GlobalFoundries Inc.

2024 CDP Corporate Questionnaire 2024

Word version

Important: this export excludes unanswered questions
This document is an export of your organization's CDP questionnaire response. It contains all data points for questions that are answered or in progress. There may be questions or data points that you have been requested to provide, which are missing from this document because they are currently unanswered. Please note that it is your responsibility to verify that your questionnaire response is complete prior to submission. CDP will not be liable for any failure to do so.
Terms of disclosure for corporate questionnaire 2024 - CDP

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10/09/2024, 07:22 am

Contents

C1. Introduction

(1.1) In which language are you submitting your response?

Select from:
☑ English

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

Select from:
☑ USD

(1.3) Provide an overview and introduction to your organization.

(1.3.2) Organization type

Select from:
☑ Publicly traded organization

(1.3.3) Description of organization

GlobalFoundries (GF) is a leading manufacturer of essential semiconductors the world relies on to live, work and connect. The complex, feature-rich chips we make enable billions of electronic devices that are pervasive in daily life and throughout nearly every sector of the global economy. Every day, we innovate and partner with customers to enable new, smarter and more power-efficient technologies for the automotive, smartphone, internet of things, communications infrastructure and other high-growth markets. With our diverse international team and manufacturing footprint spanning the U.S., Europe and Asia, GF is the trusted and dependable manufacturing arm for customers, delivering differentiated essential chips globally and locally.
[Fixed row]

(1.4) State the end date of the year for which you are reporting data. For emissions data, indicate whether you will be providing emissions data for past reporting years.

(1.4.1) End date of reporting year

12/30/2023

(1.4.2) Alignment of this reporting period with your financial reporting period

Select from:

☑ Yes

(1.4.3) Indicate if you are providing emissions data for past reporting years

Select from:

☑ Yes

(1.4.4) Number of past reporting years you will be providing Scope 1 emissions data for

Select from:

☑ 3 years

(1.4.5) Number of past reporting years you will be providing Scope 2 emissions data for

Select from:

☑ 3 years

(1.4.6) Number of past reporting years you will be providing Scope 3 emissions data for

Select from:

☑ Not providing past emissions data for Scope 3

[Fixed row]

(1.4.1) What is your organization’s annual revenue for the reporting period?

7392000000

(1.5) Provide details on your reporting boundary.

(1.5.1) Is your reporting boundary for your CDP disclosure the same as that used in your financial statements?

Select from:

☑ No

(1.5.2) How does your reporting boundary differ to that used in your financial statement?

GF applies the operational control approach for accounting of our environmental data. Therefore, GF data reported in our Sustainability report and to CDP include additional data from a JV over which GF has operational control ("Silicon Manufacturing Partners Pte Ltd. (SMP)").
[Fixed row]

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

ISIN code - bond

(1.6.1) Does your organization use this unique identifier?

Select from:

☑ No

ISIN code - equity

(1.6.1) Does your organization use this unique identifier?

Select from:

☑ Yes

(1.6.2) Provide your unique identifier

KYG393871085

CUSIP number

(1.6.1) Does your organization use this unique identifier?

Select from:
☑ Yes

(1.6.2) Provide your unique identifier

G39387108

Ticker symbol

(1.6.1) Does your organization use this unique identifier?

Select from:
☑ Yes

(1.6.2) Provide your unique identifier

GFS

SEDOL code

(1.6.1) Does your organization use this unique identifier?

Select from:
☑ No

LEI number

(1.6.1) Does your organization use this unique identifier?

Select from:
☑ No

D-U-N-S number

(1.6.1) Does your organization use this unique identifier?

Select from:

☑ Yes

(1.6.2) Provide your unique identifier

830417593

Other unique identifier

(1.6.1) Does your organization use this unique identifier?

Select from:

☑ No

[Add row]

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

Select all that apply

☑ Germany

☑ Singapore

☑ United States of America

(1.8) Are you able to provide geolocation data for your facilities?

	Are you able to provide geolocation data for your facilities?	Comment
	Select from: ☑ Yes, for all facilities	*While we do know our geolocation data, we do not provide it.*

[Fixed row]

(1.8.1) Please provide all available geolocation data for your facilities.

Row 1

(1.8.1.1) Identifier

GF Dresden

(1.8.1.2) Latitude

51.12653

(1.8.1.3) Longitude

13.71616

(1.8.1.4) Comment

none

Row 2

(1.8.1.1) Identifier

GF Singapore

(1.8.1.2) Latitude

1.43415

(1.8.1.3) Longitude

103.76571

(1.8.1.4) Comment

none

Row 3

(1.8.1.1) Identifier

GF Malta, NY

(1.8.1.2) Latitude

42.97085

(1.8.1.3) Longitude

-73.7561

(1.8.1.4) Comment

none

Row 4

(1.8.1.1) Identifier

GF Burlington, VT

(1.8.1.2) Latitude

44.47864

(1.8.1.3) Longitude

-73.10046

(1.8.1.4) Comment

none
[Add row]

(1.24) Has your organization mapped its value chain?

(1.24.1) Value chain mapped

Select from:

☑ Yes, we have mapped or are currently in the process of mapping our value chain

(1.24.2) Value chain stages covered in mapping

Select all that apply

☑ Upstream value chain

☑ Downstream value chain

(1.24.3) Highest supplier tier mapped

Select from:

☑ Tier 1 suppliers

(1.24.4) Highest supplier tier known but not mapped

Select from:

☑ Tier 3 suppliers

(1.24.7) Description of mapping process and coverage

GF value chain mapping covers direct suppliers (Tier 1), and some selected higher tier suppliers, such as smelters / refiners as part of our conflict minerals program. GF also has mapped our direct customers and some higher tier (beyond Tier 1) customers.
[Fixed row]

(1.24.1) Have you mapped where in your direct operations or elsewhere in your value chain plastics are produced, commercialized, used, and/or disposed of?

(1.24.1.1) Plastics mapping

Select from:

☑ No, and we do not plan to within the next two years

(1.24.1.5) Primary reason for not mapping plastics in your value chain

Select from:

☑ Not an immediate strategic priority

(1.24.1.6) Explain why your organization has not mapped plastics in your value chain

Plastics is not among those materials that GF as a semiconductor manufacturer primarily uses/ relies on. Therefore it is not an immediate strategic priority and we have not yet performed plastic mapping in our value chain.
[Fixed row]

C2. Identification, assessment, and management of dependencies, impacts, risks, and opportunities

(2.1) How does your organization define short-, medium-, and long-term time horizons in relation to the identification, assessment, and management of your environmental dependencies, impacts, risks, and opportunities?

Short-term

(2.1.1) From (years)

0

(2.1.3) To (years)

2

(2.1.4) How this time horizon is linked to strategic and/or financial planning

Short-term time horizon is linked to GF's operational budgetary and financial planning processes.

Medium-term

(2.1.1) From (years)

2

(2.1.3) To (years)

6

(2.1.4) How this time horizon is linked to strategic and/or financial planning

Medium-term time horizon is linked to strategic goal planning. This includes GF's Journey to Zero Carbon goal to reduce absolute Scope 1 and Scope 2 GHG emissions by 25% from 2020 to 2030; and for business planning, GF's Long-Range Plan is maintained to help inform business strategy in the medium term.

Long-term

(2.1.1) From (years)

6

(2.1.2) Is your long-term time horizon open ended?

Select from:

☑ No

(2.1.3) To (years)

26

(2.1.4) How this time horizon is linked to strategic and/or financial planning

Long-term time horizon is linked to the company' s long term strategy planning, including e.g. GF Net-zero GHG emission and 100% carbon-neutral power by 2050 goal.
[Fixed row]

(2.2) Does your organization have a process for identifying, assessing, and managing environmental dependencies and/or impacts?

(2.2.1) Process in place

Select from:

☑ Yes

(2.2.2) Dependencies and/or impacts evaluated in this process

Select from:

☑ Impacts only

(2.2.4) Primary reason for not evaluating dependencies and/or impacts

Select from:

☑ Not an immediate strategic priority

(2.2.5) Explain why you do not evaluate dependencies and/or impacts and describe any plans to do so in the future

We do not evaluate specific environmental dependencies to date because we have prioritized managing and measuring environmental impacts resulting from operations and our value chain. For example, we do monitor environmental releases (i.e. resource use, releases to air, water, and waste streams, etc.) from our own operations and also work with suppliers to understand the environmental impacts of our supply chain.
[Fixed row]

(2.2.1) Does your organization have a process for identifying, assessing, and managing environmental risks and/or opportunities?

	Process in place	Risks and/or opportunities evaluated in this process	Is this process informed by the dependencies and/or impacts process?
	Select from: ☑ Yes	*Select from:* ☑ Both risks and opportunities	*Select from:* ☑ Yes

[Fixed row]

(2.2.2) Provide details of your organization's process for identifying, assessing, and managing environmental dependencies, impacts, risks, and/or opportunities.

Row 1

(2.2.2.1) Environmental issue

Select all that apply

☑ Climate change

(2.2.2.2) Indicate which of dependencies, impacts, risks, and opportunities are covered by the process for this environmental issue

Select all that apply

☑ Risks

(2.2.2.3) Value chain stages covered

Select all that apply

☑ Direct operations

☑ Upstream value chain

(2.2.2.4) Coverage

Select from:

☑ Full

(2.2.2.5) Supplier tiers covered

Select all that apply

☑ Tier 1 suppliers

(2.2.2.7) Type of assessment

Select from:

☑ Qualitative and quantitative

(2.2.2.8) Frequency of assessment

Select from:

☑ Every two years

(2.2.2.9) Time horizons covered

Select all that apply

☑ Short-term

☑ Medium-term

☑ Long-term

(2.2.2.10) Integration of risk management process

Select from:

☑ A specific environmental risk management process

(2.2.2.11) Location-specificity used

Select all that apply

☑ Site-specific

(2.2.2.12) Tools and methods used

Other

☑ Scenario analysis

(2.2.2.13) Risk types and criteria considered

Acute physical

☑ Drought

☑ Tornado

☑ Wildfires

☑ Heat waves

☑ Cold wave/frost

☑ Cyclones, hurricanes, typhoons

☑ Heavy precipitation (rain, hail, snow/ice)

☑ Flood (coastal, fluvial, pluvial, ground water)

☑ Storm (including blizzards, dust, and sandstorms)

Chronic physical

☑ Changing precipitation patterns and types (rain, hail, snow/ice)

☑ Changing temperature (air, freshwater, marine water)

☑ Heat stress

☑ Water stress

Policy

☑ Carbon pricing mechanisms

Market

☑ Other market, please specify **:**Increased cost of renewable energy

(2.2.2.14) Partners and stakeholders considered

Select all that apply

☑ Employees

☑ Suppliers

(2.2.2.15) Has this process changed since the previous reporting year?

Select from:

☑ Yes

(2.2.2.16) Further details of process

GF works with a third party for conducting climate-related scenario analysis. For climate related transition, the climate-related scenario analysis uses a low-carbon transition scenario (IEA NZE: International Energy Agency "Net Zero emissions by 2050 scenario") and a business-as-usual scenario (IEA STEPS: "Stated policies scenario"). GF also refreshed our qualitative climate physical scenario assessment of our sites and of selected major suppliers' sites, using a high physical impact scenario (SSP5-8.5) and a 'middle-of-the-road' scenario (SSP2-4.5). The results feed into GF's Enterprise Risk Management (ERM) program.

Row 2

(2.2.2.1) Environmental issue

Select all that apply

☑ Climate change

☑ Water

(2.2.2.2) Indicate which of dependencies, impacts, risks, and opportunities are covered by the process for this environmental issue

Select all that apply

☑ Impacts

☑ Risks

☑ Opportunities

(2.2.2.3) Value chain stages covered

Select all that apply

☑ Direct operations

☑ Upstream value chain

☑ Downstream value chain

☑ End of life management

(2.2.2.4) Coverage

Select from:

☑ Full

(2.2.2.5) Supplier tiers covered

Select all that apply

☑ Tier 1 suppliers

(2.2.2.7) Type of assessment

Select from:

☑ Qualitative only

(2.2.2.8) Frequency of assessment

Select from:

☑ Annually

(2.2.2.9) Time horizons covered

Select all that apply

☑ Short-term

☑ Medium-term

☑ Long-term

(2.2.2.10) Integration of risk management process

Select from:

☑ Integrated into multi-disciplinary organization-wide risk management process

(2.2.2.11) Location-specificity used

Select all that apply

☑ Site-specific

(2.2.2.12) Tools and methods used

International methodologies and standards

☑ ISO 14001 Environmental Management Standard

Other

☑ Materiality assessment

(2.2.2.13) Risk types and criteria considered

Acute physical

☑ Heat waves
☑ Pollution incident
☑ Storm (including blizzards, dust, and sandstorms)
☑ Toxic spills

Chronic physical

☑ Heat stress
☑ Water stress

Policy

☑ Carbon pricing mechanisms
☑ Changes to international law and bilateral agreements
☑ Changes to national legislation

Market

☑ Changing customer behavior

Reputation

☑ Impact on human health

Liability

☑ Non-compliance with regulations

(2.2.2.14) Partners and stakeholders considered

Select all that apply

☑ NGOs
☑ Customers
☑ Employees
☑ Investors
☑ Suppliers
☑ Regulators
☑ Local communities
☑ Water utilities at a local level

(2.2.2.15) Has this process changed since the previous reporting year?

Select from:

☑ No

(2.2.2.16) Further details of process

GF has a process in place to proactively identify environmental impacts, risks and opportunities as part of our ISO 14001 certified Environmental Management System, taking into account our key stakeholders. The results feed into GF's Enterprise Risk Management (ERM) program. Based on this process, GF also regularly reviews our sustainability priorities in a materiality assessment which outcome informs our company sustainability strategy, actions and disclosures.

Row 3

(2.2.2.1) Environmental issue

Select all that apply

☑ Water

(2.2.2.2) Indicate which of dependencies, impacts, risks, and opportunities are covered by the process for this environmental issue

Select all that apply

☑ Risks

(2.2.2.3) Value chain stages covered

Select all that apply

☑ Direct operations

(2.2.2.4) Coverage

Select from:

☑ Full

(2.2.2.7) Type of assessment

Select from:

☑ Qualitative only

(2.2.2.8) Frequency of assessment

Select from:

☑ Annually

(2.2.2.9) Time horizons covered

Select all that apply

☑ Short-term

☑ Medium-term

☑ Long-term

(2.2.2.10) Integration of risk management process

Select from:

☑ A specific environmental risk management process

(2.2.2.11) Location-specificity used

Select all that apply

☑ Site-specific

(2.2.2.12) Tools and methods used

Commercially/publicly available tools

☑ WRI Aqueduct

(2.2.2.13) Risk types and criteria considered

Chronic physical

☑ Water stress

(2.2.2.14) Partners and stakeholders considered

Select all that apply

☑ Employees

☑ Local communities

(2.2.2.15) Has this process changed since the previous reporting year?

Select from:

☑ No

(2.2.2.16) Further details of process

GF uses the World Resources Institute's (WRI) "Aqueduct Water Risk Atlas" in our annual assessment to determine whether our manufacturing sites are located in, or withdraw water from, high baseline and future (medium-term: 2030 and long-term: 2050) water stress areas.
[Add row]

(2.2.7) Are the interconnections between environmental dependencies, impacts, risks and/or opportunities assessed?

(2.2.7.1) Interconnections between environmental dependencies, impacts, risks and/or opportunities assessed

Select from:

☑ No

(2.2.7.3) Primary reason for not assessing interconnections between environmental dependencies, impacts, risks and/or opportunities

Select from:

☑ Not an immediate strategic priority

(2.2.7.4) Explain why you do not assess the interconnections between environmental dependencies, impacts, risks and/or opportunities

While we analyze impacts, risks and/or opportunities as per response to 2.2.2, we do not yet assess the interconnections between impacts, risks and/or opportunities (or environmental dependencies) to date, as it has not been identified as a strategic priority.
[Fixed row]

(2.3) Have you identified priority locations across your value chain?

(2.3.1) Identification of priority locations

Select from:

☑ No, but we plan to within the next two years

(2.3.7) Primary reason for not identifying priority locations

Select from:

☑ Not an immediate strategic priority

(2.3.8) Explain why you do not identify priority locations

While we analyze impacts, risks and/or opportunities as per response to 2.2.2, we do not yet identify priority locations, as it has not been identified as a strategic priority. We consider implementing a biodiversity strategy within the next two years. The identification of any priority locations (both in our own operations and value chain) is anticipated to be part of that process.
[Fixed row]

(2.4) How does your organization define substantive effects on your organization?

Risks

(2.4.1) Type of definition

Select all that apply

☑ Qualitative
☑ Quantitative

(2.4.2) Indicator used to define substantive effect

Select from:
☑ Revenue

(2.4.3) Change to indicator

Select from:
☑ Absolute decrease

(2.4.5) Absolute increase/ decrease figure

100000000

(2.4.6) Metrics considered in definition

Select all that apply
☑ Frequency of effect occurring
☑ Likelihood of effect occurring

(2.4.7) Application of definition

GF identifies enterprise-level risks using both a top-down and bottom-up approach. New risks are identified through an annual survey of senior leadership and through regular communication with functional risk leaders and review of functional risk registers across the organization. All enterprise risks are assessed and scored according to the GF ERM Risk Matrix. Risks are assigned a probability score based on the likelihood of occurrence and an impact score based on the magnitude of effect. The definition of the substantive effect threshold provided in this response is the threshold that designates the impact score of "most severe impacts" in GF's ERM Risk Matrix.

Opportunities

(2.4.1) Type of definition

Select all that apply

☑ Qualitative

☑ Quantitative

(2.4.2) Indicator used to define substantive effect

Select from:

☑ Revenue

(2.4.3) Change to indicator

Select from:

☑ Absolute increase

(2.4.5) Absolute increase/ decrease figure

100000000

(2.4.6) Metrics considered in definition

Select all that apply

☑ Time horizon over which the effect occurs

☑ Likelihood of effect occurring

(2.4.7) Application of definition

The definition of a threshold is derived from the impact threshold of GF's ERM Risk Matrix as provided in response above to the substantive risk threshold. Applying this derived definition helps to understand whether the environmental opportunities identified using processes of GF ISO 14001 Environmental Management System could be substantive.
[Add row]

(2.5) Does your organization identify and classify potential water pollutants associated with its activities that could have a detrimental impact on water ecosystems or human health?

(2.5.1) Identification and classification of potential water pollutants

Select from:

☑ Yes, we identify and classify our potential water pollutants

(2.5.2) How potential water pollutants are identified and classified

Water pollutants are classified and managed according to the wastewater discharge permits applicable at each of our manufacturing sites. Additionally, GF's Global EHS Standard for industrial wastewater further specifies the techniques and management practices for proper wastewater treatment and discharge. GF's Global EHS Policy and Standards are the foundation of our multisite ISO 14001 certified Environmental Management System. They are performance standards that incorporate what GF believes are best practices for global adoption across GF operations. We strive to continuously improve best practice by aligning with policy and regulatory developments, and the evolving voluntary initiatives and industry codes that GF subscribes to. Additionally, we apply knowledge drawn from collaboration with our customers, industry associations, and academic partners.
[Fixed row]

(2.5.1) Describe how your organization minimizes the adverse impacts of potential water pollutants on water ecosystems or human health associated with your activities.

Row 1

(2.5.1.1) Water pollutant category

Select from:

☑ Inorganic pollutants

(2.5.1.2) Description of water pollutant and potential impacts

Pollutants include acids, caustics, trace metals, dissolved solids and total Nitrogen that may have an impact on water ecosystems and human health.

(2.5.1.3) Value chain stage

Select all that apply

☑ Direct operations

(2.5.1.4) Actions and procedures to minimize adverse impacts

Select all that apply

☑ Water recycling

☑ Beyond compliance with regulatory requirements

☑ Reduction or phase out of hazardous substances

☑ Requirement for suppliers to comply with regulatory requirements

☑ Industrial and chemical accidents prevention, preparedness, and response

☑ Discharge treatment using sector-specific processes to ensure compliance with regulatory requirements

☑ Assessment of critical infrastructure and storage condition (leakages, spillages, pipe erosion etc.) and their resilience

(2.5.1.5) Please explain

GF's Global EHS Policy and Standards are the foundation of our ISO 14001 certified Environmental Management System, following a "beyond compliance" approach. The Global EHS Standard for industrial wastewater includes requirements to apply best available technologies for the operation and construction of wastewater treatment facilities, to assess the potential impact discharges could have to the receiving surface water body and/or the local sewer treatment facility, including toxicity in the receiving water body and performance impacts to the sewer treatment facility. Sites must maintain inventories of wastewater discharge, as well as plans, specifications, sampling protocols, operating and maintenance procedures, and provide secondary containment of industrial wastewater vessels and piping. Wastewater treatment: At each of our manufacturing sites, we operate wastewater treatment plants to treat wastewater to comply with our discharge permits. Steps include neutralization, removing trace metals and dissolved solids, and other treatment steps as needed to meet applicable regulatory requirements. Water recycling: GF has extensive water reclaim programs in place at each of our manufacturing facilities. Reduction of hazardous substances: GF thoroughly reviews all chemicals before their introduction to our sites to ensure that proper safeguards and material handling procedures are in place. All materials must meet GF's banned, restricted and declarable substance requirements.
[Add row]

C3. Disclosure of risks and opportunities

(3.1) Have you identified any environmental risks which have had a substantive effect on your organization in the reporting year, or are anticipated to have a substantive effect on your organization in the future?

Climate change

(3.1.1) Environmental risks identified

Select from:

☑ Yes, only within our direct operations

(3.1.2) Primary reason why your organization does not consider itself to have environmental risks in your direct operations and/or upstream/downstream value chain

Select from:

☑ Insufficient data

(3.1.3) Please explain

We also consider our value chain in the risk identification process according to our response to question 2.2.2. While we have identified a potentially substantive climate related risk for our direct operations (see response to 3.1.1), we do not have sufficient data to determine if this potential risk may be substantive for our value chain.

Water

(3.1.1) Environmental risks identified

Select from:

☑ No

(3.1.2) Primary reason why your organization does not consider itself to have environmental risks in your direct operations and/or upstream/downstream value chain

Select from:

☑ Environmental risks exist, but none with the potential to have a substantive effect on our organization

(3.1.3) Please explain

None of water related risks identified in processes according to our response to question 2.2.2 surpassed the threshold of a substantive risk that is reported in the response to question 2.4.

Plastics

(3.1.1) Environmental risks identified

Select from:

☑ No

(3.1.2) Primary reason why your organization does not consider itself to have environmental risks in your direct operations and/or upstream/downstream value chain

Select from:

☑ Not an immediate strategic priority

(3.1.3) Please explain

Plastics is not an immediate strategic priority and there have been no risks identified that specifically relate to plastics.
[Fixed row]

(3.1.1) Provide details of the environmental risks identified which have had a substantive effect on your organization in the reporting year, or are anticipated to have a substantive effect on your organization in the future.

