired cooling	No
Generation of electricity, heat, steam, or cooling	Yes

C8.2a

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

	Heating value	MWh from renewable sources	MWh from non-renewable sources	Total (renewable and non-renewable) MWh
Consumption of fuel (excluding feedstock)	HHV (higher heating value)	0	3,050,838	3,050,838
Consumption of purchased or acquired electricity		0	4,103,338	4,103,338
Consumption of purchased or acquired steam		0	0	0
Consumption of self-generated non-fuel renewable energy		1,665		1,665
Total energy consumption		1,665	7,154,354	7,156,019

C8.2b

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

	Indicate whether your organization undertakes this fuel application
Consumption of fuel for the generation of electricity	Yes
Consumption of fuel for the generation of heat	Yes
Consumption of fuel for the generation of steam	Yes
Consumption of fuel for the generation of cooling	No
Consumption of fuel for co-generation or tri-generation	Yes

C8.2c

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

Fuels (excluding feedstocks)

Diesel

Heating value

HHV (higher heating value)

Total fuel MWh consumed by the organization

7,811

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

7,811

MWh fuel consumed for self-generation of steam

0

MWh fuel consumed for self-cogeneration or self-trigeneration

0

Emission factor

10.21

Unit

kg CO2 per gallon

Emissions factor source

The Climate Registry 2018 Default Emissions Factors

Comment

Fuels (excluding feedstocks)

Jet Kerosene

Heating value

HHV (higher heating value)

Total fuel MWh consumed by the organization

55,021

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-generation of steam

0

MWh fuel consumed for self-cogeneration or self-trigeneration

0

Emission factor

9.75

Unit

kg CO2 per gallon

Emissions factor source

The Climate Registry 2018 Default Emissions Factors

Comment

Fuels (excluding feedstocks)

Kerosene

Heating value

HHV (higher heating value)

Total fuel MWh consumed by the organization

2

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

2

MWh fuel consumed for self-generation of steam

0

MWh fuel consumed for self-cogeneration or self-trigeneration

0

Emission factor

10.53

Unit

kg CO2 per gallon

Emissions factor source

The Climate Registry 2018 Default Emissions Factors

Comment

Fuels (excluding feedstocks)

Petrol

Heating value

HHV (higher heating value)

Total fuel MWh consumed by the organization

134

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

134

MWh fuel consumed for self-generation of steam

0

MWh fuel consumed for self-cogeneration or self-trigeneration

0

Emission factor

8.78

Unit

kg CO2 per gallon

Emissions factor source

The Climate Registry 2018 Default Emissions Factors

Comment

Fuels (excluding feedstocks)

Natural Gas

Heating value

HHV (higher heating value)

Total fuel MWh consumed by the organization

2,984,069

MWh fuel consumed for self-generation of electricity

9,773

MWh fuel consumed for self-generation of heat

2,974,296

MWh fuel consumed for self-generation of steam

0

MWh fuel consumed for self-cogeneration or self-trigeneration

0

Emission factor

53.06

Unit

kg CO2 per million Btu

Emissions factor source

The Climate Registry 2018 Default Emissions Factors

Comment

Fuels (excluding feedstocks)

Propane Gas

Heating value

HHV (higher heating value)

Total fuel MWh consumed by the organization

1

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

1

MWh fuel consumed for self-generation of steam

0

MWh fuel consumed for self-cogeneration or self-trigeneration

0

Emission factor

61.46

Unit

kg CO2 per million Btu

Emissions factor source

The Climate Registry 2018 Default Emissions Factors

Comment

Fuels (excluding feedstocks)

Propane Liquid

Heating value

HHV (higher heating value)

Total fuel MWh consumed by the organization

3,252

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

3,252

MWh fuel consumed for self-generation of steam

0

MWh fuel consumed for self-cogeneration or self-trigeneration

0

Emission factor

62.87

Unit

kg CO2 per million Btu

Emissions factor source

The Climate Registry 2018 Default Emissions Factors

Comment

Fuels (excluding feedstocks)

Other, please specify

Heating oil

Heating value

HHV (higher heating value)