Climate change

(3.1.1.1) Risk identifier

Select from:

☑ Risk1

(3.1.1.3) Risk types and primary environmental risk driver

Policy

☑ Carbon pricing mechanisms

(3.1.1.4) Value chain stage where the risk occurs

Select from:

☑ Direct operations

(3.1.1.6) Country/area where the risk occurs

Select all that apply

☑ Germany

☑ Singapore

☑ United States of America

(3.1.1.9) Organization-specific description of risk

GF may face potential future carbon costs, leading to increased operating expenditures in future. Carbon costs could apply directly to our Scope 1 GHG emissions from our manufacturing sites in Germany, Singapore, and the U.S. and / or apply indirectly to our Scope 2 GHG emissions and passed through to GF via increased costs of fuel and energy purchases. GF has worked with a third party to quantify the potential additional costs in a scenario based climate risk analysis, looking at 2 exposure pathways: -a BAU (business as usual) GHG emissions pathway with no further GHG emission reductions; and -a GF Journey to Zero net-zero target with GHG emissions reduction according to GF's transition plan. The two emissions pathways were analyzed applying a low-carbon transition scenario (IEA NZE: International Energy Agency "Net Zero emissions by 2050 scenario") and a business-as-usual scenario (IEA STEPS: "Stated policies scenario").

(3.1.1.11) Primary financial effect of the risk

Select from:

☑ Increased direct costs

(3.1.1.12) Time horizon over which the risk is anticipated to have a substantive effect on the organization

Select all that apply

☑ Medium-term

☑ Long-term

(3.1.1.13) Likelihood of the risk having an effect within the anticipated time horizon

Select from:

☑ More likely than not

(3.1.1.14) Magnitude

Select from:

☑ Low

(3.1.1.16) Anticipated effect of the risk on the financial position, financial performance and cash flows of the organization in the selected future time horizons

The effect on the medium-term or long-term financial position, performance and cash flow has not been quantified.

(3.1.1.17) Are you able to quantify the financial effect of the risk?

Select from:

☑ Yes

(3.1.1.21) Anticipated financial effect figure in the medium-term – minimum (currency)

61000000

(3.1.1.22) Anticipated financial effect figure in the medium-term – maximum (currency)

235600000

(3.1.1.23) Anticipated financial effect figure in the long-term – minimum (currency)

85600000

(3.1.1.24) Anticipated financial effect figure in the long-term – maximum (currency)

541900000

(3.1.1.25) Explanation of financial effect figure

GF has worked with a third party to quantify the potential additional costs in a scenario-based climate risk analysis, looking at 2 exposure pathways: -a BAU (business as usual) GHG emissions pathway with no further GHG emission reductions; and -a GF Journey to Zero net-zero target with GHG emissions reduction according to GF's transition plan. The two emissions pathways were analyzed applying a low-carbon transition scenario (IEA NZE: International Energy Agency "Net Zero emissions by 2050 scenario") and a business-as-usual scenario (IEA STEPS: "Stated policies scenario"). The financial effect figures are derived from the scenario-based climate risk analysis: The maximum figures for medium-term and long-term respectively represent the potential risk of carbon costs to GF for the BAU (business as usual) GHG emissions pathway (pathway in case GF would not implement further GHG emission reductions) under a IEA NZE "Net Zero emissions by 2050" scenario. The minimum figures for medium-term and long-term respectively represent the risk of carbon costs that would potentially incur to GF under our GF Journey to Zero and net-zero target pathway (GHG emissions reduction according to GF's transition plan) under a BAU a business-as-usual scenario IEA STEPS: "Stated policies scenario".

(3.1.1.26) Primary response to risk

Infrastructure, technology and spending

☑ Improve pollution abatement and control measures

(3.1.1.27) Cost of response to risk

50000000

(3.1.1.28) Explanation of cost calculation

To align with climate science and minimize long term exposure to climate change, GF has set our Journey to Zero Carbon goal (reducing our absolute Scope 1 and Scope 2 GHG emissions by 25% from 2020 to 2030) and GF's 2050 net zero goal to achieve net-zero GHG emissions and utilize a 100% carbon-neutral power supply across our global footprint by 2050. To achieve these goals, GF will further reduce emissions through the continued use of state-of-the-art emissions controls when expanding its manufacturing footprint, installation of new controls on existing sites where appropriate, expanded use of alternative chemistries, achieving 100% carbon-neutral power and offset residual emissions. Investments and costs to implement these initiatives are subject to GF's usual budget process. The figure

provided (50M USD) represents the average of the approximate cost range (40M USD- 60M USD) to address GHG emissions most impacting future carbon costs depending on the specific circumstances.

(3.1.1.29) Description of response

To align with climate science and minimize long term exposure to climate change, GF has set our Journey to Zero Carbon goal (reducing our absolute Scope 1 and Scope 2 GHG emissions by 25% from 2020 to 2030) and GF's 2050 net zero goal to achieve net-zero GHG emissions and utilize a 100% carbon-neutral power supply across our global footprint by 2050. To achieve our 2030 Journey to Zero target and our 2050 net zero goal, GF will further reduce emissions through the continued use of state-of-the-art emissions controls when expanding its manufacturing footprint, installation of new controls on existing sites where appropriate, expanded use of alternative chemistries, achieving 100% carbon-neutral power and offset residual emissions.
[Add row]

(3.1.2) Provide the amount and proportion of your financial metrics from the reporting year that are vulnerable to the substantive effects of environmental risks.

Climate change

(3.1.2.1) Financial metric

Select from:
☑ OPEX

(3.1.2.2) Amount of financial metric vulnerable to transition risks for this environmental issue (unit currency as selected in 1.2)

0

(3.1.2.3) % of total financial metric vulnerable to transition risks for this environmental issue

Select from:
☑ Less than 1%

(3.1.2.4) Amount of financial metric vulnerable to physical risks for this environmental issue (unit currency as selected in 1.2)

0

(3.1.2.5) % of total financial metric vulnerable to physical risks for this environmental issue

Select from:

☑ Less than 1%

(3.1.2.7) Explanation of financial figures

As explained in response to 3.1.1, GF has only identified a potential substantive transition risk for medium-term and for long-term as informed by a scenario based climate risk analysis. The potential identified climate transition risk, relates to potential future carbon costs that could lead to increased future operating expenditures over medium-term and long-term. In the scenario- based analysis, the carbon cost related transition risk has not been identified to be substantive for the reporting year or for the near- term. Therefore, we have put 0 as a response to this question that is asking for the costs and effect for such substantive transition risk for the reporting year. Also, GF has not identified a substantive climate related physical risk, therefore we have responded with 0 for the requested cost detail related to physical risk.
[Add row]

(3.3) In the reporting year, was your organization subject to any fines, enforcement orders, and/or other penalties for water-related regulatory violations?

(3.3.1) Water-related regulatory violations

Select from:

☑ No

(3.3.3) Comment

In 2023, we received one environmental related notice of violation, which was not significant and had no fines or sanctions/ penalty and/or enforcement order associated.
[Fixed row]

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

Select from:

☑ Yes

(3.5.1) Select the carbon pricing regulation(s) which impact your operations.

Select all that apply

☑ Singapore carbon tax

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

Singapore carbon tax

(3.5.3.1) Period start date

12/31/2022

(3.5.3.2) Period end date

12/30/2023

(3.5.3.3) % of total Scope 1 emissions covered by tax

61

(3.5.3.4) Total cost of tax paid

1721793

(3.5.3.5) Comment

Converted to USD using the 2023 average conversion rate per Yearly Average Currency Exchange Rates Internal Revenue Service (irs.gov)
[Fixed row]

(3.5.4) What is your strategy for complying with the systems you are regulated by or anticipate being regulated by?

GF Singapore is subject to the Singapore Carbon Pricing Act (CPA), which came into operation on 1 Jan 2019.GF has a number of projects implemented to date and planned to reduce the in-scope Scope 1 GHG emissions to address the carbon tax amount. Projects relate to PFC (perfluorocompound) process gas Scope 1 GHG emissions reduction. In 2023, GF Singapore has completed several projects that reduce annual Scope 1 PFC emissions by more than 47,000 MTCO2e. The list of projects included projects that implemented process gas use optimization, and projects that substitute certain PFC process gases with NF3 in an optimized process that generates significantly lower GHG emissions. Further projects are planned for the next years (2024 to 2027) that are specifically targeting more process gas substitution to further reduce GF Singapore fabs' Scope 1 GHG emissions.

(3.6) Have you identified any environmental opportunities which have had a substantive effect on your organization in the reporting year, or are anticipated to have a substantive effect on your organization in the future?

Climate change

(3.6.1) Environmental opportunities identified

Select from:

☑ Yes, we have identified opportunities, and some/all are being realized

Water

(3.6.1) Environmental opportunities identified

Select from:

☑ No

(3.6.2) Primary reason why your organization does not consider itself to have environmental opportunities

Select from:

☑ Opportunities exist, but none anticipated to have a substantive effect on organization

(3.6.3) Please explain

GF's water conservation strategy is to reduce the amount of water withdrawn for use in manufacturing processes as well as increasing water recycling and reuse at our manufacturing facilities with the overall aim to save water related costs. For example, in 2023 GF executed projects that are estimated to achieve an annualized water saving of more than 341,000 m³ of water. However the positive impact of the 2023 achieved water related cost saving was below the threshold detailed in response to question 2.4.

[Fixed row]

(3.6.1) Provide details of the environmental opportunities identified which have had a substantive effect on your organization in the reporting year, or are anticipated to have a substantive effect on your organization in the future.

Climate change

(3.6.1.1) Opportunity identifier

Select from:

☑ Opp1

(3.6.1.3) Opportunity type and primary environmental opportunity driver

Resource efficiency

☑ Cost savings

(3.6.1.4) Value chain stage where the opportunity occurs

Select from:

☑ Direct operations

(3.6.1.5) Country/area where the opportunity occurs

Select all that apply

☑ Germany

☑ Singapore

☑ United States of America

(3.6.1.8) Organization specific description

GF may have a potential future opportunity to save carbon costs, leading to potential saving of operating expenditures in future. Carbon costs could apply directly to our Scope 1 GHG emissions from our manufacturing sites in Germany, Singapore, and the U.S. and / or apply indirectly to our Scope 2 GHG emissions and passed

through to GF via increased costs of fuel and energy purchases. GF has worked with a third party to quantify the potential additional costs in a scenario based climate risk analysis, looking at 2 exposure pathways: -a BAU (business as usual) GHG emissions pathway with no further GHG emission reductions; and -a GF Journey to Zero net-zero target with GHG emissions reduction according to GF's transition plan. The two emissions pathways were analyzed applying a low-carbon transition scenario (IEA NZE: International Energy Agency "Net Zero emissions by 2050 scenario") and a business-as-usual scenario (IEA STEPS: "Stated policies scenario") to understand the potential future costs. GF's strategy to minimize long term exposure to climate change and an opportunity to avoid or reduce additional carbon costs, GF has set our Journey to Zero Carbon goal (reducing our absolute Scope 1 and Scope 2 GHG emissions by 25% from 2020 to 2030) and GF's 2050 net zero goal to achieve net-zero GHG emissions and utilize a 100% carbon-neutral power supply across our global footprint by 2050.

(3.6.1.9) Primary financial effect of the opportunity

Select from:

☑ Reduced direct costs

(3.6.1.10) Time horizon over which the opportunity is anticipated to have a substantive effect on the organization

Select all that apply

☑ Medium-term

☑ Long-term

(3.6.1.11) Likelihood of the opportunity having an effect within the anticipated time horizon

Select from:

☑ More likely than not (50–100%)

(3.6.1.12) Magnitude

Select from:

☑ Low

(3.6.1.14) Anticipated effect of the opportunity on the financial position, financial performance and cash flows of the organization in the selected future time horizons

The effect on the medium-term or long-term financial position, performance and cash flow has not been quantified.

(3.6.1.15) Are you able to quantify the financial effects of the opportunity?

Select from:

☑ Yes

(3.6.1.19) Anticipated financial effect figure in the medium-term - minimum (currency)

61000000

(3.6.1.20) Anticipated financial effect figure in the medium-term - maximum (currency)

235600000

(3.6.1.21) Anticipated financial effect figure in the long-term - minimum (currency)

85600000

(3.6.1.22) Anticipated financial effect figure in the long-term – maximum (currency)

491900000

(3.6.1.23) Explanation of financial effect figures

GF has worked with a third party to quantify potential future carbon costs savings in a scenario based analysis, looking at 2 exposure pathways: -a BAU (business as usual) GHG emissions pathway with no further GHG emission reductions; and -a GF Journey to Zero net-zero target with GHG emissions reduction according to GF's transition plan. The two emissions pathways were analyzed applying a low-carbon transition scenario (IEA NZE: International Energy Agency "Net Zero emissions by 2050 scenario") and a business-as-usual scenario (IEA STEPS: "Stated policies scenario"). The financial effect figures are derived from the scenario based climate risk analysis: The maximum figures for medium-term and long-term respectively represent the potential savings of carbon costs for GF in a BAU (business as usual) GHG emissions pathway (pathway in case GF would not implement further GHG emission reductions) under a the IEA NZE "Net Zero emissions by 2050" scenario. The minimum figures for medium-term and long-term respectively represent the potential carbon cost savings for GF under our GF Journey to Zero and net-zero target pathway (GHG emissions reduction according to GF's transition plan) under a BAU a business-as-usual scenario IEA STEPS: "Stated policies scenario".

(3.6.1.24) Cost to realize opportunity

50000000

(3.6.1.25) Explanation of cost calculation

GF's strategy to align with climate science and seize climate change opportunities, GF has set our Journey to Zero Carbon goal (reducing our absolute Scope 1 and Scope 2 GHG emissions by 25% from 2020 to 2030) and GF's 2050 net zero goal to achieve net-zero GHG emissions and utilize a 100% carbon-neutral power supply across our global footprint by 2050. To achieve these targets, GF will further reduce emissions through the continued use of state-of-the-art emissions controls when expanding its manufacturing footprint, installation of new controls on existing sites where appropriate, expanded use of alternative chemistries, achieving 100% carbon-neutral power and offset residual emissions. Investments and costs to implement these initiatives are subject to GF's usual budget process. The figure provided here (50M USD) represents the average of the approximate cost range (40M USD - 60M USD) to realize the opportunity to address those GHG emissions most impacting future carbon costs depending on the specific circumstances.

(3.6.1.26) Strategy to realize opportunity

GF's strategy to align with climate science and seize climate change opportunities, GF has set our Journey to Zero Carbon goal (reducing our absolute Scope 1 and Scope 2 GHG emissions by 25% from 2020 to 2030) and GF's 2050 net zero goal to achieve net-zero GHG emissions and utilize a 100% carbon-neutral power supply across our global footprint by 2050. To achieve our 2030 Journey to Zero target and our 2050 net zero goal, GF will further reduce emissions through the continued use of state-of-the-art emissions controls when expanding its manufacturing footprint, installation of new controls on existing sites where appropriate, expanded use of alternative chemistries, achieving 100% carbon-neutral power and offset residual emissions.
[Add row]

(3.6.2) Provide the amount and proportion of your financial metrics in the reporting year that are aligned with the substantive effects of environmental opportunities.

Climate change

(3.6.2.1) Financial metric

Select from:
☑ OPEX

(3.6.2.2) Amount of financial metric aligned with opportunities for this environmental issue (unit currency as selected in 1.2)

0

(3.6.2.3) % of total financial metric aligned with opportunities for this environmental issue

Select from:

☑ Less than 1%

(3.6.2.4) Explanation of financial figures

The opportunity described in response to 3.6.1 is a potential medium- or long-term opportunity and is therefore not related to the reporting year.
[Add row]

C4. Governance

(4.1) Does your organization have a board of directors or an equivalent governing body?

(4.1.1) Board of directors or equivalent governing body

Select from:

☑ Yes

(4.1.2) Frequency with which the board or equivalent meets

Select from:

☑ More frequently than quarterly

(4.1.3) Types of directors your board or equivalent is comprised of

Select all that apply

☑ Independent non-executive directors or equivalent

(4.1.4) Board diversity and inclusion policy

Select from:

☑ Yes, and it is publicly available

(4.1.5) Briefly describe what the policy covers

3.8 Statement on Diversity and Member Selection The Board believes that selecting the best candidates for the Board is a key element of its corporate strategy and governance. The Board recognizes the value of diversity and will always strive to assemble a Board that will provide a range of perspectives, experience and expertise. The Board is committed to actively seeking out diverse candidates to include in the pool from which nominees for the Board are selected. Proposed appointments of Directors to the Board will be based on a prior analysis of the needs of the Board and consideration of the diversity of skills, knowledge, experience, age, race, ethnicity, gender, gender identity, sexual orientation or identity, and cultural background, as well as membership in underrepresented groups within its composition.

(4.1.6) Attach the policy (optional)

Feb 7 2024 GF Board Charter.pdf
[Fixed row]

(4.1.1) Is there board-level oversight of environmental issues within your organization?

Climate change

(4.1.1.1) Board-level oversight of this environmental issue

Select from:
☑ Yes

Water

(4.1.1.1) Board-level oversight of this environmental issue

Select from:
☑ Yes

Biodiversity

(4.1.1.1) Board-level oversight of this environmental issue

Select from:
☑ No, and we do not plan to within the next two years

(4.1.1.2) Primary reason for no board-level oversight of this environmental issue

Select from:
☑ Not an immediate strategic priority

(4.1.1.3) Explain why your organization does not have board-level oversight of this environmental issue

GF has developed a plan to assess and better understand biodiversity issues the company faces. Until this is completed, specific board-level oversight has not been implemented.
[Fixed row]

(4.1.2) Identify the positions (do not include any names) of the individuals or committees on the board with accountability for environmental issues and provide details of the board's oversight of environmental issues.

Climate change

(4.1.2.1) Positions of individuals or committees with accountability for this environmental issue

Select all that apply

☑ Board-level committee

(4.1.2.2) Positions' accountability for this environmental issue is outlined in policies applicable to the board

Select from:

☑ Yes

(4.1.2.3) Policies which outline the positions' accountability for this environmental issue

Select all that apply

☑ Other policy applicable to the board, please specify **:**Charter of the Audit, Risk and Compliance Committee of the Board of Directors

(4.1.2.4) Frequency with which this environmental issue is a scheduled agenda item

Select from:

☑ Scheduled agenda item in some board meetings – at least annually

(4.1.2.5) Governance mechanisms into which this environmental issue is integrated

Select all that apply

☑ Reviewing and guiding annual budgets

☑ Overseeing the setting of corporate targets

☑ Overseeing and guiding major capital expenditures

☑ Monitoring the implementation of a climate transition plan

☑ Monitoring progress towards corporate targets
☑ Approving corporate policies and/or commitments
☑ Approving and/or overseeing employee incentives
☑ Overseeing and guiding the development of a business strategy
☑ Monitoring compliance with corporate policies and/or commitments
☑ Overseeing and guiding the development of a climate transition plan

(4.1.2.7) Please explain

Authority for oversight and management of sustainability topics have been established according to our sustainability governance structure. The Board oversees GF's ESG matters and programs through the ARCC and the company's management team provides updates to the ARCC on a quarterly basis. The ARCC guides the company's approach to ESG-related strategy, policies and disclosures. Through the ARCC, GF has established Board-level ESG goals. Accountability for achieving Board-level ESG goals is placed on designated members of the company's Executive Team through inclusion into their annual goals, and achievement of those goals influences their incentive-based compensation. Sustainability reports to the ARCC include reviews of performance towards our Board-level ESG goals, the results of sustainability-related audits, ESG agency scoring results and applicable SEC regulatory updates. The ARCC's ESG-related recommendations are reported to the full Board for strategic decision-making, as needed. In addition to the oversight provided by the Board and the ARCC, key sustainability policy decisions and long-term goals are approved by the CEO.

Water

(4.1.2.1) Positions of individuals or committees with accountability for this environmental issue

Select all that apply
☑ Board-level committee

(4.1.2.2) Positions' accountability for this environmental issue is outlined in policies applicable to the board

Select from:
☑ Yes

(4.1.2.3) Policies which outline the positions' accountability for this environmental issue

Select all that apply
☑ Other policy applicable to the board, please specify **:**Charter of the Audit, Risk and Compliance Committee of the Board of Directors

(4.1.2.4) Frequency with which this environmental issue is a scheduled agenda item

Select from:

☑ Scheduled agenda item in some board meetings – at least annually

(4.1.2.5) Governance mechanisms into which this environmental issue is integrated

Select all that apply

☑ Reviewing and guiding annual budgets
☑ Overseeing the setting of corporate targets
☑ Monitoring progress towards corporate targets
☑ Approving corporate policies and/or commitments
☑ Approving and/or overseeing employee incentives
☑ Overseeing and guiding major capital expenditures
☑ Monitoring the implementation of a climate transition plan
☑ Overseeing and guiding the development of a business strategy
☑ Monitoring compliance with corporate policies and/or commitments
☑ Overseeing and guiding the development of a climate transition plan

(4.1.2.7) Please explain

Authority for oversight and management of sustainability topics have been established according to our sustainability governance structure. The Board oversees GF's ESG matters and programs through the ARCC and the company's management team provides updates to the ARCC on a quarterly basis. The ARCC guides the company's approach to ESG-related strategy, policies and disclosures. Through the ARCC, GF has established Board-level ESG goals. Accountability for achieving Board-level ESG goals is placed on designated members of the company's Executive Team through inclusion into their annual goals, and achievement of those goals influences their incentive-based compensation. Sustainability reports to the ARCC include reviews of performance towards our Board-level ESG goals, the results of sustainability-related audits, ESG agency scoring results and applicable SEC regulatory updates. The ARCC's ESG-related recommendations are reported to the full Board for strategic decision-making, as needed. In addition to the oversight provided by the Board and the ARCC, key sustainability policy decisions and long-term goals are approved by the CEO.
[Fixed row]

(4.2) Does your organization's board have competency on environmental issues?

Climate change

(4.2.1) Board-level competency on this environmental issue

Select from:

☑ Yes

(4.2.2) Mechanisms to maintain an environmentally competent board

Select all that apply

☑ Having at least one board member with expertise on this environmental issue

(4.2.3) Environmental expertise of the board member

Experience

☑ Executive-level experience in a role focused on environmental issues

Water

(4.2.1) Board-level competency on this environmental issue

Select from:

☑ Yes

(4.2.2) Mechanisms to maintain an environmentally competent board

Select all that apply

☑ Having at least one board member with expertise on this environmental issue

(4.2.3) Environmental expertise of the board member

Experience

☑ Executive-level experience in a role focused on environmental issues

[Fixed row]

(4.3) Is there management-level responsibility for environmental issues within your organization?

Climate change

(4.3.1) Management-level responsibility for this environmental issue

Select from:

☑ Yes

Water

(4.3.1) Management-level responsibility for this environmental issue

Select from:

☑ Yes

Biodiversity

(4.3.1) Management-level responsibility for this environmental issue

Select from:

☑ No, but we plan to within the next two years

(4.3.2) Primary reason for no management-level responsibility for environmental issues

Select from:

☑ Not an immediate strategic priority

(4.3.3) Explain why your organization does not have management-level responsibility for environmental issues

Because biodiversity has not been prioritized as an immediate strategic priority no management level responsibility has been assigned. We plan on implementing a process to identify, assess, and manage dependencies and impacts on the environment and their interconnections with risk and opportunities within the next two years. Management level responsibility would result if the need is identified.
[Fixed row]

(4.3.1) Provide the highest senior management-level positions or committees with responsibility for environmental issues (do not include the names of individuals).

Climate change

(4.3.1.1) Position of individual or committee with responsibility

Executive level

☑ Chief Executive Officer (CEO)

(4.3.1.2) Environmental responsibilities of this position

Policies, commitments, and targets

☑ Monitoring compliance with corporate environmental policies and/or commitments

☑ Measuring progress towards environmental corporate targets

☑ Setting corporate environmental policies and/or commitments

☑ Setting corporate environmental targets

Strategy and financial planning

☑ Developing a climate transition plan

☑ Implementing a climate transition plan

☑ Implementing the business strategy related to environmental issues

☑ Managing annual budgets related to environmental issues

☑ Managing major capital and/or operational expenditures relating to environmental issues

Other

☑ Providing employee incentives related to environmental performance

(4.3.1.4) Reporting line

Select from:

☑ Reports to the board directly

(4.3.1.5) Frequency of reporting to the board on environmental issues

Select from:

☑ Quarterly

(4.3.1.6) Please explain

Authority for oversight and management of sustainability topics have been established according to our sustainability governance structure. In addition to the oversight provided by the Board and the ARCC as described in response to 4.1.2, key sustainability policy decisions and long-term goals are approved by the CEO. In addition, GF maintains a Stewardship Committee, which is responsible for setting strategic direction, conducting management reviews and providing guidance and approval regarding sustainability topics. The Stewardship Committee membership includes senior executives representing the legal, finance, manufacturing, human resources, communications, technology, strategy, business operations and global supply chain organization.

Water

(4.3.1.1) Position of individual or committee with responsibility

Executive level

☑ Chief Executive Officer (CEO)

(4.3.1.2) Environmental responsibilities of this position

Policies, commitments, and targets

☑ Monitoring compliance with corporate environmental policies and/or commitments

☑ Measuring progress towards environmental corporate targets

☑ Setting corporate environmental policies and/or commitments

☑ Setting corporate environmental targets

Strategy and financial planning

☑ Developing a climate transition plan

☑ Implementing a climate transition plan

☑ Implementing the business strategy related to environmental issues

☑ Managing annual budgets related to environmental issues

☑ Managing major capital and/or operational expenditures relating to environmental issues

Other

☑ Providing employee incentives related to environmental performance

(4.3.1.4) Reporting line

Select from:

☑ Reports to the board directly

(4.3.1.5) Frequency of reporting to the board on environmental issues

Select from:

☑ Quarterly

(4.3.1.6) Please explain

Authority for oversight and management of sustainability topics have been established according to our sustainability governance structure. In addition to the oversight provided by the Board and the ARCC as described in response to 4.1.2, key sustainability policy decisions and long-term goals are approved by the CEO. In addition, GF maintains a Stewardship Committee, which is responsible for setting strategic direction, conducting management reviews and providing guidance and approval regarding sustainability topics. The Stewardship Committee membership includes senior executives representing the legal, finance, manufacturing, human resources, communications, technology, strategy, business operations and global supply chain organization.
[Add row]

(4.5) Do you provide monetary incentives for the management of environmental issues, including the attainment of targets?

Climate change

(4.5.1) Provision of monetary incentives related to this environmental issue

Select from:

☑ Yes

(4.5.2) % of total C-suite and board-level monetary incentives linked to the management of this environmental issue

0

(4.5.3) Please explain

Incentives cover those persons in GF's leadership team who have a direct impact on progress towards our climate goals. Please note that as a "foreign private issuer" under the securities laws of the United States and the rules of Nasdaq, GF does not disclose this information and we therefor put a 0.

Water

(4.5.1) Provision of monetary incentives related to this environmental issue

Select from:

☑ Yes

(4.5.2) % of total C-suite and board-level monetary incentives linked to the management of this environmental issue

0

(4.5.3) Please explain

Incentives cover those persons in GF's leadership team who have a direct impact on progress towards our water goals. Please note that as a "foreign private issuer" under the securities laws of the United States and the rules of Nasdaq, GF does not disclose this information and we therefor put a 0.
[Fixed row]

(4.5.1) Provide further details on the monetary incentives provided for the management of environmental issues (do not include the names of individuals).

Climate change

(4.5.1.1) Position entitled to monetary incentive

Board or executive level

☑ Chief Operating Officer (COO)

(4.5.1.2) Incentives

Select all that apply

☑ Bonus - % of salary

☑ Shares

(4.5.1.3) Performance metrics

Emission reduction

☑ Reduction in absolute emissions

(4.5.1.4) Incentive plan the incentives are linked to

Select from:

☑ Short-Term Incentive Plan, or equivalent, only (e.g. contractual annual bonus)

(4.5.1.5) Further details of incentives

Annual bonus and awards of RSUs (Restricted Stock Units) and / or PSUs (Performance Stock Units) are influenced by progress to GF's climate goals.

(4.5.1.6) How the position's incentives contribute to the achievement of your environmental commitments and/or climate transition plan

The incentive prioritizes GF's climate goals and with that enables progress on GHG reduction projects: Accountability for achieving GF's climate goals is placed on designated members of the company's leadership, including the CEO, through inclusion into their annual goals. Achievement of annual goals influences incentive-based compensation.

Water

(4.5.1.1) Position entitled to monetary incentive

Board or executive level

☑ Chief Operating Officer (COO)

(4.5.1.2) Incentives

Select all that apply

☑ Bonus - % of salary

☑ Shares

(4.5.1.3) Performance metrics

Resource use and efficiency

☑ Improvements in water efficiency – direct operations

(4.5.1.4) Incentive plan the incentives are linked to

Select from:

☑ Short-Term Incentive Plan, or equivalent, only (e.g. contractual annual bonus)

(4.5.1.5) Further details of incentives

Annual bonus and awards of RSUs (Restricted Stock Units) and / or PSUs (Performance Stock Units) are influenced by progress to GF's water efficiency goal.

(4.5.1.6) How the position's incentives contribute to the achievement of your environmental commitments and/or climate transition plan

The incentive prioritizes GF's water efficiency goals and with that enables progress on water conservation projects: Accountability for achieving GF's water goals is placed on designated members of the company's leadership, including the CEO, through inclusion into their annual goals. Achievement of annual goals influences incentive-based compensation.
[Add row]

(4.6) Does your organization have an environmental policy that addresses environmental issues?

	Does your organization have any environmental policies?
	Select from: ☑ Yes

[Fixed row]

(4.6.1) Provide details of your environmental policies.

Row 1

(4.6.1.1) Environmental issues covered

Select all that apply

☑ Climate change

☑ Water

(4.6.1.2) Level of coverage

Select from:

☑ Organization-wide

(4.6.1.3) Value chain stages covered

Select all that apply

☑ Direct operations

(4.6.1.4) Explain the coverage

GF's Global EHS Policy and Standards are the foundation of our multisite ISO 14001 certified Environmental Management System. The GF EHS policy applies to all activities, employees and contractors at GF operated facilities and subsidiaries. The GF Global EHS Standards are performance standards that incorporate what GF

believes are best practices for global adoption across GF operations. They include requirements for resource conservation (including water conservation), global climate protection, wastewater, groundwater and stormwater management. GF EHS Policy is based on the following principles: - Journey to Zero, - Continual Improvement, - Beyond Compliance, - Customer Focus, - Consultation and Participation, - Roles and Responsibilities.

(4.6.1.5) Environmental policy content

Environmental commitments

☑ Commitment to comply with regulations and mandatory standards

☑ Commitment to take environmental action beyond regulatory compliance

☑ Commitment to stakeholder engagement and capacity building on environmental issues

Climate-specific commitments

☑ Commitment to net-zero emissions

Water-specific commitments

☑ Commitment to control/reduce/eliminate water pollution

☑ Commitment to reduce water withdrawal volumes

Additional references/Descriptions

☑ Reference to timebound environmental milestones and targets

(4.6.1.6) Indicate whether your environmental policy is in line with global environmental treaties or policy goals

Select all that apply

☑ Yes, in line with the Paris Agreement

☑ Yes, in line with Sustainable Development Goal 6 on Clean Water and Sanitation

(4.6.1.7) Public availability

Select from:

☑ Publicly available

(4.6.1.8) Attach the policy

GF-Global-EHS-Policy_October-2023-external (1).pdf
[Add row]

(4.10) Are you a signatory or member of any environmental collaborative frameworks or initiatives?

(4.10.1) Are you a signatory or member of any environmental collaborative frameworks or initiatives?

Select from:
☑ Yes

(4.10.2) Collaborative framework or initiative

Select all that apply
☑ Other, please specify :Semiconductor Climate Consortium

(4.10.3) Describe your organization's role within each framework or initiative

GF is a Founding Member of the Semiconductor Climate Consortium to collaborate across the supply chain to accelerate the reduction of GHG emissions across the semiconductor value chain.
[Fixed row]

(4.11) In the reporting year, did your organization engage in activities that could directly or indirectly influence policy, law, or regulation that may (positively or negatively) impact the environment?

(4.11.1) External engagement activities that could directly or indirectly influence policy, law, or regulation that may impact the environment

Select all that apply
☑ Yes, we engaged indirectly through, and/or provided financial or in-kind support to a trade association or other intermediary organization or individual whose activities could influence policy, law, or regulation

(4.11.2) Indicate whether your organization has a public commitment or position statement to conduct your engagement activities in line with global environmental treaties or policy goals

Select from:

☑ No, and we do not plan to have one in the next two years

(4.11.5) Indicate whether your organization is registered on a transparency register

Select from:

☑ Yes

(4.11.6) Types of transparency register your organization is registered on

Select all that apply

☑ Mandatory government register

(4.11.7) Disclose the transparency registers on which your organization is registered & the relevant ID numbers for your organization

GF is listed in mandatory transparency registers with the following register numbers: U.S.: U.S. Senate's Lobbying Disclosure Act Database; Senate ID# 401105733-12; House ID# 448410001 EU: EU Transparency Register: REG 493333193565-46 Germany: Lobbyregister Deutscher Bundestag, ID: R006489 GF lobby activities for New York (NY) and Vermont (VT) (no assigned ID numbers): NY:https://reports.ethics.ny.gov/publicquery/AssociatedFilings/NTI3NTM5fDEwMDc4OTB8TFI1 VT: https://lobbying.vermont.gov

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

GF sustainability governance structure ensures that our external engagement activities are consistent with our environmental commitments and strategic goals: The Corporate EHS Sustainability Director oversees our trade associations engagement regarding environmental related topics, including climate-related and water-related topics, to ensure consistent positions. Strategic decisions and position taking are presented for review and approval to GF's Stewardship Committee. The Stewardship Committee, which is responsible for setting strategic direction, conducting management reviews and providing guidance and approval regarding environmental and sustainability topics.
[Fixed row]

(4.11.2) Provide details of your indirect engagement on policy, law, or regulation that may (positively or negatively) impact the environment through trade associations or other intermediary organizations or individuals in the reporting year.

Row 1

(4.11.2.1) Type of indirect engagement

Select from:

☑ Indirect engagement via a trade association

(4.11.2.4) Trade association

North America

☑ Other trade association in North America, please specify **:**Semiconductor Industry Association

(4.11.2.5) Environmental issues relevant to the policies, laws, or regulations on which the organization or individual has taken a position

Select all that apply

☑ Climate change

☑ Water

(4.11.2.6) Indicate whether your organization's position is consistent with the organization or individual you engage with

Select from:

☑ Consistent

(4.11.2.7) Indicate whether your organization attempted to influence the organization or individual's position in the reporting year

Select from:

☑ Yes, we publicly promoted their current position

(4.11.2.8) Describe how your organization's position is consistent with or differs from the organization or individual's position, and any actions taken to influence their position

Being part of SIA's EHS working groups, GF is generally aligned with SIA's positions. SIA and the U.S. semiconductor industry are an acknowledged global leader in promoting environmental sustainability in the design, manufacture, and use of its products, as well as the health and safety of its operations and impacts on workers in semiconductor manufacturing facilities. Although the industry contributes only a very small amount of GHG emissions, SIA and its members have been engaged in ongoing efforts to reduce these emissions. For example, SIA contributed to the World Semiconductor Council's Best Practice Guidance for Semiconductor PFC Emission Reduction: https://www.semiconductors.org/policies/environment-health-safety/ http://www.semiconductorcouncil.org/wp-content/uploads/2017/07/Best-Practice-Guidance-of-PFC-Emission-Reduction.pdf

(4.11.2.9) Funding figure your organization provided to this organization or individual in the reporting year (currency)

415000

(4.11.2.10) Describe the aim of this funding and how it could influence policy, law or regulation that may impact the environment

The amount provided is the membership fee for GF

(4.11.2.11) Indicate if you have evaluated whether your organization's engagement is aligned with global environmental treaties or policy goals

Select from:

☑ No, we have not evaluated

Row 2

(4.11.2.1) Type of indirect engagement

Select from:

☑ Indirect engagement via a trade association

(4.11.2.4) Trade association

Europe

☑ Other trade association in Europe, please specify **:**European Semiconductor Industry Association (ESIA)

(4.11.2.5) Environmental issues relevant to the policies, laws, or regulations on which the organization or individual has taken a position

Select all that apply

☑ Climate change

☑ Water

(4.11.2.6) Indicate whether your organization's position is consistent with the organization or individual you engage with

Select from:

☑ Consistent

(4.11.2.7) Indicate whether your organization attempted to influence the organization or individual's position in the reporting year

Select from:

☑ Yes, we publicly promoted their current position

(4.11.2.8) Describe how your organization's position is consistent with or differs from the organization or individual's position, and any actions taken to influence their position

Being part of ESIA's EHS working groups, GF is generally aligned with ESIA's positions. ESIA and the European Semiconductor industry support the European Union (EU) Green Deal. The EU has pledged to become the first climate-neutral continent by 2050, with a revised 2030 emission reduction goal of 'at least 55%'. The European Green Deal aims at using technological innovations that are enabled by semiconductors as the main tool for decarbonising economies. Semiconductor products will continue to be a key enabler of low carbon and energy efficient innovative solutions: https://www.eusemiconductors.eu/esia/public-policy/sustainability-esh. Similar as SIA, ESIA also contributed to the World Semiconductor Council's Best Practice Guidance for Semiconductor PFC Emission Reduction:. http://www.semiconductorcouncil.org/wp-content/uploads/2017/07/Best-Practice-Guidance-of-PFC-Emission-Reduction.pdf Please note that the membership fee for ESIA is paid in EUR, the amount provided here in response is the converted amount in USD using the 2023 average conversion rate per Yearly Average Currency Exchange Rates (irs.gov).

(4.11.2.9) Funding figure your organization provided to this organization or individual in the reporting year (currency)

41088

(4.11.2.10) Describe the aim of this funding and how it could influence policy, law or regulation that may impact the environment

The amount provided is the membership fee for GF

(4.11.2.11) Indicate if you have evaluated whether your organization's engagement is aligned with global environmental treaties or policy goals

Select from:
☑ No, we have not evaluated
[Add row]

(4.12) Have you published information about your organization's response to environmental issues for this reporting year in places other than your CDP response?

Select from:
☑ Yes

(4.12.1) Provide details on the information published about your organization's response to environmental issues for this reporting year in places other than your CDP response. Please attach the publication.

Row 1

(4.12.1.1) Publication

Select from:
☑ In voluntary sustainability reports

(4.12.1.3) Environmental issues covered in publication

Select all that apply
☑ Climate change

☑ Water

(4.12.1.4) Status of the publication

Select from:

☑ Complete

(4.12.1.5) Content elements

Select all that apply

☑ Strategy

☑ Governance

☑ Emission targets

☑ Emissions figures

☑ Risks & Opportunities

☑ Value chain engagement

☑ Public policy engagement

☑ Water accounting figures

☑ Content of environmental policies

(4.12.1.6) Page/section reference

Stakeholders and priorities (pages 12-17, specifically page 17 on GF's sustainability strategy; Governance (pages 18-21); Technology for humanity (pages 39-46); Sustainable manufacturing (page 70-86), specifically: Emission targets, GHG emissions — climate risk mitigation (page 74-77), and TCFD table (pages 112 - 113); See page detail page numbers and references as per GRI Index (pages 114-125); SASB index (page1 126-127)

(4.12.1.7) Attach the relevant publication

GF-CRR-24.pdf

(4.12.1.8) Comment

none
[Add row]

C5. Business strategy

(5.1) Does your organization use scenario analysis to identify environmental outcomes?

Climate change

(5.1.1) Use of scenario analysis

Select from:
☑ Yes

(5.1.2) Frequency of analysis

Select from:
☑ Every two years

Water

(5.1.1) Use of scenario analysis

Select from:
☑ Yes

(5.1.2) Frequency of analysis

Select from:
☑ Every two years
[Fixed row]

(5.1.1) Provide details of the scenarios used in your organization’s scenario analysis.

Climate change

(5.1.1.1) Scenario used

Physical climate scenarios

☑ RCP 8.5

(5.1.1.2) Scenario used SSPs used in conjunction with scenario

Select from:

☑ SSP5

(5.1.1.3) Approach to scenario

Select from:

☑ Qualitative

(5.1.1.4) Scenario coverage

Select from:

☑ Organization-wide

(5.1.1.5) Risk types considered in scenario

Select all that apply

☑ Acute physical

☑ Chronic physical

(5.1.1.6) Temperature alignment of scenario

Select from:

☑ 4.0°C and above

(5.1.1.7) Reference year

2022

(5.1.1.8) Timeframes covered

Select all that apply

☑ 2030

☑ 2050

(5.1.1.9) Driving forces in scenario

Local ecosystem asset interactions, dependencies and impacts

☑ Climate change (one of five drivers of nature change)

(5.1.1.10) Assumptions, uncertainties and constraints in scenario

This scenario is considered as a "worst case scenario": This scenario assumes very low political momentum and ambition, with little action on climate change mitigation taken. By 2100, the average temperature of the planet will have risen by a catastrophic more than 4C. The scenario includes severe impacts of extreme weather events worldwide (e.g. flooding, heatwaves), shifting weather patterns, changing land suitability. The scenario was used to analyze risk to GF sites as well as to GF's selected supplier sites. The risk analysis using this scenario included the following physical risks: Heat (heatwaves and heat stress), wildfires, droughts, water scarcity, heavy rainfall, flooding (riverine and coastal), tropical cyclones, windstorms, heavy snowfall, and cold waves. It was conducted using the following datasets (with the specific resolution in parenthesis): - NASA-NEX GDDP (25km x 25km) - Aqueduct Floods (1km x 1km) - Aqueduct water stress (25km x 25km) - STORM dataset (25km x 25km) - NASA NEX-GDDP FWI (25km x 25km).

(5.1.1.11) Rationale for choice of scenario

For physical risks scenario analysis, GF has selected this "high emission" scenario in combination with the "middle of the road" scenario (listed further below). The rationale is to understand the potential extent of physical climate risks to GF (including selected supplier sites) and therefore we have chosen this "worst case scenario" as one of the two scenarios used to understand the physical climate change risks to GF.

Water

(5.1.1.1) Scenario used

Physical climate scenarios

☑ RCP 8.5

(5.1.1.2) Scenario used SSPs used in conjunction with scenario

Select from:

☑ SSP5

(5.1.1.3) Approach to scenario

Select from:

☑ Qualitative

(5.1.1.4) Scenario coverage

Select from:

☑ Organization-wide

(5.1.1.5) Risk types considered in scenario

Select all that apply

☑ Chronic physical

(5.1.1.6) Temperature alignment of scenario

Select from:

☑ 4.0°C and above

(5.1.1.7) Reference year

2022

(5.1.1.8) Timeframes covered

Select all that apply

☑ 2030

☑ 2050

(5.1.1.9) Driving forces in scenario

Local ecosystem asset interactions, dependencies and impacts

☑ Climate change (one of five drivers of nature change)

(5.1.1.10) Assumptions, uncertainties and constraints in scenario

This scenario is considered as a "worst case scenario". This scenario assumes very low political momentum and ambition, with little action on climate change mitigation taken. By 2100, the average temperature of the planet will have risen by a catastrophic more than 4C. The scenario includes severe impacts of extreme weather events worldwide (e.g. flooding, heatwaves), shifting weather patterns, changing land suitability. The scenario was used to analyze risk to GF sites as well as to GF's selected supplier sites. The risk analysis using this scenario included the following physical risk: Water scarcity. It was conducted using the following dataset (with the specific resolution in parenthesis): - Aqueduct water stress (25km x 25km).

(5.1.1.11) Rationale for choice of scenario

The water related scenario analysis was part of GF's climate change physical scenario analysis, and covered water scarcity. For physical risks scenario analysis, GF has selected this "high emission" scenario in combination with the "middle of the road" scenario (listed further below). The rationale is to understand the potential extent of water scarcity physical risks to GF (including selected supplier sites) and therefore we have chosen this "worst case scenario" as one of the two scenarios used to understand physical risks (including water physical risk) to GF.

Climate change

(5.1.1.1) Scenario used

Physical climate scenarios

☑ RCP 4.5

(5.1.1.2) Scenario used SSPs used in conjunction with scenario

Select from:

☑ SSP2

(5.1.1.3) Approach to scenario

Select from:

☑ Qualitative

(5.1.1.4) Scenario coverage

Select from:

☑ Organization-wide

(5.1.1.5) Risk types considered in scenario

Select all that apply

☑ Acute physical

☑ Chronic physical

(5.1.1.6) Temperature alignment of scenario

Select from:

☑ 2.0ºC - 2.4ºC

(5.1.1.7) Reference year

2022

(5.1.1.8) Timeframes covered

Select all that apply

☑ 2030

☑ 2050

(5.1.1.9) Driving forces in scenario

Local ecosystem asset interactions, dependencies and impacts

☑ Climate change (one of five drivers of nature change)

(5.1.1.10) Assumptions, uncertainties and constraints in scenario

This scenario is considered as a "Middle of the road" scenario: The scenario assumes moderately stringent climate policies and carbon pricing and with that only small shifts in societal, political and economic trends, resulting in heterogeneous efforts globally towards reducing emissions. The scenario includes localized and severe impacts of extreme weather events (e.g. flooding, droughts, heatwaves). The scenario was used to analyze risk to GF sites as well as to GF's selected supplier sites. The risk analysis using this scenario included the following physical risks: Heat (heatwaves and heat stress), wildfires, droughts, water scarcity, heavy rainfall, flooding (riverine and coastal), tropical cyclones, windstorms, heavy snowfall, and cold waves. It was conducted using the following datasets (with the specific resolution in parenthesis): - NASA-NEX GDDP (25km x 25km) - Aqueduct Floods (1km x 1km) - Aqueduct water stress (25km x 25km) - STORM dataset (25km x 25km) - NASA NEX-GDDP FWI (25km x 25km).

(5.1.1.11) Rationale for choice of scenario

For physical risks scenario analysis, GF has selected this "middle of the road" scenario in combination with the "worst case" scenario (listed further above). The rationale is to understand the likely extent of physical climate risks to GF (including selected supplier sites) and therefore we have chosen this "middle of the road scenario" as one of the two scenarios used to understand physical climate change risks to GF.

Climate change

(5.1.1.1) Scenario used

Climate transition scenarios

☑ IEA STEPS (previously IEA NPS)

(5.1.1.3) Approach to scenario

Select from:

☑ Quantitative

(5.1.1.4) Scenario coverage

Select from:

☑ Organization-wide

(5.1.1.5) Risk types considered in scenario

Select all that apply

☑ Policy

☑ Market

(5.1.1.6) Temperature alignment of scenario

Select from:

☑ 2.0ºC - 2.4ºC

(5.1.1.7) Reference year

2022

(5.1.1.8) Timeframes covered

Select all that apply

☑ 2025

☑ 2030

☑ 2050

(5.1.1.9) Driving forces in scenario

Local ecosystem asset interactions, dependencies and impacts

☑ Climate change (one of five drivers of nature change)

Regulators, legal and policy regimes

☑ Global regulation

☑ Level of action (from local to global)

Macro and microeconomy

☑ Other macro and microeconomy driving forces, please specify **:**Energy and carbon costs

(5.1.1.10) Assumptions, uncertainties and constraints in scenario

This scenario is reflective of the current policy landscape, and scenario outcomes are based on a detailed sector-by-sector review of policies and measures that are in place or have been announced. Aspirational climate-related targets are not automatically assumed to be met. Assumptions for the climate risk analysis at GF include GF's estimated growth rate until 2050, GF's trajectory to reaching our 2050 net-zero goal, as well as key assumptions for global and selected regional carbon prices, carbon price pass through rates, and decarbonization of energy grids.