Total fuel MWh consumed by the organization

548

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

548

MWh fuel consumed for self-generation of steam

0

MWh fuel consumed for self-cogeneration or self-trigeneration

0

Emission factor

10.67

Unit

kg CO2 per gallon

Emissions factor source

The Climate Registry 2018 Default Emissions Factors

Comment

C8.2d

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

	Total Gross generation (MWh)	Generation that is consumed by the organization (MWh)	Gross generation from renewable sources (MWh)	Generation from renewable sources that is consumed by the organization (MWh)
--	------------------------------	---	---	--

Electricity	1,665	1,665	1,665	1,665
Heat	0	0	0	0
Steam	0	0	0	0
Cooling	0	0	0	0

C9. Additional metrics

C9.1

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

C10. Verification

C10.1

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

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

C10.1a

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

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Limited assurance

Attach the statement

 CY19 Corning Verification Statement GHG & Water.pdf

Page/ section reference

Pages 1, 2, 3

Relevant standard

ISO14064-3

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 location-based

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Limited assurance

Attach the statement

 CY19 Corning Verification Statement GHG & Water.pdf

Page/ section reference

Pages 1, 2, 3

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: Upstream transportation and distribution

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Limited assurance

Attach the statement

 CY19 Corning Verification Statement GHG & Water.pdf

Page/section reference

Pages 1, 2, 3

Relevant standard

ISO14064-3

Proportion of reported emissions verified (%)

100

Scope 3 category

Scope 3: Business travel

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Limited assurance

Attach the statement

 CY19 Corning Verification Statement GHG & Water.pdf

Page/section reference

Pages 1, 2, 3

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
C8. Energy	Energy consumption	ISAE 3000; ISAE 3410	In addition to greenhouse gas emissions, Corning also had limited assurance verification completed for our energy consumption for the reporting year.  1

 1CY19 Corning Verification Statement GHG & Water.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.

Korea ETS

C11.1b

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

Korea ETS

% of Scope 1 emissions covered by the ETS

15

% of Scope 2 emissions covered by the ETS

82

Period start date

January 1, 2015

Period end date

December 31, 2025

Allowances allocated

533,959

Allowances purchased

0

Verified Scope 1 emissions in metric tons CO₂e

Verified Scope 2 emissions in metric tons CO₂e

Details of ownership

Facilities we own and operate

Comment

Currently, country-specific emissions are considered confidential.

C11.1d

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

Corning's Environmental Policy outlines our commitment to operate in an environmentally responsible manner – including measures to reduce emissions, waste, and energy and water consumption – while complying with and striving to exceed all applicable laws, regulations, and company standards. Corning has compliance programs in place to ensure we comply with local, state, national, and federal environmental regulations. Specific functional areas such as Global Environment and Sustainability, Global Supply Management, and Global Energy Management keep abreast of potential future regulations in the cities, regions, and countries that we operate in. These functional areas work closely with the impacted sites to ensure compliance and assist with opportunities to reduce carbon emissions through efficiency. (Corning Sustainability Report 2020, pages 13, 39)

C11.2

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

No

C11.3

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

No, and we do not currently anticipate doing so in the next two years

C12. Engagement

C12.1

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

Yes, our customers

C12.1b

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

Type of engagement

Education/information sharing

Details of engagement

Other, please specify

Share information through customer ESG surveys

% of customers by number

% 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

Corning engages with our customers on climate-related issues by responding to customer ESG surveys, hosting meetings to benchmark on sustainability and energy management, and by completing the CDP Climate Change and Water Security questionnaires.

Impact of engagement, including measures of success

Corning responds to customer inquiries in a timely and consistent manner. In 2020, Corning responded to more than 70 customer ESG surveys.

C12.3

(C12.3) Do you engage in activities that could either directly or indirectly influence public policy on climate-related issues through any of the following?

Direct engagement with policy makers
 Trade associations
 Funding research organizations

C12.3a

(C12.3a) On what issues have you been engaging directly with policy makers?