(5.1.1.11) Rationale for choice of scenario

For our climate transition risk scenario analysis, GF has selected this stated policy scenario in combination with the "1.5C aligned scenario" (listed further above). The rationale is to understand the potential extent of transition climate risks to GF and therefore we have chosen this stated policy climate scenario as one of the two scenarios used to understand the transition climate change risks to GF.

Climate change

(5.1.1.1) Scenario used

Climate transition scenarios

☑ IEA NZE 2050

(5.1.1.3) Approach to scenario

Select from:

☑ Quantitative

(5.1.1.4) Scenario coverage

Select from:

☑ Organization-wide

(5.1.1.5) Risk types considered in scenario

Select all that apply

☑ Policy

☑ Market

(5.1.1.6) Temperature alignment of scenario

Select from:

☑ 1.5°C or lower

(5.1.1.7) Reference year

2022

(5.1.1.8) Timeframes covered

Select all that apply

☑ 2025

☑ 2030

☑ 2050

(5.1.1.9) Driving forces in scenario

Local ecosystem asset interactions, dependencies and impacts

☑ Climate change (one of five drivers of nature change)

Regulators, legal and policy regimes

☑ Global regulation

☑ Level of action (from local to global)

Macro and microeconomy

☑ Other macro and microeconomy driving forces, please specify **:**Energy and carbon costs

(5.1.1.10) Assumptions, uncertainties and constraints in scenario

This scenario shows a narrow but achievable pathway for the global energy sector to achieve net zero emissions by 2050, with advanced economies reaching net zero emissions ahead of others. It is assumed that key energy-related UN sustainable development goals (UN SDGs) are met (in particular universal energy access by 2030). This scenario does not rely on emission reductions from outside the energy sector, but assumes that non-energy sector emissions will be reduced in alignment as energy sector transitions.

(5.1.1.11) Rationale for choice of scenario

For our climate transition risk scenario analysis, GF has selected this 1.5C aligned scenario in combination with the "stated policy" scenario (listed further below). The rationale is to understand the potential extent of transition climate risks to GF and therefore we have chosen this climate scenario in line with limiting global warming to 1.5C as one of the two scenarios used to understand the transition climate change risks to GF.

Water

(5.1.1.1) Scenario used

Physical climate scenarios

☑ RCP 4.5

(5.1.1.2) Scenario used SSPs used in conjunction with scenario

Select from:

☑ SSP2

(5.1.1.3) Approach to scenario

Select from:

☑ Qualitative

(5.1.1.4) Scenario coverage

Select from:

☑ Organization-wide

(5.1.1.5) Risk types considered in scenario

Select all that apply

☑ Chronic physical

(5.1.1.6) Temperature alignment of scenario

Select from:

☑ 2.0ºC - 2.4ºC

(5.1.1.7) Reference year

2022

(5.1.1.8) Timeframes covered

Select all that apply

☑ 2030

☑ 2050

(5.1.1.9) Driving forces in scenario

Local ecosystem asset interactions, dependencies and impacts

☑ Climate change (one of five drivers of nature change)

(5.1.1.10) Assumptions, uncertainties and constraints in scenario

This scenario is considered as a "Middle of the road" scenario: The scenario assumes moderately stringent climate policies and carbon pricing and with that only small shifts in societal, political and economic trends, resulting in heterogeneous efforts globally towards reducing emissions. The scenario includes localized and severe impacts of extreme weather events (e.g. flooding, droughts, heatwaves). The scenario was used to analyze risk to GF sites as well as to GF's selected supplier sites. The risk analysis using this scenario included the following physical risk: Water scarcity. It was conducted using the following dataset (with the specific resolution in parenthesis): - Aqueduct water stress (25km x 25km).

(5.1.1.11) Rationale for choice of scenario

The water related scenario analysis was part of GF's climate change physical scenario analysis, and covered water scarcity. For climate related physical risks scenario analysis, GF has selected this "middle of the road" scenario in combination with the "worst case" scenario (listed further above). The rationale is to understand the likely extent of water scarcity as part of physical climate risks to GF (including selected supplier sites) and therefore we have chosen this "middle of the road scenario" as one of the two scenarios used to understand physical climate change risks (including water scarcity) to GF.
[Add row]

(5.1.2) Provide details of the outcomes of your organization’s scenario analysis.

Climate change

(5.1.2.1) Business processes influenced by your analysis of the reported scenarios

Select all that apply

☑ Risk and opportunities identification, assessment and management

☑ Strategy and financial planning

(5.1.2.2) Coverage of analysis

Select from:

☑ Organization-wide

(5.1.2.3) Summarize the outcomes of the scenario analysis and any implications for other environmental issues

A quantitative scenario-based climate risk analysis evaluated short, medium and long term climate related transition risks. The quantitative scenario-based climate risk analysis over short, medium and long-term (2025, 2030, 2050) aimed to quantify climate transition risks that appeared most significant in our previous qualitative climate-related scenario analysis. For transition risks the quantitative analysis used a low-carbon transition scenario (IEA NZE: International Energy Agency “Net Zero emissions by 2050 scenario”) and a business-as-usual scenario (IEA STEPS: “Stated policies scenario”). In 2024, GF also refreshed our qualitative climate physical scenario assessment of our manufacturing sites and of selected major suppliers’ sites, using a high physical impact scenario (SSP5-8.5) and a middle-of-the-road scenario (SSP2-4.5) and looking at medium-term and long-term timeframes (2030 and 2050). The focal questions for the physical risk was to understand the likely extent of physical climate risks to GF (including selected supplier sites)) in a qualitative way. The focal question for the transition risks was to quantify the potential additional costs under the defined scenarios and defined exposure / GHG emissions pathways. The scenario-based climate related risk analysis identified future carbon costs as a potential risk that could exceed our significance threshold as provided in response to question 2.4. Our strategy to address the potential risk and to align with climate science is GF’s Journey to Zero Carbon goal (absolute Scope 1 and Scope 2 GHG emissions by 25% from 2020 to 2030, even as we expand our global manufacturing capacity), as well GF's 2050 net-zero GHG emissions goal. To achieve our 2030 Journey to Zero target and our 2050 net zero goal, GF plans to further reduce emissions through the continued use of state-of-the-art emissions controls when expanding its manufacturing footprint, installation of new controls on existing sites where appropriate, expanded use of alternative chemistries, achieving 100% carbon-neutral power and offset residual emissions.

Water

(5.1.2.1) Business processes influenced by your analysis of the reported scenarios

Select all that apply

☑ Risk and opportunities identification, assessment and management

(5.1.2.2) Coverage of analysis

Select from:

☑ Organization-wide

(5.1.2.3) Summarize the outcomes of the scenario analysis and any implications for other environmental issues

GF's climate related physical risk scenario-based analysis covered water scarcity as one of the impact categories (see as mentioned in the response above for climate change) The focal question was to understand the likely extent of water scarcity as part of physical climate risks to GF (including selected supplier sites) using a "high emission" scenario (SSP5-8.5) and a "middle of the road" scenario (SSP2-4.5), looking at medium-term and long-term timeframes (2030 and 2050). The scenario analysis on water scarcity has not resulted in an elevated risk as compared to today for water scarcity for GF's manufacturing sites for both time horizons covered (2030 and 2050). The results of the scenario analysis related to water scarcity will inform our risk identification and assessment process.
[Fixed row]

(5.2) Does your organization’s strategy include a climate transition plan?

(5.2.1) Transition plan

Select from:

☑ No, but we have a climate transition plan with a different temperature alignment

(5.2.2) Temperature alignment of transition plan

Select from:

☑ Well-below 2°C aligned

(5.2.3) Publicly available climate transition plan

Select from:

☑ No

(5.2.4) Plan explicitly commits to cease all spending on, and revenue generation from, activities that contribute to fossil fuel expansion

Select from:

☑ No, and we do not plan to add an explicit commitment within the next two years

(5.2.6) Explain why your organization does not explicitly commit to cease all spending on and revenue generation from activities that contribute to fossil fuel expansion

GF relies on the onsite combustion of fossil fuels for heating and emission abatement at some of its operations. There are some regional limitations to the feasibility of sunsetting the consumption of fossil fuels for operations. As equipment reaches end of life, non-fossil fueled equipment will be considered but a broader commitment to cease all spending on fossil fuels within the next two years is not feasible at this time.

(5.2.7) Mechanism by which feedback is collected from shareholders on your climate transition plan

Select from:

☑ We have a different feedback mechanism in place

(5.2.8) Description of feedback mechanism

GF's major shareholder is represented on GF's Board of Directors. Feedback on GF's climate transition plan is collected in consultation with our major shareholder.

(5.2.9) Frequency of feedback collection

Select from:

☑ More frequently than annually

(5.2.10) Description of key assumptions and dependencies on which the transition plan relies

Beyond GF's medium term Journey to Zero Carbon Goal (25% of Scope 1 and Scope 2 GHG emission reduction from 2020 to 2030), GF plans to achieve net-zero GHG emissions and utilize a 100% carbon-neutral power supply across our global footprint by 2050. To achieve this, GF plans to further reduce emissions through the continued use of state-of-the-art emissions controls when expanding its manufacturing footprint, installation of new controls on existing sites where appropriate, expanded use of alternative chemistries, achieving 100% carbon-neutral power and offset residual emissions.

(5.2.11) Description of progress against transition plan disclosed in current or previous reporting period

In 2023, GF absolute Scope 1 and Scope 2 GHG emissions decreased more than 6% as compared to our 2020 baseline.

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

GF-CRR-24 (1).pdf

(5.2.13) Other environmental issues that your climate transition plan considers

Select all that apply

☑ No other environmental issue considered

(5.2.15) Primary reason for not having a climate transition plan that aligns with a 1.5°C world

Select from:

☑ Other, please specify **:**The current planning represents a conservative approach based on options that appear feasible today. GF continues to investigate in a 1.5°C-aligned transition plan but this is not complete.

(5.2.16) Explain why your organization does not have a climate transition plan that aligns with a 1.5°C world

The current planning represents a conservative approach based on options that appear feasible today. GF continues to investigate in a 1.5C-aligned transition plan but this is not complete.
[Fixed row]

(5.3) Have environmental risks and opportunities affected your strategy and/or financial planning?

(5.3.1) Environmental risks and/or opportunities have affected your strategy and/or financial planning

Select from:

☑ Yes, both strategy and financial planning

(5.3.2) Business areas where environmental risks and/or opportunities have affected your strategy

Select all that apply

☑ Operations
[Fixed row]

(5.3.1) Describe where and how environmental risks and opportunities have affected your strategy.

Operations

(5.3.1.1) Effect type

Select all that apply

☑ Risks

(5.3.1.2) Environmental issues relevant to the risks and/or opportunities that have affected your strategy in this area

Select all that apply

☑ Climate change

(5.3.1.3) Describe how environmental risks and/or opportunities have affected your strategy in this area

As an important step to minimize the long-term exposure to climate risks, GF has set our Journey to Zero Carbon goal (reducing our absolute Scope 1 and Scope 2 GHG emissions by 25% from 2020 to 2030) and GF's 2050 net zero goal. We are on track to meet our 25% reduction goal by 2030 and have furthered our Journey to Zero Carbon goal with the April 2024 announcement of our goal to achieve net-zero GHG emissions and utilize a 100% carbon-neutral power supply across our global footprint by 2050. To achieve our net zero 2050 goal, GF will further reduce emissions through the continued use of state-of-the-art emissions controls when expanding its manufacturing footprint, installation of new controls on existing sites where appropriate, expanded use of alternative chemistries, achieving 100% carbon-neutral power and offset residual emissions.
[Add row]

(5.3.2) Describe where and how environmental risks and opportunities have affected your financial planning.

Row 1

(5.3.2.1) Financial planning elements that have been affected

Select all that apply

☑ Direct costs

☑ Capital expenditures

(5.3.2.2) Effect type

Select all that apply

☑ Risks

(5.3.2.3) Environmental issues relevant to the risks and/or opportunities that have affected these financial planning elements

Select all that apply

☑ Climate change

(5.3.2.4) Describe how environmental risks and/or opportunities have affected these financial planning elements

GF has set our Journey to Zero Carbon goal (reducing our absolute Scope 1 and Scope 2 GHG emissions by 25% from 2020 to 2030) and GF's 2050 net zero goal to minimize the long- term exposure to climate risks. To progress towards these goals, GF applies a variety of approaches and investments tailored to our global manufacturing footprint. These approaches include enhancing manufacturing emission controls (with associated capital expenditures), further improving energy efficiency (affecting capital expenditures and direct costs), and sourcing renewable and lower-carbon energy (affecting capital expenditure and direct costs).
[Add row]

(5.4) 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
	Select from: ☑ No, but we plan to in the next two years

[Fixed row]

(5.9) What is the trend in your organization’s water-related capital expenditure (CAPEX) and operating expenditure (OPEX) for the reporting year, and the anticipated trend for the next reporting year?

(5.9.1) Water-related CAPEX (+/- % change)

-55

(5.9.2) Anticipated forward trend for CAPEX (+/- % change)

10

(5.9.3) Water-related OPEX (+/- % change)

-8

(5.9.4) Anticipated forward trend for OPEX (+/- % change)

13

(5.9.5) Please explain

The percentages provided for water-related CAPEX and OPEX changes are based on actual water-related spend data in both categories for 2022 and 2023. The water related CAPEX decrease of 55% from 2022 to 2023 was caused mainly by less spend for water-related facilities upgrade projects in 2023 than in 2022. Certain relevant expansion project have been completed in 2022. The water related OPEX decreased only slightly by 8% from 2022 to 2023 and was nearly flat. The percentages provided for the anticipated forward trend for water-related CAPEX and OPEX are based on actual spend data for 2023 and on forecasted 2024 spend in both categories. The anticipated forward trend for water-related CAPEX of 11 % from 2023 to 2024 is related to some planned upgrade projects. The anticipated forward trend for water-related OPEX of 13% from 2023 to 2024 is due to expected growth at GF manufacturing facilities.
[Fixed row]

(5.10) Does your organization use an internal price on environmental externalities?

	Use of internal pricing of environmental externalities	Environmental externality priced
	Select from: ☑ Yes	*Select all that apply* ☑ Carbon

[Fixed row]

(5.10.1) Provide details of your organization’s internal price on carbon.

Row 1

(5.10.1.1) Type of pricing scheme

Select from:

☑ Shadow price

(5.10.1.2) Objectives for implementing internal price

Select all that apply

☑ Conduct cost-benefit analysis

☑ Identify and seize low-carbon opportunities

☑ Stress test investments

(5.10.1.3) Factors considered when determining the price

Select all that apply

☑ Alignment with the price of a carbon tax

(5.10.1.4) Calculation methodology and assumptions made in determining the price

GF follows the price and pricing schedule of Singapore carbon tax.

(5.10.1.5) Scopes covered

Select all that apply

☑ Scope 1

(5.10.1.6) Pricing approach used – spatial variance

Select from:

☑ Differentiated

(5.10.1.7) Indicate how and why the price is differentiated

GF applies the carbon price only for Scope 1 emissions from our Singapore site. The price is used for understanding the actual cost benefit from reduction projects for GHG emissions across the company and therefor uses the actual cost according to the actual carbon tax scheme that is applicable to GF.

(5.10.1.8) Pricing approach used – temporal variance

Select from:

☑ Evolutionary

(5.10.1.9) Indicate how you expect the price to change over time

GF follows the price and pricing schedule of Singapore carbon tax: for 2019 to 2023 the Singapore carbon tax was 5 SGD/MTCO2e (3.7 USD/MTCO2e); for 2024 to 2025 it is 25 SGD/MTCO2e (18.6 USD/MTCO2e); for 2026 to 2027 is 45 SGD/MTCO2e (33.5 USD/MTCO2e), and for 2030 it is 50 - 80 SGD/ton CO2e (37.7 - 59.6 USD/MTCO2e) For 2030, GF applies the mean of the pricing range of 50 - 80 SGD/MTCO2e: 65 SGD/MTCO2e (48.4 USD/MTCO2e).

(5.10.1.10) Minimum actual price used (currency per metric ton CO2e)

0

(5.10.1.11) Maximum actual price used (currency per metric ton CO2e)

48.4

(5.10.1.12) Business decision-making processes the internal price is applied to

Select all that apply

☑ Capital expenditure

☑ Risk management

(5.10.1.13) Internal price is mandatory within business decision-making processes

Select from:

☑ Yes, for some decision-making processes, please specify **:**GF is using an internal carbon price to prioritize GHG emissions reduction projects in project planning for our Journey to Zero Carbon target (25% reduction of GF absolute Scope 1+2 GHG emissions by 2030 compared to 2020 baseline).

(5.10.1.14) % total emissions in the reporting year in selected scopes this internal price covers

33

(5.10.1.15) Pricing approach is monitored and evaluated to achieve objectives

Select from:

☑ Yes

(5.10.1.16) Details of how the pricing approach is monitored and evaluated to achieve your objectives

Authority for oversight and management of sustainability topics have been established according to our sustainability governance structure. Accountability for achieving GF ESG goals, including GF's Journey to Zero Carbon goals is placed on designated members of the company's Executive Team. We review quarterly progress of our Journey to Zero Carbon goals in our Stewardship Committee, which is responsible for setting strategic direction, conducting management reviews and providing guidance and approval regarding sustainability topics. The Stewardship Committee membership includes senior executives representing the legal, finance, manufacturing, human resources, communications, technology, strategy, business operations and global supply chain organizations. As the application of a carbon price is part of our Journey to Zero Carbon strategy to identify the GHG reduction projects to be implemented, so the pricing approach is also subject to regular review and evaluation.

[Add row]

(5.11) Do you engage with your value chain on environmental issues?

	Engaging with this stakeholder on environmental issues	Environmental issues covered
Suppliers	*Select from:* ☑ Yes	*Select all that apply* ☑ Climate change ☑ Water
Customers	*Select from:* ☑ Yes	*Select all that apply* ☑ Climate change ☑ Water
Investors and shareholders	*Select from:* ☑ Yes	*Select all that apply* ☑ Climate change ☑ Water
Other value chain stakeholders	*Select from:* ☑ Yes	*Select all that apply* ☑ Climate change ☑ Water

[Fixed row]

(5.11.1) Does your organization assess and classify suppliers according to their dependencies and/or impacts on the environment?

Climate change

(5.11.1.1) Assessment of supplier dependencies and/or impacts on the environment

Select from:

☑ Yes, we assess the dependencies and/or impacts of our suppliers

(5.11.1.2) Criteria for assessing supplier dependencies and/or impacts on the environment

Select all that apply

☑ Contribution to supplier-related Scope 3 emissions

(5.11.1.3) % Tier 1 suppliers assessed

Select from:

☑ 1-25%

(5.11.1.4) Define a threshold for classifying suppliers as having substantive dependencies and/or impacts on the environment

Suppliers contributing more than 5% to GF's supplier related Scope 3 (Category 1 and 2) GHG emissions are considered to have a substantive impact. Annually GF reaches out to our "major suppliers" to obtain their Scope 3 GHG emissions. For 2023, this covered suppliers with a cumulative spend of nearly 81% in the primary commodities that GF sources, which include silicon wafers, manufacturing materials and chemicals, manufacturing tools, photomasks and outsourced test and assembly services.

(5.11.1.5) % Tier 1 suppliers meeting the thresholds for substantive dependencies and/or impacts on the environment

Select from:

☑ 1-25%

(5.11.1.6) Number of Tier 1 suppliers meeting the thresholds for substantive dependencies and/or impacts on the environment

6

Water

(5.11.1.1) Assessment of supplier dependencies and/or impacts on the environment

Select from:

☑ No, we do not assess the dependencies and/or impacts of our suppliers, and have no plans to do so within two years

[Fixed row]

(5.11.2) Does your organization prioritize which suppliers to engage with on environmental issues?

Climate change

(5.11.2.1) Supplier engagement prioritization on this environmental issue

Select from:

☑ Yes, we prioritize which suppliers to engage with on this environmental issue

(5.11.2.2) Criteria informing which suppliers are prioritized for engagement on this environmental issue

Select all that apply

☑ Procurement spend

(5.11.2.4) Please explain

Annually GF reaches out to our "major suppliers" to assess if and how they meet the Responsible Business Alliance (RBA) Code requirements, including the RBA Code's requirements on energy and greenhouse gas emissions. For 2023, our major supplier program covered suppliers with a cumulative spend of nearly 81% in the primary commodities that GF sources, which include silicon wafers, manufacturing materials and chemicals, manufacturing tools, photomasks and outsourced test and assembly services.

Water

(5.11.2.1) Supplier engagement prioritization on this environmental issue

Select from:

☑ Yes, we prioritize which suppliers to engage with on this environmental issue

(5.11.2.2) Criteria informing which suppliers are prioritized for engagement on this environmental issue

Select all that apply

☑ Procurement spend

(5.11.2.4) Please explain

Annually GF reaches out to our "major suppliers" to assess if and how they meet the Responsible Business Alliance (RBA) Code requirements, including the RBA Code's requirements on water management. For 2023, our major supplier program covered suppliers with a cumulative spend of nearly 81% in the primary commodities that GF sources, which include silicon wafers, manufacturing materials and chemicals, manufacturing tools, photomasks and outsourced test and assembly services.
[Fixed row]

(5.11.5) Do your suppliers have to meet environmental requirements as part of your organization's purchasing process?

Climate change

(5.11.5.1) Suppliers have to meet specific environmental requirements related to this environmental issue as part of the purchasing process

Select from:

☑ Yes, environmental requirements related to this environmental issue are included in our supplier contracts

(5.11.5.2) Policy in place for addressing supplier non-compliance

Select from:

☑ Yes, we have a policy in place for addressing non-compliance

(5.11.5.3) Comment

The GF Supplier Code of Conduct summarizes the essential business behaviors we require from our suppliers including requiring suppliers to conform to all elements of the Responsible Business Alliance (RBA) Code. These include an environmental standard on "Energy Consumption and Greenhouse Gas Emissions". The GF Supplier Code of Conduct is shared with GF suppliers upon onboarding for acceptance and annually thereafter. We have also incorporated the RBA Code requirements into our standard supplier agreement templates and the terms and conditions of purchase orders.

Water

(5.11.5.1) Suppliers have to meet specific environmental requirements related to this environmental issue as part of the purchasing process

Select from:

☑ Yes, environmental requirements related to this environmental issue are included in our supplier contracts

(5.11.5.2) Policy in place for addressing supplier non-compliance

Select from:

☑ Yes, we have a policy in place for addressing non-compliance

(5.11.5.3) Comment

The GF Supplier Code of Conduct summarizes the essential business behaviors we require from our suppliers including requiring suppliers to conform to all elements of the Responsible Business Alliance (RBA) Code. These include environmental standards on "Water Management". The GF Supplier Code of Conduct is shared with GF suppliers upon onboarding for acceptance and annually thereafter. We have also incorporated the RBA Code requirements into our standard supplier agreement templates and the terms and conditions of purchase orders.
[Fixed row]

(5.11.6) Provide details of the environmental requirements that suppliers have to meet as part of your organization's purchasing process, and the compliance measures in place.

Climate change

(5.11.6.1) Environmental requirement

Select from:

☑ Compliance with an environmental certification, please specify **:**Suppliers must have an Environmental Management System (EMS) to manage their environmental impact, following ISO 14001 or similar systems. Suppliers also must have a management system to manage RBA conformity, including RBA environmental elements.

(5.11.6.2) Mechanisms for monitoring compliance with this environmental requirement

Select all that apply

☑ Certification

☑ On-site third-party audit

☑ Supplier self-assessment

(5.11.6.3) % tier 1 suppliers by procurement spend required to comply with this environmental requirement

Select from:

☑ 76-99%

(5.11.6.4) % tier 1 suppliers by procurement spend in compliance with this environmental requirement

Select from:

☑ 76-99%

(5.11.6.7) % tier 1 supplier-related scope 3 emissions attributable to the suppliers required to comply with this environmental requirement

Select from:

☑ 76-99%

(5.11.6.8) % tier 1 supplier-related scope 3 emissions attributable to the suppliers in compliance with this environmental requirement

Select from:

☑ 76-99%

(5.11.6.9) Response to supplier non-compliance with this environmental requirement

Select from:

☑ Retain and engage

(5.11.6.10) % of non-compliant suppliers engaged

Select from:

☑ 1-25%

(5.11.6.11) Procedures to engage non-compliant suppliers

Select all that apply

☑ Developing quantifiable, time-bound targets and milestones to bring suppliers back into compliance

☑ Providing information on appropriate actions that can be taken to address non-compliance

☑ Other, please specify **:**If a non-compliance has been identified in an RBA Audit, engagement is performed according to RBA corrective action process.

(5.11.6.12) Comment

The GF Supplier Code of Conduct is shared with GF suppliers upon onboarding for acceptance and annually thereafter. It includes the requirements to have an Environmental Management System (EMS) to manage their environmental impact according to ISO 14001 or similar systems. Suppliers are also required to conform to all requirements of the RBA Code, including its environmental requirements (including on energy and GHG emissions) and also must have a management system to manage RBA conformity. GF annually assesses our major suppliers' conformance with the RBA Code, including its environmental provisions, utilizing RBA generic risk assessments, self-assessment questionnaires and RBA audit program or equivalent methods. In case of non-compliance identified in RBA audits, we rely on remediation according to RBA corrective action process.

Water

(5.11.6.1) Environmental requirement

Select from:

☑ Compliance with an environmental certification, please specify **:**Suppliers must have an Environmental Management System (EMS) to manage their environmental impact, following ISO 14001 or similar systems. Suppliers also must have a management system to manage RBA conformity, including RBA environmental elements.

(5.11.6.2) Mechanisms for monitoring compliance with this environmental requirement

Select all that apply

☑ Certification

☑ On-site third-party audit

☑ Supplier self-assessment

(5.11.6.3) % tier 1 suppliers by procurement spend required to comply with this environmental requirement

Select from:

☑ 76-99%

(5.11.6.4) % tier 1 suppliers by procurement spend in compliance with this environmental requirement

Select from:

☑ 76-99%

(5.11.6.9) Response to supplier non-compliance with this environmental requirement

Select from:

☑ Retain and engage

(5.11.6.10) % of non-compliant suppliers engaged

Select from:

☑ 1-25%

(5.11.6.11) Procedures to engage non-compliant suppliers

Select all that apply

☑ Developing quantifiable, time-bound targets and milestones to bring suppliers back into compliance

☑ Providing information on appropriate actions that can be taken to address non-compliance

☑ Other, please specify :If a non-compliance has been identified in an RBA Audit, engagement is performed according to RBA corrective action process.

(5.11.6.12) Comment

The GF Supplier Code of Conduct is shared with GF suppliers upon onboarding for acceptance and annually thereafter. It includes the requirements to have an Environmental Management System (EMS) to manage their environmental impact according to ISO 14001 or similar systems. Suppliers are also required to conform to all requirements of the RBA Code, including its environmental requirements (including on water management) and also must have a management system to manage RBA conformity. GF annually assesses our major suppliers' conformance with the RBA Code, including its environmental provisions, utilizing RBA generic risk assessments, self-assessment questionnaires and RBA audit program or equivalent methods. In case of non-compliance identified in RBA audits, we rely on remediation according to RBA corrective action process.
[Add row]

(5.11.7) Provide further details of your organization's supplier engagement on environmental issues.

Climate change

(5.11.7.2) Action driven by supplier engagement

Select from:

☑ Emissions reduction

(5.11.7.3) Type and details of engagement

Information collection

☑ Collect GHG emissions data at least annually from suppliers

(5.11.7.4) Upstream value chain coverage

Select all that apply

☑ Tier 1 suppliers

(5.11.7.5) % of tier 1 suppliers by procurement spend covered by engagement

Select from:

☑ 51-75%

(5.11.7.6) % of tier 1 supplier-related scope 3 emissions covered by engagement

Select from:

☑ 76-99%

(5.11.7.9) Describe the engagement and explain the effect of your engagement on the selected environmental action

GF annually engages with its "major" suppliers via Responsible Business Alliance (RBA) tools and platforms. The composition of the annual GF major supplier list is based on documented criteria that are related to supplier category, supplier spend, supplier facility location, and nature of supplier business. The 2023 GF major supplier list covered suppliers with a cumulative spend of more than 81 percent in the primary commodities, which include silicon wafer, electronic grade and specialty chemical suppliers, manufacturing tool suppliers, mask suppliers, and outsourced manufacturing — mostly outsourced test and assembly (OSAT) suppliers. The suppliers of capital goods (manufacturing tools) and the suppliers of the chemicals / materials / gases that we use in semiconductor manufacturing, as well as OSAT

suppliers, are the suppliers that are understood to account for the majority of GF supply chain climate impact. GF is annually reaching out these identified major suppliers to quantify and report their Scope 1 and Scope 2 information as relevant to their business with GF (which represents GF supplier related Scope 3 GHG emissions).

(5.11.7.10) Engagement is helping your tier 1 suppliers meet an environmental requirement related to this environmental issue

Select from:

☑ No, this engagement is unrelated to meeting an environmental requirement

(5.11.7.11) Engagement is helping your tier 1 suppliers engage with their own suppliers on the selected action

Select from:

☑ Unknown

Water

(5.11.7.2) Action driven by supplier engagement

Select from:

☑ No other supplier engagement

[Add row]

(5.11.9) Provide details of any environmental engagement activity with other stakeholders in the value chain.

Climate change

(5.11.9.1) Type of stakeholder

Select from:

☑ Customers

(5.11.9.2) Type and details of engagement

Education/Information sharing

☑ Share information on environmental initiatives, progress and achievements

Innovation and collaboration

☑ Align your organization's goals to support customers' targets and ambitions

☑ Collaborate with stakeholders in creation and review of your climate transition plan

(5.11.9.3) % of stakeholder type engaged

Select from:

☑ 26-50%

(5.11.9.4) % stakeholder-associated scope 3 emissions

Select from:

☑ 26-50%

(5.11.9.5) Rationale for engaging these stakeholders and scope of engagement

GF's mission is to innovate and partner with our customers to deliver technology and solutions for humanity. We work closely with our customers, from industry leaders to startups, to identify the right technology opportunities and deliver the right solutions across established and emerging applications in their market segments. Accordingly, we also work with customers to enable their climate transition planning. We collaborate on subjects such as aligning on focus areas, identification of GHG reduction opportunities, apportioning of achieved GHG emission reductions to customers, alignment on climate goal setting (ambition level) and approach to transition planning. We also collaborate with customers to enable transparency on GF environmental impact, providing customers information on their apportioned share of GF's environmental impact, including providing information on our customers apportioned share of GHG emissions from GF manufacturing of their products.

(5.11.9.6) Effect of engagement and measures of success

Engagement with our customers on climate change results in consideration of higher ambition level GHG targets setting and more aggressive GHG emission reduction planning and consequently is anticipated to accelerate customer GHG reduction progress. Collaboration also enables best practice sharing and learning on potential further GHG emissions reduction options. Lastly, for GF, customer engagement on climate change also has an effect on customer satisfaction.

Water

(5.11.9.1) Type of stakeholder

Select from:

☑ Customers

(5.11.9.2) Type and details of engagement

Education/Information sharing

☑ Share information on environmental initiatives, progress and achievements

(5.11.9.3) % of stakeholder type engaged

Select from:

☑ 26-50%

(5.11.9.5) Rationale for engaging these stakeholders and scope of engagement

GF's mission is to innovate and partner with our customers to deliver technology and solutions for humanity. We work closely with our customers, from industry leaders to startups, to identify the right technology opportunities and deliver the right solutions across established and emerging applications in their market segments. Accordingly, we also work with customers to enable them to better understand water use in their value chain Engagement with our customers regarding water mostly focuses on sharing GF performance data on water, including GF targets and performance as well as providing our customers' apportioned water performance metrics (water withdrawal, wastewater, etc.).

(5.11.9.6) Effect of engagement and measures of success

Engagement with our customers regarding water mostly focuses on sharing GF performance data on water, including GF targets and performance as well as providing our customers' apportioned water performance metrics (water withdrawal, wastewater, etc.). Therefore, engagement results in our customers' ability to better understand water management key performance indicators in their value chains.

Climate change

(5.11.9.1) Type of stakeholder

Select from:

☑ Investors and shareholders

(5.11.9.2) Type and details of engagement

Education/Information sharing

☑ Educate and work with stakeholders on understanding and measuring exposure to environmental risks

☑ Share information on environmental initiatives, progress and achievements

(5.11.9.3) % of stakeholder type engaged

Select from:

☑ 76-99%

(5.11.9.4) % stakeholder-associated scope 3 emissions

Select from:

☑ None

(5.11.9.5) Rationale for engaging these stakeholders and scope of engagement

GF engages and provides information regarding climate and business sustainability to investors and shareholders. This includes information about the company's goals, initiatives and performance specifically related to climate change. In addition to publishing an annual Sustainability Report with a focused section on climate action and related issues, we also engage with and respond to surveys from ESG research firms, as well as company specific ESG questionnaires.

(5.11.9.6) Effect of engagement and measures of success

Through communication and engagement with investors and shareholders, GF enables investor and shareholder transparency of the company's goals, initiatives and performance, including, but not limited to, specifically related to climate change

Water

(5.11.9.1) Type of stakeholder

Select from:

☑ Investors and shareholders

(5.11.9.2) Type and details of engagement

Education/Information sharing

☑ Educate and work with stakeholders on understanding and measuring exposure to environmental risks

☑ Share information on environmental initiatives, progress and achievements

(5.11.9.3) % of stakeholder type engaged

Select from:

☑ 76-99%

(5.11.9.5) Rationale for engaging these stakeholders and scope of engagement

GF engages and provides information regarding climate and business sustainability to investors and shareholders. This includes information about the company's goals, initiatives and performance specifically related to water topics. In addition to publishing an annual Sustainability Report with a focused section on water topics, we also engage with and respond to surveys from ESG research firms, as well as company specific ESG questionnaires

(5.11.9.6) Effect of engagement and measures of success

Through communication and engagement with investors and shareholders, GF enables investor and shareholder transparency of the company's goals, initiatives and performance, including, but not limited to, specifically related to water topics.

Water

(5.11.9.1) Type of stakeholder

Select from:

☑ Other value chain stakeholder, please specify :Employees

(5.11.9.2) Type and details of engagement

Education/Information sharing

☑ Share information on environmental initiatives, progress and achievements

Innovation and collaboration

☑ Run a campaign to encourage innovation to reduce environmental impacts

(5.11.9.3) % of stakeholder type engaged

Select from:

☑ 100%

(5.11.9.5) Rationale for engaging these stakeholders and scope of engagement

To drive internal awareness for environmental action and to encourage responsibility and solicit ideas for water conservation at every level of the business, we engage with employees on sustainability topics. The scope of employee engagement includes in person activities, educational material, internal newsletters, surveys, annual events (such as Earth Week), and broad dissemination of our sustainability report.

(5.11.9.6) Effect of engagement and measures of success

Engagement regarding environmental action builds a stronger culture for sustainable business and encourages ownership for water conservation at every level. Continuing to move toward reaching GF's water reduction goals is only possible with the support of employees who understand the importance of resource conservation.

Climate change

(5.11.9.1) Type of stakeholder

Select from:

☑ Other value chain stakeholder, please specify **:**Employees

(5.11.9.2) Type and details of engagement

Education/Information sharing

☑ Share information on environmental initiatives, progress and achievements

Innovation and collaboration

☑ Collaborate with stakeholders on innovations to reduce environmental impacts in products and services

(5.11.9.3) % of stakeholder type engaged

Select from:

☑ 100%

(5.11.9.4) % stakeholder-associated scope 3 emissions

Select from:

☑ Less than 1%

(5.11.9.5) Rationale for engaging these stakeholders and scope of engagement

Important to the success of achieving GF's long-term climate goals is ensuring alignment and support across our business units and employee base. To drive internal awareness for environmental action and to encourage responsibility and solicit ideas for GHG emissions reduction and energy conservation at every level of the business, we engage with employees on sustainability topics. The scope of employee engagement includes in-person activities, educational material, internal newsletters, surveys, annual events (such as Earth Week), coverage in quarterly all-employee-meetings and broad dissemination of our sustainability report.

(5.11.9.6) Effect of engagement and measures of success

Engagement regarding environmental action builds a stronger culture for sustainable business and encourages ownership for climate action at every level. Successful engagement by the company on climate issues is ultimately measured by GF achieving our climate goals.
[Add row]

(5.13) Has your organization already implemented any mutually beneficial environmental initiatives due to CDP Supply Chain member engagement?

	Environmental initiatives implemented due to CDP Supply Chain member engagement
	Select from: ☑ Yes

[Fixed row]

C6. Environmental Performance - Consolidation Approach

(6.1) Provide details on your chosen consolidation approach for the calculation of environmental performance data.

Climate change

(6.1.1) Consolidation approach used

Select from:

☑ Operational control

(6.1.2) Provide the rationale for the choice of consolidation approach

GF applies the operational control approach because it is the approach that best matches our level of influence on our climate impact and executing on our Journey to Zero Carbon GHG emission reductions.

Water

(6.1.1) Consolidation approach used

Select from:

☑ Operational control

(6.1.2) Provide the rationale for the choice of consolidation approach

GF applies the operational control approach because it is the approach that best matches our level of influence on GF's impact on water and the execution of our water use reduction.

Plastics

(6.1.1) Consolidation approach used

Select from:

☑ Operational control

(6.1.2) Provide the rationale for the choice of consolidation approach

GF applies the operational control approach to in general to environmental topics because it best matches our influence on our impacts and on our strategies.

Biodiversity

(6.1.1) Consolidation approach used

Select from:

☑ Operational control

(6.1.2) Provide the rationale for the choice of consolidation approach

GF applies the operational control approach to in general to environmental topics because it best matches our influence on our impacts and on our strategies.
[Fixed row]

C7. Environmental performance - Climate Change

(7.1) Is this your first year of reporting emissions data to CDP?

Select from:

☑ No

(7.1.1) 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?

	Has there been a structural change?	Name of organization(s) acquired, divested from, or merged with	Details of structural change(s), including completion dates
	Select all that apply ☑ Yes, a divestment	*GF's facility in East Fishkill, New York.*	*Divestiture of our East Fishkill, New York fab at the end of 2022 to onsemi.*

[Fixed row]

(7.1.2) Has your emissions accounting methodology, boundary, and/or reporting year definition changed in the reporting year?

(7.1.2.1) Change(s) in methodology, boundary, and/or reporting year definition?

Select all that apply

☑ Yes, a change in methodology

☑ Yes, a change in boundary

(7.1.2.2) Details of methodology, boundary, and/or reporting year definition change(s)

Methodology: GF has recalculated our 2020 to 2023 GHG emissions inventory using the following methods: a) For semiconductor process related F-GHGs and N2O emissions GF uses Tier 2 methods of the IPCC 2019 Refinement to the 2006 IPCC Guidelines, Chapter 6 Electronics Industries (recalculation of emission values previously calculated with IPCC 2006 Guideline for GHG Inventories V3, Chapter 6 Electronics Industries); b) GWPs used are from IPCC Fifth Assessment Report (AR5 – 100 year) (recalculation of emission values previously calculated with GWPs from IPCC Fourth Assessment Report (AR4 – 100 year). Boundary: Following the divestiture of our East Fishkill, New York fab at the end of 2022, the 2020 baseline and subsequent years' Scope 1 and Scope 2 GHG emissions have been recalculated by removing the East Fishkill fab's contribution to correctly reflect the change in operational boundary.
[Fixed row]

(7.1.3) Have your organization's base year emissions and past years' emissions been recalculated as a result of any changes or errors reported in 7.1.1 and/or 7.1.2?

(7.1.3.1) Base year recalculation

Select from:
☑ Yes

(7.1.3.2) Scope(s) recalculated

Select all that apply
☑ Scope 1
☑ Scope 2, location-based
☑ Scope 2, market-based

(7.1.3.3) Base year emissions recalculation policy, including significance threshold

Scope 1 and Scope 2 (both market based and location based) GHG emission recalculation is required, as and when necessary (e.g. change of organizational boundaries (following acquisitions and / or divestures), change in calculation method or emission factors, or errors), if the resulting change would exceed 5%.

(7.1.3.4) Past years' recalculation

Select from:
☑ No
[Fixed row]

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

Select all that apply

☑ IPCC Guidelines for National Greenhouse Gas Inventories, 2006

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

☑ US EPA Mandatory Greenhouse Gas Reporting Rule

☑ Other, please specify :IPCC 2019 Refinement to the 2006 IPCC Guidelines, Chapter 6 Electronics Industries

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

	Scope 2, location-based	Scope 2, market-based	Comment
	Select from: ☑ We are reporting a Scope 2, location-based figure	*Select from:* ☑ We are reporting a Scope 2, market-based figure	*no additional comment*

[Fixed row]

(7.4) 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?

Select from:

☑ Yes

(7.4.1) Provide details of the sources of Scope 1, Scope 2, or Scope 3 emissions that are within your selected reporting boundary which are not included in your disclosure.

Row 1

(7.4.1.1) Source of excluded emissions

Emissions associated with refrigerant losses (comfort cooling)

(7.4.1.2) Scope(s) or Scope 3 category(ies)

Select all that apply

☑ Scope 1

(7.4.1.3) Relevance of Scope 1 emissions from this source

Select from:

☑ Emissions are not relevant

(7.4.1.10) Explain why this source is excluded

GF generally accounts for fugitive emissions from the use of fluorinated heat transfer fluids (FHTFs) and other cooling liquids for cooling of our manufacturing facilities and office buildings at our manufacturing facilities sites. Some fugitive emissions from the use of FHTFs for comfort cooling at some of our office buildings at our manufacturing sites have been omitted and not included into our 2023 Scope 1 and Scope 2 GHG inventory. The exclusion is well below 1% of GF's total 2023 Scope 1 and Scope 2 GHG inventory and is are therefor not relevant.

(7.4.1.11) Explain how you estimated the percentage of emissions this excluded source represents

The omission of some fugitive emissions from the use of FHTFs for comfort cooling at some office buildings at our manufacturing sites is well below 1% of GF's total 2023 Scope 1 and Scope 2 GHG emissions inventory. Explanation of estimation: The total GHG emissions of fugitive emissions from the use of FHTFs for cooling of our manufacturing facilities and office buildings at our manufacturing facilities sites was less than 6% in 2023. We estimate that fugitive emissions from the use of FHTFs for cooling of our manufacturing facilities account for approximately 5%, and fugitive emissions from comfort cooling at all manufacturing sites office buildings account for less than 1% of our total 2023 Scope 1 and Scope 2 GHG emissions inventory. Fugitive emissions from the use of FHTFs for comfort cooling were only omitted from our 2023 Scope 1 and Scope 2 GHG inventory for a fraction of office buildings at our manufacturing sites. Considering that only a portion of already less than 1% of GHG emissions of GF's total 2023 Scope 1 and Scope 2 GHG inventory were excluded, the exclusion is well below 1% of GF's total 2023 Scope 1 and Scope 2 GHG inventory and we consider the exclusion therefor as not relevant.
[Add row]

(7.5) Provide your base year and base year emissions.

Scope 1

(7.5.1) Base year end

12/31/2020

(7.5.2) Base year emissions (metric tons CO2e)

1552766

(7.5.3) Methodological details

For semiconductor process related F-GHGs and N2O emissions GF uses Tier 2 methods of the IPCC 2019 Refinement to the 2006 IPCC Guidelines, Chapter 6 Electronics Industries (recalculation of emission values previously calculated with IPCC 2006 Guideline for GHG Inventories V3, Chapter 6 Electronics Industries); GWPs used are from IPCC Fifth Assessment Report (AR5 – 100 year) (recalculation of emission values previously calculated with GWPs from IPCC Fourth Assessment Report (AR4 – 100 year). Stationary combustion: emission factors from GHG Protocol Stationary Combustion Emission Factors from Cross Sector Tool March 2017

Scope 2 (location-based)

(7.5.1) Base year end

12/31/2020

(7.5.2) Base year emissions (metric tons CO2e)

846613

(7.5.3) Methodological details

Location based GHG emissions are claculated with the grid averages for emission factors.

Scope 2 (market-based)

(7.5.1) Base year end

12/31/2020

(7.5.2) Base year emissions (metric tons CO2e)

731542

(7.5.3) Methodological details

GF uses the market-based method to quantify Scope 2 GHG emissions from the "GHG Protocol Scope 2 Guidance". The market-based method reflects emissions from the electricity that a company purchases, which in some cases may be different from the electricity that is generated locally and distributed via the local grid.

Scope 3 category 1: Purchased goods and services

(7.5.1) Base year end

12/30/2023

(7.5.2) Base year emissions (metric tons CO2e)

449425

(7.5.3) Methodological details

Scope 3 GHG emissions of purchased goods and services (chemicals, wafers, masks, outsourced assembly and test services) were estimated using GF major suppliers' information obtained in annual major supplier campaign. GF major suppliers were requested to provide either their portion of Scope 1 and Scope 2 GHG relevant to materials and services provided to GF or to provide their Scope 1 and Scope 2 GHG emissions, as well as their revenue, so that supplier specific economic (Scope 1Scope 2) GHG intensity could be derived. GF supplier spend was then multiplied with supplier specific economic GHG emissions intensity to obtain the resulting supplier specific GHG emissions in this category. GF major suppliers with a cumulative spend of 87 percent were covered by this method, and their individual supplier specific (Scope 1 Scope 2) GHG emissions were summed up. The resulting total was extrapolated to 100 percent to represent GF's Category 1 Purchased goods and services Scope 3 GHG emissions.

Scope 3 category 2: Capital goods

(7.5.1) Base year end

12/30/2023

(7.5.2) Base year emissions (metric tons CO2e)

20289

(7.5.3) Methodological details

Scope 3 GHG emissions of capital goods were estimated using GF major suppliers' information obtained in annual major supplier campaign. GF major suppliers were requested to provide either their portion of Scope 1 and Scope 2 GHG relevant to capital equipment provided to GF or to provide their Scope 1 and Scope 2 GHG emissions, as well as their revenue, so that supplier specific economic (Scope 1Scope 2) GHG intensity could be derived. GF supplier spend was then multiplied with supplier specific economic GHG emissions intensity to obtain the resulting supplier specific GHG emissions in this category. Major suppliers with a cumulative spend of 72 percent were covered by this method, and their individual supplier specific (Scope 1 Scope 2) GHG emissions were summed up. The resulting total was extrapolated to 100 percent to represent GF's Category 2 Capital goods Scope 3 GHG emissions. The Scope 3 GHG emissions of Category 2 Capital goods are not considered relevant because they do not exceed 5% of GF's 2023 total quantified Scope 3 GHG emissions.