Focus of legislation	Corporate position	Details of engagement	Proposed legislative solution
Other, please specify Paris Agreement	Support	In 2019, Corning joined 75 companies in urging continued U.S. participation in the global climate-change initiative known as the Paris Agreement.	The companies encouraged the U.S. to embrace the policy framework of the Paris Agreement as the best path toward a clean-energy future.

C12.3b

(C12.3b) Are you on the board of any trade associations or do you provide funding beyond membership?

No

C12.3d

(C12.3d) Do you publicly disclose a list of all research organizations that you fund?

Yes

C12.3f

(C12.3f) What processes do you have in place to ensure that all of your direct and indirect activities that influence policy are consistent with your overall climate change strategy?

In conducting our government affairs program, Corning is committed to ensuring that its political and lobbying activities are conducted in full compliance with applicable law and in a manner that reflects Corning’s core corporate Values. Federal law prohibits corporations from contributing directly to federal candidates, federal political committees, or federal political parties. Corporations may contribute to Super PACs, i.e., political action committees that make independent expenditures supporting or opposing federal candidates. An independent expenditure is an expenditure for a communication "expressly advocating the election or defeat of a clearly identified candidate that is not made in cooperation, consultation, or concert with, or at the request or suggestion of, a candidate, a candidate’s authorized committee, or their agents, or a political party or its agents". Corning does not contribute to Super PACs or make independent expenditures supporting or opposing federal candidates, ballot measures, or referenda. Where permissible under state and local law, and consistent with the Company’s interests, Corning makes contributions to non-federal candidates (e.g., candidates to state offices), and may make contributions to non-federal political committees, non-federal parties, and other non-federal political organizations that register and report to the Internal Revenue

Service under section 527 of the Internal Revenue Code. Corning's Global Government Affairs group has authority to make decisions on behalf of the company regarding political contributions to non-federal candidates and other non-federal political entities where permitted by law. Such decisions are made in consultation with Corning's internal and/or external legal counsel and subject to oversight by our board's Corporate Responsibility and Sustainability Committee. Corning political contributions are made without regard for the political preferences of our executives. On a semi-annual basis, we will disclose non-federal political contributions that exceed \$1,000 during a calendar year. To view this list, see the Political Contributions page on Corning.com. Our Global Government Affairs group is responsible for overseeing all lobbying activities, and we disclose lobbying activities and expenditures as required by applicable federal, state, and local laws. (Corning Sustainability Report 2020, page 38)

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 communications

Status

Complete

Attach the document

 2020 Profiles in Leadership_Final (Updated 5.5.2020).pdf

Page/Section reference

Page 26

Content elements

Strategy

Other metrics

Other, please specify

Accomplishments related to climate change

Comment

Corning submits an application to ENERGY STAR for its Partner of the Year award on an annual basis. We received ENERGY STAR Partner of the Year awards in 2014, 2015, 2016, 2017, 2018, 2019, 2020, and 2021 to recognize its sustained efforts in efficient energy management. As an award winner in 2020, some of Corning's 2019 accomplishments were highlighted in the attached report, including our energy productivity improvement. Other key accomplishments include those related to energy efficiency and renewable energy, incorporation of ENERGY STAR guidelines into our corporate energy program, and communications related to energy management.

Publication

In voluntary sustainability report

Status

Complete

Attach the document

 2020_Sustainability_Report_Corning_Incorporated.pdf

Page/Section reference

Governance: pages 36-41

Strategy: page 4

Emissions figures: page 14

Other metrics: page 14

Content elements

Governance

Strategy

Emissions figures

Other metrics

Comment

Corning's 2020 Sustainability Report features information about our response to climate change and GHG emissions for the reporting year (2019).

C15. 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.

C15.1

(C15.1) Provide details for the person that has signed off (approved) your CDP climate change response.

	Job title	Corresponding job category
Row 1	Director of Global Environment and Sustainability	Environment/Sustainability manager

Submit your response

In which language are you submitting your response?

English

Please confirm how your response should be handled by CDP

	I am submitting to	Public or Non-Public Submission	Are you ready to submit the additional Supply Chain questions?
I am submitting my response	Investors Customers	Public	Yes, I will submit the Supply Chain questions now

Please confirm below

I have read and accept the applicable Terms