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

(7.5.1) Base year end

12/30/2023

(7.5.2) Base year emissions (metric tons CO2e)

174514

(7.5.3) Methodological details

GF Scope 3 fuel and energy related activities (not already included in Scope 1 or 2) were quantified using GF's own data on fuel and electricity use and third-party average factors (IEA Life cycle Upstream Emission Factors, 2023, Defra 2023, EPA egrid 2022 (EPA 2021 egrid data released in January 2024). The quantification includes all upstream (cradle-to-gate) emissions of purchased fuels, electricity, and all upstream (cradle-to-gate) emissions of energy consumed in a T&D system (for T&D losses).

Scope 3 category 4: Upstream transportation and distribution

(7.5.1) Base year end

12/30/2023

(7.5.2) Base year emissions (metric tons CO2e)

26380

(7.5.3) Methodological details

Distance based method, based on estimated weight of material transported in 2023 in upstream transportation, assumptions of transportation distances and transportation mode, using Defra 2023 well to wheel factors. The Scope 3 GHG emissions of Category 4 Upstream transportation and distribution are not considered relevant because they do not exceed 5% of GF's 2023 total quantified Scope 3 GHG emissions.

Scope 3 category 5: Waste generated in operations

(7.5.1) Base year end

12/30/2023

(7.5.2) Base year emissions (metric tons CO2e)

4647

(7.5.3) Methodological details

The quantification of Category 5 Scope 3 Waste generated in operations is based on actual 2023 GF total waste tonnage and third-party average factors (Defra 2023) for Scope 1 and Scope 2 of waste treatment of the waste GF generated in 2023. The quantification of Category 5 Scope 3 Waste generated in operations includes as well the well to wheel emissions (Scope 1) from waste transportation. It is based on distances to waste treatment facilities relevant to GF waste, and third-party average factors (Defra 2023) for waste transportation. The Scope 3 GHG emissions of Category 5 Scope 3 Waste generated in operations are not considered relevant because they do not exceed 5% of GF's 2023 total quantified Scope 3 GHG emissions.

Scope 3 category 6: Business travel

(7.5.1) Base year end

12/30/2023

(7.5.2) Base year emissions (metric tons CO2e)

4333

(7.5.3) Methodological details

Data provided by GF’s global travel provider and includes travel carriers' Scope 1 and Scope 2 emissions (well to wheel/ well to wing). The quantification of GF's travel provider factors in the scope 1 and scope 2 emissions of transportation companies (e.g., airlines) and is based on the distances travelled and the travel means (e.g. air, rail). The Scope 3 GHG emissions of Category 6 Business travel are not considered relevant because they do not exceed 5% of GF's 2023 total quantified Scope 3 GHG emissions.

Scope 3 category 7: Employee commuting

(7.5.1) Base year end

12/30/2023

(7.5.2) Base year emissions (metric tons CO2e)

17831

(7.5.3) Methodological details

Quantification is based on number of employees by location, employee commute assumptions and third-party average factors (Defra 2023). The assumptions were validated / updated with results from an employee survey on employee commute distances, frequency and modes of employee commute, that was performed in early 2023. Emissions from employee commuting include the Scope 1 and scope 2 emissions of employees and third-party transportation providers. The Scope 3 GHG emissions of Category 7Employee commute are not considered relevant because they do not exceed 5% of GF's 2023 total quantified Scope 3 GHG emissions.

Scope 3 category 8: Upstream leased assets

(7.5.1) Base year end

12/30/2023

(7.5.2) Base year emissions (metric tons CO2e)

0

(7.5.3) Methodological details

Upstream leased assets GHG emissions are included in GF's Scope 1 and Scope 2 GHG inventory.

Scope 3 category 9: Downstream transportation and distribution

(7.5.1) Base year end

12/30/2023

(7.5.2) Base year emissions (metric tons CO2e)

0

(7.5.3) Methodological details

GF does not have control of and therefore does not have sufficient insight into this category and therefore does not quantify this category.

Scope 3 category 10: Processing of sold products

(7.5.1) Base year end

12/30/2023

(7.5.2) Base year emissions (metric tons CO2e)

0

(7.5.3) Methodological details

As a manufacturer of "sold intermediate products", GF does not have control and has not had sufficient insight into this category. GF is therefore not able to reasonably estimate the downstream emissions in Category 10 Processing of sold products that are associated with the various subsequent processing options of the intermediate product.

Scope 3 category 11: Use of sold products

(7.5.1) Base year end

12/30/2023

(7.5.2) Base year emissions (metric tons CO2e)

0

(7.5.3) Methodological details

As a manufacturer of "sold intermediate products", GF does not have control and has not had sufficient insight into this category. GF is therefore not able to reasonably estimate the downstream emissions in Category 11 Use of sold products that are associated with the various end uses of the intermediate product.

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

(7.5.1) Base year end

12/30/2023

(7.5.2) Base year emissions (metric tons CO2e)

0

(7.5.3) Methodological details

As a manufacturer of "sold intermediate products", GF does not have control and has not had sufficient insight into this category. GF is therefore not able to reasonably estimate the downstream emissions in Category 12 End of life treatment of sold products that are associated with the various end of life treatment options of the intermediate product.

Scope 3 category 13: Downstream leased assets

(7.5.1) Base year end

12/30/2023

(7.5.2) Base year emissions (metric tons CO2e)

0

(7.5.3) Methodological details

GF does not have any downstream leased assets, so this category is not relevant to our organization.

Scope 3 category 14: Franchises

(7.5.1) Base year end

12/30/2023

(7.5.2) Base year emissions (metric tons CO2e)

0

(7.5.3) Methodological details

GF does not have any franchises, so this category is not relevant to our organization.

Scope 3 category 15: Investments

(7.5.1) Base year end

12/30/2023

(7.5.2) Base year emissions (metric tons CO2e)

0

(7.5.3) Methodological details

GF JVs are disclosed in 2023 GF Annual Report GF Form 20-F. For Silicon Manufacturing Partners Pte Ltd. (“SMP”), GHG emissions are already accounted as part of GF's Scope 1 and Scope 2 GHG emissions because GF exercises operational control. For GF's JV with Toppan, GHG emissions are covered as part of GF's

Scope 3 Category 1 Purchased goods and services GHG emissions, as the JV is part of our major suppliers list for which GHG emissions are collected and accounted for.

Scope 3: Other (upstream)

(7.5.1) Base year end

12/30/2023

(7.5.2) Base year emissions (metric tons CO2e)

0

(7.5.3) Methodological details

This category is not relevant to GF.

Scope 3: Other (downstream)

(7.5.1) Base year end

12/30/2023

(7.5.2) Base year emissions (metric tons CO2e)

0

(7.5.3) Methodological details

This category is not relevant to GF.
[Fixed row]

(7.6) What were your organization’s gross global Scope 1 emissions in metric tons CO2e?

Reporting year

(7.6.1) Gross global Scope 1 emissions (metric tons CO2e)

957489

(7.6.3) Methodological details

Semiconductor manufacturing Scope 1 GHG consists of F-GHGs, N2O and GHG emissions from stationary combustion: For semiconductor process related F-GHGs and N2O emissions GF uses Tier 2 methods of the IPCC 2019 Refinement to the 2006 IPCC Guidelines, Chapter 6 Electronics Industries (recalculation of emission values previously calculated with IPCC 2006 Guideline for GHG Inventories V3, Chapter 6 Electronics Industries); GWPs used are from IPCC Fifth Assessment Report (AR5 – 100 year) (recalculation of emission values previously calculated with GWPs from IPCC Fourth Assessment Report (AR4 – 100 year). Stationary combustion: GHG emission calculation is based on fuel consumption and emission factors from GHG Protocol Stationary Combustion Emission Factors from Cross Sector Tool March 2017.

Past year 1

(7.6.1) Gross global Scope 1 emissions (metric tons CO2e)

1247726

(7.6.2) End date

12/30/2022

(7.6.3) Methodological details

Semiconductor manufacturing Scope 1 GHG consists of F-GHGs, N2O and GHG emissions from stationary combustion: For semiconductor process related F-GHGs and N2O emissions GF uses Tier 2 methods of the IPCC 2019 Refinement to the 2006 IPCC Guidelines, Chapter 6 Electronics Industries (recalculation of emission values previously calculated with IPCC 2006 Guideline for GHG Inventories V3, Chapter 6 Electronics Industries); GWPs used are from IPCC Fifth Assessment Report (AR5 – 100 year) (recalculation of emission values previously calculated with GWPs from IPCC Fourth Assessment Report (AR4 – 100 year). Stationary combustion: GHG emission calculation is based on fuel consumption and emission factors from GHG Protocol Stationary Combustion Emission Factors from Cross Sector Tool March 2017.

Past year 2

(7.6.1) Gross global Scope 1 emissions (metric tons CO2e)

1328045

(7.6.2) End date

12/30/2021

(7.6.3) Methodological details

Semiconductor manufacturing Scope 1 GHG consists of F-GHGs, N2O and GHG emissions from stationary combustion: For semiconductor process related F-GHGs and N2O emissions GF uses Tier 2 methods of the IPCC 2019 Refinement to the 2006 IPCC Guidelines, Chapter 6 Electronics Industries (recalculation of emission values previously calculated with IPCC 2006 Guideline for GHG Inventories V3, Chapter 6 Electronics Industries); GWPs used are from IPCC Fifth Assessment Report (AR5 – 100 year) (recalculation of emission values previously calculated with GWPs from IPCC Fourth Assessment Report (AR4 – 100 year). Stationary combustion: GHG emission calculation is based on fuel consumption and emission factors from GHG Protocol Stationary Combustion Emission Factors from Cross Sector Tool March 2017.

Past year 3

(7.6.1) Gross global Scope 1 emissions (metric tons CO2e)

1164855

(7.6.2) End date

12/30/2020

(7.6.3) Methodological details

Semiconductor manufacturing Scope 1 GHG consists of F-GHGs, N2O and GHG emissions from stationary combustion: For semiconductor process related F-GHGs and N2O emissions GF uses Tier 2 methods of the IPCC 2019 Refinement to the 2006 IPCC Guidelines, Chapter 6 Electronics Industries (recalculation of emission values previously calculated with IPCC 2006 Guideline for GHG Inventories V3, Chapter 6 Electronics Industries); GWPs used are from IPCC Fifth Assessment Report (AR5 – 100 year) (recalculation of emission values previously calculated with GWPs from IPCC Fourth Assessment Report (AR4 – 100 year). Stationary combustion: GHG emission calculation is based on fuel consumption and emission factors from GHG Protocol Stationary Combustion Emission Factors from Cross Sector Tool March 2017.
[Fixed row]

(7.7) What were your organization’s gross global Scope 2 emissions in metric tons CO2e?

Reporting year

(7.7.1) Gross global Scope 2, location-based emissions (metric tons CO2e)

940079

(7.7.2) Gross global Scope 2, market-based emissions (metric tons CO2e) (if applicable)

822082

(7.7.4) Methodological details

GF quantifies our GHG emissions according to "The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition). GF uses the market-based and location-based method to quantify Scope 2 GHG emissions as per "GHG Protocol Scope 2 Guidance". GF location-based Scope 2 GHG emissions are calculated based on electricity use by site and the multiplication with the respective up to date location-based grid emission factors, such as U.S. EPA egrid emission factors for the GF U.S. sites; German UBA emission factors for the GF Germany site, Singapore NEA emission factor for GF Singapore site. GF market-based Scope 2 GHG emissions are calculated with specific grid emission factors where, according to the GHG Protocol Scope 2 guidance, GF can use a market-based emission factor rather than the location-based grid emission factor. This is the case for those GF sites where GF has a PPA in place and / or where GF has been provided with a supplier specific emission factor for electricity supplied by the local grid. The default emission factors for GF sites where GF is not able to use market-based emission factors are the location-based emission factors as described above.

Past year 1

(7.7.1) Gross global Scope 2, location-based emissions (metric tons CO2e)

918902

(7.7.2) Gross global Scope 2, market-based emissions (metric tons CO2e) (if applicable)

755951

(7.7.3) End date

12/30/2022

(7.7.4) Methodological details

GF quantifies our GHG emissions according to "The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition). GF uses the market-based and location-based method to quantify Scope 2 GHG emissions as per "GHG Protocol Scope 2 Guidance". GF location-based Scope 2 GHG emissions

are calculated based on electricity use by site and the multiplication with the respective up to date location-based grid emission factors, such as U.S. EPA egrid emission factors for the GF U.S. sites; German UBA emission factors for the GF Germany site, Singapore NEA emission factor for GF Singapore site. GF market-based Scope 2 GHG emissions are calculated with specific grid emission factors where, according to the GHG Protocol Scope 2 guidance, GF can use a market-based emission factor rather than the location-based grid emission factor. This is the case for those GF sites where GF has a PPA in place and / or where GF has been provided with a supplier specific emission factor for electricity supplied by the local grid. The default emission factors for GF sites where GF is not able to use market-based emission factors are the location-based emission factors as described above.

Past year 2

(7.7.1) Gross global Scope 2, location-based emissions (metric tons CO2e)

871307

(7.7.2) Gross global Scope 2, market-based emissions (metric tons CO2e) (if applicable)

794579

(7.7.3) End date

12/30/2021

(7.7.4) Methodological details

GF quantifies our GHG emissions according to "The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition). GF uses the market-based and location-based method to quantify Scope 2 GHG emissions as per "GHG Protocol Scope 2 Guidance". GF location-based Scope 2 GHG emissions are calculated based on electricity use by site and the multiplication with the respective up to date location-based grid emission factors, such as U.S. EPA egrid emission factors for the GF U.S. sites; German UBA emission factors for the GF Germany site, Singapore NEA emission factor for GF Singapore site. GF market-based Scope 2 GHG emissions are calculated with specific grid emission factors where, according to the GHG Protocol Scope 2 guidance, GF can use a market-based emission factor rather than the location-based grid emission factor. This is the case for those GF sites where GF has a PPA in place and / or where GF has been provided with a supplier specific emission factor for electricity supplied by the local grid. The default emission factors for GF sites where GF is not able to use market-based emission factors are the location-based emission factors as described above.

Past year 3

(7.7.1) Gross global Scope 2, location-based emissions (metric tons CO2e)

846613

(7.7.2) Gross global Scope 2, market-based emissions (metric tons CO2e) (if applicable)

731542

(7.7.3) End date

12/30/2020

(7.7.4) Methodological details

GF quantifies our GHG emissions according to "The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition). GF uses the market-based and location-based method to quantify Scope 2 GHG emissions as per "GHG Protocol Scope 2 Guidance". GF location-based Scope 2 GHG emissions are calculated based on electricity use by site and the multiplication with the respective up to date location-based grid emission factors, such as U.S. EPA egrid emission factors for the GF U.S. sites; German UBA emission factors for the GF Germany site, Singapore NEA emission factor for GF Singapore site. GF market-based Scope 2 GHG emissions are calculated with specific grid emission factors where, according to the GHG Protocol Scope 2 guidance, GF can use a market-based emission factor rather than the location-based grid emission factor. This is the case for those GF sites where GF has a PPA in place and / or where GF has been provided with a supplier specific emission factor for electricity supplied by the local grid. The default emission factors for GF sites where GF is not able to use market-based emission factors are the location-based emission factors as described above.
[Fixed row]

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

Purchased goods and services

(7.8.1) Evaluation status

Select from:
☑ Relevant, calculated

(7.8.2) Emissions in reporting year (metric tons CO2e)

449425

(7.8.3) Emissions calculation methodology

Select all that apply

☑ Hybrid method

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

87

(7.8.5) Please explain

Scope 3 GHG emissions of purchased goods and services (chemicals, wafers, masks, outsourced assembly and test services) were estimated using GF major suppliers' information obtained in annual major supplier campaign. GF major suppliers were requested to provide either their portion of Scope 1 and Scope 2 GHG relevant to materials and services provided to GF or to provide their Scope 1 and Scope 2 GHG emissions, as well as their revenue, so that supplier specific economic (Scope 1Scope 2) GHG intensity could be derived. GF supplier spend was then multiplied with supplier specific economic GHG emissions intensity to obtain the resulting supplier specific GHG emissions in this category. GF major suppliers with a cumulative spend of 87 percent were covered by this method, and their individual supplier specific (Scope 1 Scope 2) GHG emissions were summed up. The resulting total was extrapolated to 100 percent to represent GF's Category 1 Purchased goods and services Scope 3 GHG emissions.

Capital goods

(7.8.1) Evaluation status

Select from:

☑ Not relevant, calculated

(7.8.2) Emissions in reporting year (metric tons CO2e)

20289

(7.8.3) Emissions calculation methodology

Select all that apply

☑ Hybrid method

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

72

(7.8.5) Please explain

Scope 3 GHG emissions of capital goods were estimated using GF major suppliers' information obtained in annual major supplier campaign. GF major suppliers were requested to provide either their portion of Scope 1 and Scope 2 GHG relevant to capital equipment provided to GF or to provide their Scope 1 and Scope 2 GHG emissions, as well as their revenue, so that supplier specific economic (Scope 1Scope 2) GHG intensity could be derived. GF supplier spend was then multiplied with supplier specific economic GHG emissions intensity to obtain the resulting supplier specific GHG emissions in this category. Major suppliers with a cumulative spend of 72 percent were covered by this method, and their individual supplier specific (Scope 1 Scope 2) GHG emissions were summed up. The resulting total was extrapolated to 100 percent to represent GF's Category 2 Capital goods Scope 3 GHG emissions. The Scope 3 GHG emissions of Category 2 Capital goods are not considered relevant because they do not exceed 5% of GF's 2023 total quantified Scope 3 GHG emissions.

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

(7.8.1) Evaluation status

Select from:

☑ Relevant, calculated

(7.8.2) Emissions in reporting year (metric tons CO2e)

174514

(7.8.3) Emissions calculation methodology

Select all that apply

☑ Average data method

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

0

(7.8.5) Please explain

GF Scope 3 fuel and energy related activities (not already included in Scope 1 or 2) were quantified using GF's own data on fuel and electricity use and third-party average factors (IEA Life cycle Upstream Emission Factors, 2023, Defra 2023, EPA egrid 2022 (EPA 2021 egrid data released in January 2024). The quantification includes all upstream (cradle-to-gate) emissions of purchased fuels, electricity, and all upstream (cradle-to-gate) emissions of energy consumed in a T&D system (for T&D losses).

Upstream transportation and distribution

(7.8.1) Evaluation status

Select from:

☑ Not relevant, calculated

(7.8.2) Emissions in reporting year (metric tons CO2e)

26380

(7.8.3) Emissions calculation methodology

Select all that apply

☑ Distance-based method

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

0

(7.8.5) Please explain

Distance based method, based on estimated weight of material transported in 2023 in upstream transportation, assumptions of transportation distances and transportation mode, using Defra 2023 well to wheel factors. The Scope 3 GHG emissions of Category 4 Upstream transportation and distribution are not considered relevant because they do not exceed 5% of GF's 2023 total quantified Scope 3 GHG emissions.

Waste generated in operations

(7.8.1) Evaluation status

Select from:

☑ Not relevant, calculated

(7.8.2) Emissions in reporting year (metric tons CO2e)

4647

(7.8.3) Emissions calculation methodology

Select all that apply

☑ Average data method

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

0

(7.8.5) Please explain

The quantification of Category 5 Scope 3 Waste generated in operations is based on actual 2023 GF total waste tonnage and third-party average factors (Defra 2023) for Scope 1 and Scope 2 of waste treatment of the waste GF generated in 2023. The quantification of Category 5 Scope 3 Waste generated in operations includes as well the well to wheel emissions (Scope 1) from waste transportation. It is based on distances to waste treatment facilities relevant to GF waste, and third-party average factors (Defra 2023) for waste transportation. The Scope 3 GHG emissions of Category 5 Scope 3 Waste generated in operations are not considered relevant because they do not exceed 5% of GF's 2023 total quantified Scope 3 GHG emissions.

Business travel

(7.8.1) Evaluation status

Select from:

☑ Not relevant, calculated

(7.8.2) Emissions in reporting year (metric tons CO2e)

4333

(7.8.3) Emissions calculation methodology

Select all that apply

☑ Distance-based method

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

100

(7.8.5) Please explain

Data provided by GF's global travel provider and includes travel carriers' Scope 1 and Scope 2 emissions (well to wheel/ well to wing). The quantification of GF's travel provider factors in the scope 1 and scope 2 emissions of transportation companies (e.g., airlines) and is based on the distances travelled and the travel means (e.g. air, rail). The Scope 3 GHG emissions of Category 6 Business travel are not considered relevant because they do not exceed 5% of GF's 2023 total quantified Scope 3 GHG emissions.

Employee commuting

(7.8.1) Evaluation status

Select from:

☑ Not relevant, calculated

(7.8.2) Emissions in reporting year (metric tons CO2e)

17831

(7.8.3) Emissions calculation methodology

Select all that apply

☑ Distance-based method

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

0

(7.8.5) Please explain

Quantification is based on number of employees by location, employee commute assumptions and third-party average factors (Defra 2023). The assumptions were validated / updated with results from an employee survey on employee commute distances, frequency and modes of employee commute, that was performed in early 2023. Emissions from employee commuting include the Scope 1 and scope 2 emissions of employees and third-party transportation providers. The Scope 3 GHG emissions of Category 7Employee commute are not considered relevant because they do not exceed 5% of GF's 2023 total quantified Scope 3 GHG emissions.

Upstream leased assets

(7.8.1) Evaluation status

Select from:

☑ Not relevant, explanation provided

(7.8.5) Please explain

Upstream leased assets GHG emissions are included in GF's Scope 1 and Scope 2 GHG inventory.

Downstream transportation and distribution

(7.8.1) Evaluation status

Select from:

☑ Not relevant, explanation provided

(7.8.5) Please explain

GF does not have control of and therefore does not have sufficient insight into this category and therefore does not quantify this category.

Processing of sold products

(7.8.1) Evaluation status

Select from:

☑ Not relevant, explanation provided

(7.8.5) Please explain

As a manufacturer of "sold intermediate products", GF does not have control and has not had sufficient insight into this category. GF is therefore not able to reasonably estimate the downstream emissions in Category 10 Processing of sold products that are associated with the various subsequent processing options of the intermediate product.

Use of sold products

(7.8.1) Evaluation status

Select from:

☑ Not relevant, explanation provided

(7.8.5) Please explain

As a manufacturer of "sold intermediate products", GF does not have control and has not had sufficient insight into this category. GF is therefore not able to reasonably estimate the downstream emissions in Category 11 Use of sold products that are associated with the various end uses of the intermediate product.

End of life treatment of sold products

(7.8.1) Evaluation status

Select from:

☑ Not relevant, explanation provided

(7.8.5) Please explain

As a manufacturer of "sold intermediate products", GF does not have control and has not had sufficient insight into this category. GF is therefore not able to reasonably estimate the downstream emissions in Category 12 End of life treatment of sold products that are associated with the various end of life treatment options of the intermediate product.

Downstream leased assets

(7.8.1) Evaluation status

Select from:

☑ Not relevant, explanation provided

(7.8.5) Please explain

GF does not have any downstream leased assets, so this category is not relevant to our organization.

Franchises

(7.8.1) Evaluation status

Select from:

☑ Not relevant, explanation provided

(7.8.5) Please explain

GF does not have any franchises, so this category is not relevant to our organization.

Investments

(7.8.1) Evaluation status

Select from:

☑ Not relevant, explanation provided

(7.8.5) Please explain

GF JVs are disclosed in 2023 GF Annual Report GF Form 20-F. For Silicon Manufacturing Partners Pte Ltd. (“SMP”), GHG emissions are already accounted as part of GF's Scope 1 and Scope 2 GHG emissions because GF exercises operational control. For GF's JV with Toppan, these are covered as part of GF's Scope 3 Category 1 Purchased goods and services GHG emissions, as the JV is part of our major suppliers list for which GHG emissions are collected and accounted for.

Other (upstream)

(7.8.1) Evaluation status

Select from:

☑ Not relevant, explanation provided

(7.8.5) Please explain

This category is not relevant to GF.

Other (downstream)

(7.8.1) Evaluation status

Select from:
☑ Not relevant, explanation provided

(7.8.5) Please explain

This category is not relevant to GF.
[Fixed row]

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

	Verification/assurance status
Scope 1	*Select from:* ☑ Third-party verification or assurance process in place
Scope 2 (location-based or market-based)	*Select from:* ☑ Third-party verification or assurance process in place
Scope 3	*Select from:* ☑ No third-party verification or assurance

[Fixed row]

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

Row 1

(7.9.1.1) Verification or assurance cycle in place

Select from:

☑ Annual process

(7.9.1.2) Status in the current reporting year

Select from:

☑ Complete

(7.9.1.3) Type of verification or assurance

Select from:

☑ Limited assurance

(7.9.1.4) Attach the statement

GlobalFoundries Reporting Year 2023 Verification Statement (1).pdf

(7.9.1.5) Page/section reference

The verification statement is solely relating to GHG emissions. Page 1 covers the Scope 1 GHG emissions value, Page 1-3 cover other information about the method of Scope 1 GHG emissions verification.

(7.9.1.6) Relevant standard

Select from:

☑ ISO14064-3

(7.9.1.7) Proportion of reported emissions verified (%)

100
[Add row]

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

Row 1

(7.9.2.1) Scope 2 approach

Select from:

☑ Scope 2 location-based

(7.9.2.2) Verification or assurance cycle in place

Select from:

☑ Annual process

(7.9.2.3) Status in the current reporting year

Select from:

☑ Complete

(7.9.2.4) Type of verification or assurance

Select from:

☑ Limited assurance

(7.9.2.5) Attach the statement

GlobalFoundries Reporting Year 2023 Verification Statement (1).pdf

(7.9.2.6) Page/ section reference

The verification statement is solely relating to GHG emissions. Page 1 covers the Scope 2 location-based and market-based values, Page 1-3 cover other information about the method of Scope 2 GHG emissions verification.

(7.9.2.7) Relevant standard

Select from:

☑ ISO14064-3

(7.9.2.8) Proportion of reported emissions verified (%)

100

Row 2

(7.9.2.1) Scope 2 approach

Select from:

☑ Scope 2 market-based

(7.9.2.2) Verification or assurance cycle in place

Select from:

☑ Annual process

(7.9.2.3) Status in the current reporting year

Select from:

☑ Complete

(7.9.2.4) Type of verification or assurance

Select from:

☑ Limited assurance

(7.9.2.5) Attach the statement

GlobalFoundries Reporting Year 2023 Verification Statement (1).pdf

(7.9.2.6) Page/ section reference

The verification statement is solely relating to GHG emissions. Page 1 covers the Scope 2 location-based and market-based values, Page 1-3 cover other information about the method of Scope 2 GHG emissions verification.

(7.9.2.7) Relevant standard

Select from:
☑ ISO14064-3

(7.9.2.8) Proportion of reported emissions verified (%)

100
[Add row]

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

Select from:
☑ Decreased

(7.10.1) 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 renewable energy consumption

(7.10.1.1) Change in emissions (metric tons CO2e)

0

(7.10.1.2) Direction of change in emissions

Select from:
☑ No change

(7.10.1.3) Emissions value (percentage)

0

(7.10.1.4) Please explain calculation

There has been no material change in renewable energy consumption from 2022 to 2023.

Other emissions reduction activities

(7.10.1.1) Change in emissions (metric tons CO2e)

47000

(7.10.1.2) Direction of change in emissions

Select from:

☑ Decreased

(7.10.1.3) Emissions value (percentage)

2

(7.10.1.4) Please explain calculation

GHG emission reduction projects implemented during 2022 were fully effective during 2023 and saved 47,000 MTCO2e of combined Scope 1 & 2 GHG. These total combined savings of 47,000 MTCO2e are 2% of GF's previous year's (2022) combined Scope 1 & 2 GHG emissions (based on market-based Scope 2).

Divestment

(7.10.1.1) Change in emissions (metric tons CO2e)

0

(7.10.1.2) Direction of change in emissions

Select from:

☑ No change

(7.10.1.3) Emissions value (percentage)

0

(7.10.1.4) Please explain calculation

At YE 2022, GF divested our East Fishkill, New York fab. Following the divestiture, the 2020 baseline and subsequent years' performance has been recalculated by removing the East Fishkill, NY fab's contribution to our GHG inventory. Accordingly while there has been a divestment, the inventory was already recalculated and there is no change in GF's GHG inventory due to divestment of our East Fishkill, NY fab at YE 2022.

Acquisitions

(7.10.1.1) Change in emissions (metric tons CO2e)

0

(7.10.1.2) Direction of change in emissions

Select from:

☑ No change

(7.10.1.3) Emissions value (percentage)

0

(7.10.1.4) Please explain calculation

There has been no aquisition that would have had an impact on GF's GHG inventory in 2023.

Mergers

(7.10.1.1) Change in emissions (metric tons CO2e)

0

(7.10.1.2) Direction of change in emissions

Select from:

☑ No change

(7.10.1.3) Emissions value (percentage)

0

(7.10.1.4) Please explain calculation

There has been no merger that could have had an impact on GF's GHG inventory in 2023.

Change in output

(7.10.1.1) Change in emissions (metric tons CO2e)

215987

(7.10.1.2) Direction of change in emissions

Select from:

☑ Decreased

(7.10.1.3) Emissions value (percentage)

11

(7.10.1.4) Please explain calculation

In 2023, as compared to 2022, some GF 200mm fabs (which have a higher GHG emission intensity) had a decreased output leading to a calculated lower GHG emission of 215,987 MTCO2e, which is equivalent to 10.6% of GF's previous year's (2022) combined Scope 1 & 2 GHG emissions (based on market-based Scope 2).

Change in methodology

(7.10.1.1) Change in emissions (metric tons CO2e)

0

(7.10.1.2) Direction of change in emissions

Select from:

☑ No change

(7.10.1.3) Emissions value (percentage)

0

(7.10.1.4) Please explain calculation

GF has recalculated our 2020 to 2023 GHG emissions inventory using the following methods: • For semiconductor process related F-GHGs and N2O emissions GF uses Tier 2 methods of the IPCC 2019 Refinement to the 2006 IPCC Guidelines, Chapter 6 Electronics Industries (recalculation of emission values previously calculated with IPCC 2006 Guideline for GHG Inventories V3, Chapter 6 Electronics Industries); • GWPs used are from IPCC Fifth Assessment Report (AR5 – 100 year) (recalculation of emission values previously calculated with GWPs from IPCC Fourth Assessment Report (AR4 – 100 year). Accordingly,while there has been a change in GHG inventory calculation method, the inventory is already recalculated and there is no change in GF's GHG inventory due to method change.

Change in boundary

(7.10.1.1) Change in emissions (metric tons CO2e)

0

(7.10.1.2) Direction of change in emissions

Select from:

☑ No change

(7.10.1.3) Emissions value (percentage)

0

(7.10.1.4) Please explain calculation

There has been no change in GF's GHG inventory boundary approach from 2022 to 2023.

Change in physical operating conditions

(7.10.1.1) Change in emissions (metric tons CO2e)

0

(7.10.1.2) Direction of change in emissions

Select from:
☑ No change

(7.10.1.3) Emissions value (percentage)

0

(7.10.1.4) Please explain calculation

There has been no change in physical operating conditions that would affect GF's GHG inventory from 2022 to 2023.

Unidentified

(7.10.1.1) Change in emissions (metric tons CO2e)

0

(7.10.1.2) Direction of change in emissions

Select from:
☑ No change

(7.10.1.3) Emissions value (percentage)

0

(7.10.1.4) Please explain calculation

There has been no other unidentified change to GF GHG inventory from 2022 to 2023.

Other

(7.10.1.1) Change in emissions (metric tons CO2e)

0

(7.10.1.2) Direction of change in emissions

Select from:
☑ No change

(7.10.1.3) Emissions value (percentage)

0

(7.10.1.4) Please explain calculation

There has been no other change to GF GHG inventory from 2022 to 2023.
[Fixed row]

(7.10.2) Are your emissions performance calculations in 7.10 and 7.10.1 based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure?

Select from:
☑ Market-based

(7.12) Are carbon dioxide emissions from biogenic carbon relevant to your organization?

Select from:
☑ No

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

Select from:
☑ Yes

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

Row 1

(7.15.1.1) Greenhouse gas

Select from:
☑ PFCs

(7.15.1.2) Scope 1 emissions (metric tons of CO2e)

462029

(7.15.1.3) GWP Reference

Select from:
☑ IPCC Fifth Assessment Report (AR5 – 100 year)

Row 2

(7.15.1.1) Greenhouse gas

Select from:
☑ HFCs

(7.15.1.2) Scope 1 emissions (metric tons of CO2e)

46282

(7.15.1.3) GWP Reference

Select from:

☑ IPCC Fifth Assessment Report (AR5 – 100 year)

Row 3

(7.15.1.1) Greenhouse gas

Select from:

☑ SF6

(7.15.1.2) Scope 1 emissions (metric tons of CO2e)

59850

(7.15.1.3) GWP Reference

Select from:

☑ IPCC Fifth Assessment Report (AR5 – 100 year)

Row 4

(7.15.1.1) Greenhouse gas

Select from:

☑ NF3

(7.15.1.2) Scope 1 emissions (metric tons of CO2e)

168666

(7.15.1.3) GWP Reference

Select from:

☑ IPCC Fifth Assessment Report (AR5 – 100 year)

Row 5

(7.15.1.1) Greenhouse gas

Select from:
☑ N2O

(7.15.1.2) Scope 1 emissions (metric tons of CO2e)

48557

(7.15.1.3) GWP Reference

Select from:
☑ IPCC Fifth Assessment Report (AR5 – 100 year)

Row 6

(7.15.1.1) Greenhouse gas

Select from:
☑ CO2

(7.15.1.2) Scope 1 emissions (metric tons of CO2e)

70846

(7.15.1.3) GWP Reference

Select from:
☑ IPCC Fifth Assessment Report (AR5 – 100 year)

Row 7

(7.15.1.1) Greenhouse gas

Select from:

☑ Other, please specify :Fluorinated Heat Transfer Fluids (FHTF)

(7.15.1.2) Scope 1 emissions (metric tons of CO2e)

101258

(7.15.1.3) GWP Reference

Select from:

☑ IPCC Fifth Assessment Report (AR5 – 100 year)

[Add row]

(7.16) Break down your total gross global Scope 1 and 2 emissions by country/area.

	Scope 1 emissions (metric tons CO2e)	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Germany	*60831*	*308337*	*273995*
Singapore	*619749*	*452436*	*452436*
United States of America	*276908*	*178537*	*94882*

[Fixed row]

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

Select all that apply

☑ By facility

(7.17.2) Break down your total gross global Scope 1 emissions by business facility.

Row 1

(7.17.2.1) Facility

Fab 1, Dresden, Germany

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

60831

(7.17.2.3) Latitude

51.050407

(7.17.2.4) Longitude

13.737262

Row 3

(7.17.2.1) Facility

Fab 9, Burlington, VT, USA

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

137730

(7.17.2.3) Latitude

44.4759

(7.17.2.4) Longitude

-73.2121

Row 4

(7.17.2.1) Facility

Woodlands, Singapore

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

619749

(7.17.2.3) Latitude

1.3521

(7.17.2.4) Longitude

103.8198

Row 6

(7.17.2.1) Facility

Fab 8, Malta, NY, USA

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

139178

(7.17.2.3) Latitude

42.9854

(7.17.2.4) Longitude

-73.7868
[Add row]

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

Select all that apply
☑ By facility

(7.20.2) Break down your total gross global Scope 2 emissions by business facility.

	Facility	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Row 1	*Fab 1, Dresden, Germany*	*308337*	*273995*
Row 2	*Fab 8, Malta, NY, USA*	*94882*	*94882*
Row 5	*Fab 9, Burlington, VT, USA*	*83655*	*0*
Row 6	*Woodlands, Singapore*	*452436*	*452436*

[Add row]

(7.22) Break down your gross Scope 1 and Scope 2 emissions between your consolidated accounting group and other entities included in your response.

Consolidated accounting group

(7.22.1) Scope 1 emissions (metric tons CO2e)

907446

(7.22.2) Scope 2, location-based emissions (metric tons CO2e)

920881

(7.22.3) Scope 2, market-based emissions (metric tons CO2e)

802884

(7.22.4) Please explain

GF usually applies the operational control principle to our GHG inventory. This data represents all GF's Scope 1 and Scope 2 GHG emissions (under the operational control approach) less the estimated portion (according to allocation by 2023 estimated Manufacturing Index) of GHG emissions of GF joint venture “Silicon Manufacturing Partners Pte Ltd. (SMP)".

All other entities

(7.22.1) Scope 1 emissions (metric tons CO2e)

50043

(7.22.2) Scope 2, location-based emissions (metric tons CO2e)

19613

(7.22.3) Scope 2, market-based emissions (metric tons CO2e)

19613

(7.22.4) Please explain

Data represents estimated portion (according to allocation by 2023 estimated Manufacturing Index) of GHG emissions of GF joint venture “Silicon Manufacturing Partners Pte Ltd. (SMP)".
[Fixed row]

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

Select from:

☑ No

(7.27) What are the challenges in allocating emissions to different customers, and what would help you to overcome these challenges?

Row 1

(7.27.1) Allocation challenges

Select from:

☑ We face no challenges

(7.27.2) Please explain what would help you overcome these challenges

*Allocation is per MI (Manufacturing Index) of customer wafer outs by GF fab as a share of total wafer outs by GF fab (expressed in MI). Resulting GHG emissions are summed up to the total. (MI # of wafer outs * wafer area * # of mask steps). This current allocation method is representative and appropriate.*
[Add row]

(7.28) Do you plan to develop your capabilities to allocate emissions to your customers in the future?

(7.28.1) Do you plan to develop your capabilities to allocate emissions to your customers in the future?

Select from:

☑ No

(7.28.3) Primary reason for no plans to develop your capabilities to allocate emissions to your customers

Select from:

☑ Capabilities to allocate emissions to customers already maximized

(7.28.4) Explain why you do not plan to develop capabilities to allocate emissions to your customers

*GF's current method to allocate our Scope 1 and Scope 2 GHG emissions to customers is already representative and fully appropriate. GF allocation method is as follows: GF's fab and year specific normalized Scope 1 and 2 GHG emissions by Manufacturing Index (g CO2-e/ MI) are applied to the number of customer wafer outs (expressed in MI) per year and by GF fab. The resulting GHG emissions are summed up to the total. (MI # of wafer outs * wafer area * # of mask steps. [Fixed row]*

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

Select from:

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

(7.30) 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)	*Select from:* ☑ Yes
Consumption of purchased or acquired electricity	*Select from:* ☑ Yes
Consumption of purchased or acquired heat	*Select from:* ☑ Yes
Consumption of purchased or acquired steam	*Select from:* ☑ No
Consumption of purchased or acquired cooling	*Select from:* ☑ Yes
Generation of electricity, heat, steam, or cooling	*Select from:* ☑ Yes

[Fixed row]

(7.30.1) Report your organization’s energy consumption totals (excluding feedstocks) in MWh.

Consumption of fuel (excluding feedstock)

(7.30.1.1) Heating value

Select from:

☑ LHV (lower heating value)

(7.30.1.2) MWh from renewable sources

0

(7.30.1.3) MWh from non-renewable sources

349615

(7.30.1.4) Total (renewable and non-renewable) MWh

349615

Consumption of purchased or acquired electricity

(7.30.1.1) Heating value

Select from:

☑ LHV (lower heating value)

(7.30.1.2) MWh from renewable sources

734199.13

(7.30.1.3) MWh from non-renewable sources

2040149.23

(7.30.1.4) Total (renewable and non-renewable) MWh

2774348.35

Consumption of purchased or acquired heat

(7.30.1.1) Heating value

Select from:
☑ LHV (lower heating value)

(7.30.1.2) MWh from renewable sources

0

(7.30.1.3) MWh from non-renewable sources

187231.69

(7.30.1.4) Total (renewable and non-renewable) MWh

187231.69

Consumption of purchased or acquired cooling

(7.30.1.1) Heating value

Select from:
☑ LHV (lower heating value)

(7.30.1.2) MWh from renewable sources

0

(7.30.1.3) MWh from non-renewable sources

314640.45

(7.30.1.4) Total (renewable and non-renewable) MWh

314640.45

Consumption of self-generated non-fuel renewable energy

(7.30.1.1) Heating value

Select from:
☑ LHV (lower heating value)

(7.30.1.2) MWh from renewable sources

4055

(7.30.1.4) Total (renewable and non-renewable) MWh

4055.82

Total energy consumption

(7.30.1.1) Heating value

Select from:
☑ LHV (lower heating value)

(7.30.1.2) MWh from renewable sources

738254.95

(7.30.1.3) MWh from non-renewable sources

2891636.37

(7.30.1.4) Total (renewable and non-renewable) MWh

3629891.32
[Fixed row]

(7.30.6) 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	*Select from:* ☑ No
Consumption of fuel for the generation of heat	*Select from:* ☑ Yes
Consumption of fuel for the generation of steam	*Select from:* ☑ No
Consumption of fuel for the generation of cooling	*Select from:* ☑ No
Consumption of fuel for co-generation or tri-generation	*Select from:* ☑ No

[Fixed row]

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

Sustainable biomass

(7.30.7.1) Heating value

Select from:
☑ LHV

(7.30.7.2) Total fuel MWh consumed by the organization

0

(7.30.7.8) Comment

none

Other biomass

(7.30.7.1) Heating value

Select from:
☑ LHV

(7.30.7.2) Total fuel MWh consumed by the organization

0

(7.30.7.8) Comment

none

Other renewable fuels (e.g. renewable hydrogen)

(7.30.7.1) Heating value

Select from:
☑ LHV

(7.30.7.2) Total fuel MWh consumed by the organization

0

(7.30.7.8) Comment

none

Coal

(7.30.7.1) Heating value

Select from:
☑ LHV

(7.30.7.2) Total fuel MWh consumed by the organization

0

(7.30.7.8) Comment

none

Oil

(7.30.7.1) Heating value

Select from:
☑ LHV

(7.30.7.2) Total fuel MWh consumed by the organization

0

(7.30.7.8) Comment

none

Gas

(7.30.7.1) Heating value

Select from:
☑ LHV

(7.30.7.2) Total fuel MWh consumed by the organization

335417

(7.30.7.8) Comment

Natural gas fuel use.

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

(7.30.7.1) Heating value

Select from:
☑ LHV

(7.30.7.2) Total fuel MWh consumed by the organization

14198

(7.30.7.8) Comment

This includes Diesel, LPG and non-renewable hydrogen fuel use.

Total fuel

(7.30.7.1) Heating value

Select from:

☑ LHV

(7.30.7.2) Total fuel MWh consumed by the organization

349615

(7.30.7.8) Comment

None
[Fixed row]

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

Electricity

(7.30.9.1) Total Gross generation (MWh)

4056

(7.30.9.2) Generation that is consumed by the organization (MWh)

4056

(7.30.9.3) Gross generation from renewable sources (MWh)

4056

(7.30.9.4) Generation from renewable sources that is consumed by the organization (MWh)

4056

Heat

(7.30.9.1) Total Gross generation (MWh)

0

(7.30.9.2) Generation that is consumed by the organization (MWh)

0

(7.30.9.3) Gross generation from renewable sources (MWh)

0

(7.30.9.4) Generation from renewable sources that is consumed by the organization (MWh)

0

Steam

(7.30.9.1) Total Gross generation (MWh)

0

(7.30.9.2) Generation that is consumed by the organization (MWh)

0

(7.30.9.3) Gross generation from renewable sources (MWh)

0

(7.30.9.4) Generation from renewable sources that is consumed by the organization (MWh)

0

Cooling

(7.30.9.1) Total Gross generation (MWh)

0

(7.30.9.2) Generation that is consumed by the organization (MWh)

0

(7.30.9.3) Gross generation from renewable sources (MWh)

0

(7.30.9.4) Generation from renewable sources that is consumed by the organization (MWh)

0
[Fixed row]

(7.30.14) 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 7.7.

Row 1

(7.30.14.1) Country/area

Select from:
☑ United States of America

(7.30.14.2) Sourcing method

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

(7.30.14.3) Energy carrier

Select from:

☑ Electricity

(7.30.14.4) Low-carbon technology type

Select from:

☑ Low-carbon energy mix, please specify **:**This refers to the grid electricity as provided by the local utility provider Green Mountain Power (GMP) to GF's Fab in Burlington, Vermont. GMP energy mix is 100% carbon free and more than 80% renewable (includes hydro, wind, solar).

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

340910

(7.30.14.6) Tracking instrument used

Select from:

☑ Contract

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

Select from:

☑ United States of America

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

Select from:

☑ No

(7.30.14.10) Comment

none
[Add row]

(7.30.16) Provide a breakdown by country/area of your electricity/heat/steam/cooling consumption in the reporting year.

Germany

(7.30.16.1) Consumption of purchased electricity (MWh)

586642

(7.30.16.2) Consumption of self-generated electricity (MWh)

0

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

501872

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

0

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

1088514.00

Singapore

(7.30.16.1) Consumption of purchased electricity (MWh)

1085499

(7.30.16.2) Consumption of self-generated electricity (MWh)

4056

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

0

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

0

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

1089555.00

United States of America

(7.30.16.1) Consumption of purchased electricity (MWh)

1102207

(7.30.16.2) Consumption of self-generated electricity (MWh)

0

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

0

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

0

(7.30.16.6) Total electricity/heat/steam/cooling energy consumption (MWh)

1102207.00
[Fixed row]

(7.45) 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.

Row 1

(7.45.1) Intensity figure

0.0002406

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

1778802

(7.45.3) Metric denominator

Select from:
☑ unit total revenue

(7.45.4) Metric denominator: Unit total

7392000000

(7.45.5) Scope 2 figure used

Select from:
☑ Market-based

(7.45.6) % change from previous year

13

(7.45.7) Direction of change

Select from:
☑ Decreased

(7.45.8) Reasons for change

Select all that apply
☑ Other emissions reduction activities

☑ Change in output

(7.45.9) Please explain

In 2023, GF has made progress on our GHG emission reduction projects. leading to a decrease in emissions intensity. GHG emission reduction projects implemented during 2022 were fully effective during 2023 and saved 47,000 MTCO2e of combined Scope 1 & 2 GHG. In 2023 we have also implemneted projects that are estimated to realize annualized GHG reductions of 90,000 MTCO2e. We have reported details of these projects in our response to 7.55.2. Additionally, there was a slight decrease in our 200mm fabs' output, which hadve a higher GHG emission intensity, contributing to an overall reduction in GF's total GHG emissions intensity of 13% in 2023 as compared to 2022.
[Add row]

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

Row 1

(7.52.1) Description

Select from:
☑ Energy usage

(7.52.2) Metric value

0.04

(7.52.3) Metric numerator

Electricity used in kWh

(7.52.4) Metric denominator (intensity metric only)

Manufacturing Index

(7.52.5) % change from previous year

4

(7.52.6) Direction of change

Select from:

☑ Increased

(7.52.7) Please explain

There was a slight increase in absolute and normalized electricity use from 2022 to 2023. This was mainly caused by commencement of activities at our newest fab module at our Singapore Woodland campus, that uses electricity even prior to production start. The overall trend in normalized electricity use decrease since 2020 reflects GF's continued work over many years to achieve significantly higher productivity by keeping the growth in absolute electricity demand nearly flat while increasing manufacturing output.
[Add row]

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

Select all that apply

☑ Absolute target

(7.53.1) Provide details of your absolute emissions targets and progress made against those targets.

Row 1

(7.53.1.1) Target reference number

Select from:

☑ Abs 1

(7.53.1.2) Is this a science-based target?

Select from:

☑ No, but we anticipate setting one in the next two years

(7.53.1.5) Date target was set

08/18/2021

(7.53.1.6) Target coverage

Select from:

☑ Organization-wide

(7.53.1.7) Greenhouse gases covered by target

Select all that apply

☑ Methane (CH4)

☑ Nitrous oxide (N2O)

☑ Carbon dioxide (CO2)

☑ Perfluorocarbons (PFCs)

☑ Hydrofluorocarbons (HFCs)

☑ Sulphur hexafluoride (SF6)

☑ Nitrogen trifluoride (NF3)

(7.53.1.8) Scopes

Select all that apply

☑ Scope 1

☑ Scope 2

(7.53.1.9) Scope 2 accounting method

Select from:

☑ Market-based

(7.53.1.11) End date of base year

12/30/2020

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

1552766

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

731542

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

0.000

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

2284308.000

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

100

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

100

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

100

(7.53.1.54) End date of target

12/30/2030

(7.53.1.55) Targeted reduction from base year (%)

25

(7.53.1.56) Total emissions at end date of target covered by target in all selected Scopes (metric tons CO2e)

1713231.000

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

957489

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

822497

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

1779986.000

(7.53.1.78) Land-related emissions covered by target

Select from:

☑ No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

(7.53.1.79) % of target achieved relative to base year

88.31

(7.53.1.80) Target status in reporting year

Select from:

☑ Underway

(7.53.1.82) Explain target coverage and identify any exclusions

GF's Journey to Zero Carbon target encompasses all of GF's manufacturing sites' Scope 1 and Scope 2 GHG emissions. There are no exclusions.

(7.53.1.83) Target objective

GF's Journey to Zero Carbon target objective is to align with climate science and minimize medium term exposure to climate change.

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

To meet GF's Journey to Zero Carbon target of reducing absolute greenhouse emissions by 25%, GF has a project plan and milestones with emission reduction projects across our global manufacturing footprint to achieve the target. Projects include enhancing manufacturing emission controls, further improving energy efficiency, and sourcing renewable and lower-carbon energy.

(7.53.1.85) Target derived using a sectoral decarbonization approach

Select from:

☑ No

Row 2

(7.53.1.1) Target reference number

Select from:

☑ Abs 2

(7.53.1.2) Is this a science-based target?

Select from:

☑ No, but we anticipate setting one in the next two years

(7.53.1.5) Date target was set

04/21/2024

(7.53.1.6) Target coverage

Select from:

☑ Organization-wide

(7.53.1.7) Greenhouse gases covered by target

Select all that apply

☑ Methane (CH4)

☑ Nitrous oxide (N2O)

☑ Sulphur hexafluoride (SF6)

☑ Nitrogen trifluoride (NF3)

☑ Carbon dioxide (CO2)
☑ Perfluorocarbons (PFCs)
☑ Hydrofluorocarbons (HFCs)

(7.53.1.8) Scopes

Select all that apply
☑ Scope 1
☑ Scope 2

(7.53.1.9) Scope 2 accounting method

Select from:
☑ Market-based

(7.53.1.11) End date of base year

12/30/2020

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

1552766

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

731542

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

0.000

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

2284308.000

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

100

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

100

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

100

(7.53.1.54) End date of target

12/30/2050

(7.53.1.55) Targeted reduction from base year (%)

50

(7.53.1.56) Total emissions at end date of target covered by target in all selected Scopes (metric tons CO2e)

1142154.000

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

957489

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

822497

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

1779986.000

(7.53.1.78) Land-related emissions covered by target

Select from:

☑ No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

(7.53.1.79) % of target achieved relative to base year

44.16

(7.53.1.80) Target status in reporting year

Select from:

☑ Underway

(7.53.1.82) Explain target coverage and identify any exclusions

The 2050 target encompasses all of GF's manufacturing sites' Scope 1 and Scope 2 GHG emissions. There are no exclusions.

(7.53.1.83) Target objective

The target objective is to align with climate science and minimize long-term exposure to climate change.

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

To meet the 2050 absolute greenhouse emissions by 50%, GF has a project plan and milestones with emission reduction projects across our global manufacturing footprint to achieve the target. Projects include enhancing manufacturing emission controls, further improving energy efficiency, and sourcing renewable and lower-carbon energy.

(7.53.1.85) Target derived using a sectoral decarbonization approach

Select from:

☑ No

[Add row]

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

Select all that apply

☑ Net-zero targets

(7.54.2) Provide details of any other climate-related targets, including methane reduction targets.

Row 2

(7.54.2.1) Target reference number

Select from:

☑ Oth 1

(7.54.2.3) Target coverage

Select from:

☑ Organization-wide

(7.54.2.4) Target type: absolute or intensity

Select from:

☑ Intensity

(7.54.2.5) Target type: category & Metric (target numerator if reporting an intensity target)

Energy consumption or efficiency

☑ kWh

(7.54.2.8) Figure or percentage in base year

0.053

(7.54.2.15) Is this target part of an emissions target?

GF's energy efficiency goal supports our GHG reduction goals as listed above: Abs1, Int1.

(7.54.2.16) Is this target part of an overarching initiative?

Select all that apply

☑ No, it's not part of an overarching initiative

[Add row]

(7.54.3) Provide details of your net-zero target(s).

Row 1

(7.54.3.1) Target reference number

Select from:

☑ NZ1

(7.54.3.2) Date target was set

04/21/2024

(7.54.3.3) Target Coverage

Select from:

☑ Organization-wide

(7.54.3.4) Targets linked to this net zero target

Select all that apply

☑ Abs1

(7.54.3.5) End date of target for achieving net zero

12/30/2050

(7.54.3.6) Is this a science-based target?

Select from:

☑ No, but we anticipate setting one in the next two years

(7.54.3.8) Scopes

Select all that apply

☑ Scope 1

☑ Scope 2

(7.54.3.9) Greenhouse gases covered by target

Select all that apply

☑ Methane (CH4)

☑ Nitrous oxide (N2O)

☑ Carbon dioxide (CO2)

☑ Perfluorocarbons (PFCs)

☑ Hydrofluorocarbons (HFCs)

☑ Sulphur hexafluoride (SF6)

☑ Nitrogen trifluoride (NF3)

(7.54.3.10) Explain target coverage and identify any exclusions

The GF 2050 net-zero target covers all GF operations' GHG emissions across our global footprint without any specific exclusions.

(7.54.3.11) Target objective

Achieve net zero GHG emissions by 2050, achieve 100% carbon-neutral power by 2050.

(7.54.3.12) Do you intend to neutralize any residual emissions with permanent carbon removals at the end of the target?

Select from:

☑ Yes

(7.54.3.13) Do you plan to mitigate emissions beyond your value chain?

Select from:

☑ No, but we plan to within the next two years

(7.54.3.14) Do you intend to purchase and cancel carbon credits for neutralization and/or beyond value chain mitigation?

Select all that apply

☑ Yes, we plan to purchase and cancel carbon credits for neutralization at the end of the target

(7.54.3.15) Planned milestones and/or near-term investments for neutralization at the end of the target

To achieve its net zero 2050 goal, GF plans to further reduce emissions through the continued use of state-of-the-art emissions controls when expanding its manufacturing footprint, installation of new controls on existing sites where appropriate, expanded use of alternative chemistries, achieving 100% carbon-neutral power and offset residual emissions.

(7.54.3.17) Target status in reporting year

Select from:

☑ Underway

(7.54.3.19) Process for reviewing target

Authority for oversight and management of sustainability topics have been established according to our sustainability governance structure. Accountability for achieving GF ESG goals, including GF's Journey to Zero Carbon goals is placed on designated members of the company's Executive Team. We review quarterly progress of our Journey to Zero Carbon goals in our Stewardship Committee, which is responsible for setting strategic direction, conducting management reviews and providing guidance and approval regarding sustainability topics. The Stewardship Committee membership includes senior executives representing the legal, finance, manufacturing, human resources, communications, technology, strategy, business operations and global supply chain organizations. Additionally, sustainability reports to the ARCC include reviews of performance towards our Board level sustainability goals.
[Add row]

(7.55) 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.

Select from:

☑ Yes

(7.55.1) 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	*8*	*`Numeric input*
To be implemented	*2*	*41000*
Implementation commenced	*5*	*269000*
Implemented	*9*	*90000*
Not to be implemented	*0*	*`Numeric input*

[Fixed row]

(7.55.2) Provide details on the initiatives implemented in the reporting year in the table below.

Row 1

(7.55.2.1) Initiative category & Initiative type

Non-energy industrial process emissions reductions

☑ Process equipment replacement

(7.55.2.2) Estimated annual CO2e savings (metric tonnes CO2e)

47000

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

Select all that apply

☑ Scope 1

(7.55.2.4) Voluntary/Mandatory

Select from:
☑ Voluntary

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

174000

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

2200000

(7.55.2.7) Payback period

Select from:
☑ 4-10 years

(7.55.2.8) Estimated lifetime of the initiative

Select from:
☑ 6-10 years

(7.55.2.9) Comment

GF Singapore commenced a multi-year project to reduce GHG emissions by retrofitting a set of CVD tools. The retrofits enable use of an NF3 remote clean for the CVD chamber clean process. This cleaning technology significantly reduces GHG emissions. Retrofits completed in 2023 are estimated to result in annualized greenhouse gas emission reduction of more than 47,000 MTCO2-e. The annualized savings represent the savings in Singapore carbon taxes at the 2023 tax rate. The payback takes into account the increases in the Singapore carbon tax rate over the next years.

Row 2

(7.55.2.1) Initiative category & Initiative type

Fugitive emissions reductions

☑ Other, please specify :Fluorinated heat transfer fluid (FHTF) use replacement to lower GWP FHTF

(7.55.2.2) Estimated annual CO2e savings (metric tonnes CO2e)

6600

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

Select all that apply

☑ Scope 1

(7.55.2.4) Voluntary/Mandatory

Select from:

☑ Voluntary

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

37000

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

0

(7.55.2.7) Payback period

Select from:

☑ No payback

(7.55.2.8) Estimated lifetime of the initiative

Select from:

☑ 6-10 years

(7.55.2.9) Comment

Our Burlington, Vermont site successfully completed the testing, qualification, and conversion of fluorinated heat transfer fluids to a more environmentally friendly alternative for a specific series of etch tools. The replacement fluids have a much lower impact on global warming. Collectively, the project is estimated to reduce annual GHG emissions by 6,600 MTCO2e.

Row 3

(7.55.2.1) Initiative category & Initiative type

Fugitive emissions reductions

☑ Other, please specify **:**Fluorinated heat transfer fluid (FHTF) use replacement to lower GWP FHTF

(7.55.2.2) Estimated annual CO2e savings (metric tonnes CO2e)

22754

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

Select all that apply

☑ Scope 1

(7.55.2.4) Voluntary/Mandatory

Select from:

☑ Voluntary

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

0

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

0

(7.55.2.7) Payback period

Select from:

☑ No payback

(7.55.2.8) Estimated lifetime of the initiative

Select from:

☑ 6-10 years

(7.55.2.9) Comment

Project addressed reduction of fugitive emissions of FHTF (fluorinated heat transfer fluids) by replacing by fluids with lower global warming potential at our Singapore manufacturing site.

Row 4

(7.55.2.1) Initiative category & Initiative type

Energy efficiency in buildings

☑ Lighting

(7.55.2.2) Estimated annual CO2e savings (metric tonnes CO2e)

99

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

Select all that apply

☑ Scope 2 (market-based)

(7.55.2.4) Voluntary/Mandatory

Select from:

☑ Voluntary

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

75000

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

255000

(7.55.2.7) Payback period

Select from:
☑ 4-10 years

(7.55.2.8) Estimated lifetime of the initiative

Select from:
☑ 6-10 years

(7.55.2.9) Comment

Our manufacturing site in Malta, New York, upgraded lighting in the production support areas, with an estimated electricity conservation amounting to 794 MWh per year, corresponding to a savings of 99 MTCO2e.

Row 5

(7.55.2.1) Initiative category & Initiative type

Energy efficiency in production processes
☑ Product or service design

(7.55.2.2) Estimated annual CO2e savings (metric tonnes CO2e)

83

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

Select all that apply

☑ Scope 2 (market-based)

(7.55.2.4) Voluntary/Mandatory

Select from:

☑ Voluntary

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

154000

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

0

(7.55.2.7) Payback period

Select from:

☑ No payback

(7.55.2.8) Estimated lifetime of the initiative

Select from:

☑ 6-10 years

(7.55.2.9) Comment

At our Singapore manufacturing site, a project was completed to remove heater jackets (which heat the piping between a tool's exhaust and vacuum pump) at a specific etching tool group. The project resulted in an estimated savings of more than 730 MWh of annual electricity consumption, corresponding to 83 MTCO2e of Scope 2 GHG emissions.

Row 6

(7.55.2.1) Initiative category & Initiative type

Energy efficiency in buildings

☑ Heating, Ventilation and Air Conditioning (HVAC)

(7.55.2.2) Estimated annual CO2e savings (metric tonnes CO2e)

19

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

Select all that apply

☑ Scope 2 (market-based)

(7.55.2.4) Voluntary/Mandatory

Select from:

☑ Voluntary

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

52000

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

0

(7.55.2.7) Payback period

Select from:

☑ No payback

(7.55.2.8) Estimated lifetime of the initiative

Select from:

☑ 6-10 years

(7.55.2.9) Comment

Our Malta, New York, facilities team added new controls for defined areas of the clean room and support areas (in the subfab) to prevent overheating and over cooling of some specific areas. The improvements are projected to amount to over 554,000 kWh per year of electricity savings (corresponding to 19 MTCO2e).

Row 7

(7.55.2.1) Initiative category & Initiative type

Energy efficiency in production processes

☑ Other, please specify **:**Chilled water system pump operating mode

(7.55.2.2) Estimated annual CO2e savings (metric tonnes CO2e)

6

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

Select all that apply

☑ Scope 2 (market-based)

(7.55.2.4) Voluntary/Mandatory

Select from:

☑ Voluntary

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

10000

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

0

(7.55.2.7) Payback period

Select from:

☑ No payback

(7.55.2.8) Estimated lifetime of the initiative

Select from:

☑ 6-10 years

(7.55.2.9) Comment

At our Dresden, Germany manufacturing site, in a specific process chilled water system, the pump operating mode was switched from flow pressure control to differential pressure control. The upgrade provides a more stable control variant in the closed cooling water system and results in approximately 44,000kWh per year in energy savings (corresponding to approximately 6 MTCO2e).

Row 8

(7.55.2.1) Initiative category & Initiative type

Energy efficiency in production processes

☑ Other, please specify **:**Numerous other smaller energy efficiency projects across the company not mentioned before (with monetary savings data)

(7.55.2.2) Estimated annual CO2e savings (metric tonnes CO2e)

4430

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

Select all that apply

☑ Scope 2 (market-based)

(7.55.2.4) Voluntary/Mandatory

Select from:
☑ Voluntary

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

2250000

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

0

(7.55.2.7) Payback period

Select from:
☑ No payback

(7.55.2.8) Estimated lifetime of the initiative

Select from:
☑ 6-10 years

(7.55.2.9) Comment

Numerous energy efficiency projects (with monetary savings data) across the company, not included in projects listed individually, resulted in approximately 4,430 MTCO2e of annual reduction in our Scope 2 GHG emissions.

Row 9

(7.55.2.1) Initiative category & Initiative type

Energy efficiency in production processes

☑ Other, please specify **:**Numerous other smaller energy efficiency projects across the company not mentioned before (without monetary savings data)

(7.55.2.2) Estimated annual CO2e savings (metric tonnes CO2e)

9009

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

Select all that apply

☑ Scope 2 (market-based)

(7.55.2.4) Voluntary/Mandatory

Select from:

☑ Voluntary

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

0

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

0

(7.55.2.7) Payback period

Select from:

☑ No payback

(7.55.2.8) Estimated lifetime of the initiative

Select from:

☑ 6-10 years

(7.55.2.9) Comment

Numerous energy efficiency projects (without monetary savings data) across the company, not included in projects listed individually, resulted in approximately 9,009 MTCO2e of annual reduction in our Scope 2 GHG emissions.
[Add row]

(7.55.3) What methods do you use to drive investment in emissions reduction activities?

Row 1

(7.55.3.1) Method

Select from:
☑ Dedicated budget for other emissions reduction activities

(7.55.3.2) Comment

GHG emissions reduction project costs (such as for abatement installations to reduce fluorinated process gas emissions) are budgeted specifically as part of the overall company budget process.

Row 3

(7.55.3.1) Method

Select from:
☑ Financial optimization calculations

(7.55.3.2) Comment

This method is used to identify the hierarchy of GHG reduction projects.
[Add row]

(7.73) Are you providing product level data for your organization’s goods or services?

Select from:

☑ No, I am not providing data

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

Select from:

☑ No

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

Select from:

☑ No

C9. Environmental performance - Water security

(9.1) Are there any exclusions from your disclosure of water-related data?

Select from:
☑ No

(9.2) Across all your operations, what proportion of the following water aspects are regularly measured and monitored?

Water withdrawals – total volumes

(9.2.1) % of sites/facilities/operations

Select from:
☑ 100%

(9.2.2) Frequency of measurement

Select from:
☑ Continuously

(9.2.3) Method of measurement

Water withdrawals are monitored at each GF manufacturing site through automated water meters.

(9.2.4) Please explain

Water withdrawals are monitored at each GF manufacturing site through automated water meters. At minimum quarterly, the measured water withdrawals by sites are rolled up o compile a corporate quarterly total volume of water withdrawn.

Water withdrawals – volumes by source

(9.2.1) % of sites/facilities/operations

Select from:

☑ 100%

(9.2.2) Frequency of measurement

Select from:

☑ Continuously

(9.2.3) Method of measurement

Water withdrawals by source are monitored at each GF manufacturing site through automated water meters.

(9.2.4) Please explain

Water withdrawal volumes by source are monitored at each GF manufacturing site through automated water meters. At minimum, quarterly water withdrawals by site and by source are rolled up to compile a corporate quarterly total volume of water withdrawn by source.

Water withdrawals quality

(9.2.1) % of sites/facilities/operations

Select from:

☑ 100%

(9.2.2) Frequency of measurement

Select from:

☑ Continuously

(9.2.3) Method of measurement

The quality of incoming water (i.e. water withdrawal) is constantly monitored for particles, ions, and dissolved gases as it enters the ultrapure water (UPW) plant.

(9.2.4) Please explain

Water quality is very important to GF. Water, specifically, ultrapure water (UPW) is necessary for semiconductor manufacturing and must be treated to very high purity levels, removing particles, ions, and dissolved gases before it can be used. Therefore, the quality of incoming water (i.e. water withdrawal) is constantly monitored.

Water discharges – total volumes

(9.2.1) % of sites/facilities/operations

Select from:

☑ 100%

(9.2.2) Frequency of measurement

Select from:

☑ Continuously

(9.2.3) Method of measurement

Water discharges are monitored at each GF manufacturing site through automated meters.

(9.2.4) Please explain

Water discharges are monitored at each GF manufacturing site through automated meters. At minimum quarterly, water discharge by site is rolled up to compile a corporate quarterly total volume of water discharge

Water discharges – volumes by destination

(9.2.1) % of sites/facilities/operations

Select from:

☑ 100%

(9.2.2) Frequency of measurement

Select from:

☑ Continuously

(9.2.3) Method of measurement

Water discharges by destination are monitored at each GF manufacturing site through automated meters.

(9.2.4) Please explain

Water discharges by destination are monitored at each GF manufacturing site through automated meters. At minimum quarterly, water discharge by site and by destination is rolled up to compile a corporate quarterly total volume of water discharge.

Water discharges – volumes by treatment method

(9.2.1) % of sites/facilities/operations

Select from:
☑ 100%

(9.2.2) Frequency of measurement

Select from:
☑ Continuously

(9.2.3) Method of measurement

Water discharges by treatment method are monitored at each GF manufacturing site through automated meters.

(9.2.4) Please explain

Water discharges by treatment method are monitored at each GF manufacturing site through automated meters.

Water discharge quality – by standard effluent parameters

(9.2.1) % of sites/facilities/operations

Select from:

☑ 100%

(9.2.2) Frequency of measurement

Select from:

☑ Other, please specify **:**Water quality parameters are controlled as per wastewater permits and/or regulatory requirements in place at all sites.

(9.2.3) Method of measurement

Analytical control of water quality parameters as per wastewater permits and/or regulatory requirements in place at each site.

(9.2.4) Please explain

Water quality parameters are controlled as per wastewater permits and/or regulatory requirements in place at each site. Wastewater permits or procedures for each site clearly define the water quality parameters and the frequency and methods of controls as well as action plans in case of exceedance.

Water discharge quality – emissions to water (nitrates, phosphates, pesticides, and/or other priority substances)

(9.2.1) % of sites/facilities/operations

Select from:

☑ 100%

(9.2.2) Frequency of measurement

Select from:

☑ Other, please specify **:**Water quality parameters are controlled as per wastewater permits and/or regulatory requirements in place at all sites.

(9.2.3) Method of measurement

Analytical control of water quality parameters as per wastewater permits and/or regulatory requirements in place at each site.

(9.2.4) Please explain

Water quality parameters are controlled as per wastewater permits and/or regulatory requirements in place at each site. Wastewater permits or procedures for each site clearly define the water quality parameters and the frequency and methods of controls as well as action plans in case of exceedance.

Water discharge quality – temperature

(9.2.1) % of sites/facilities/operations

Select from:

☑ 100%

(9.2.2) Frequency of measurement

Select from:

☑ Other, please specify **:**Temperature parameters are controlled as per wastewater permits in place at all sites.

(9.2.3) Method of measurement

Temperature parameters are controlled as per wastewater permits in place at all sites.

(9.2.4) Please explain

Temperature parameters are controlled as per wastewater permits in place at all sites.

Water consumption – total volume

(9.2.1) % of sites/facilities/operations

Select from:

☑ 100%

(9.2.2) Frequency of measurement

Select from:

☑ Quarterly

(9.2.3) Method of measurement

Calculated quarterly by subtracting the quarterly total of water discharge from the quarterly total of water withdrawal for all GF manufacturing sites.

(9.2.4) Please explain

Calculated quarterly by subtracting the quarterly total of water discharge from the quarterly total of water withdrawal for all GF manufacturing sites.

Water recycled/reused

(9.2.1) % of sites/facilities/operations

Select from:
☑ 100%

(9.2.2) Frequency of measurement

Select from:
☑ Continuously

(9.2.3) Method of measurement

Volumes of water recycled in our own water recycling plants as well as the water reused are monitored at each GF manufacturing site through automated meters.

(9.2.4) Please explain

Volumes of water recycled in our own water recycling plants as well as the water reused are monitored at each GF manufacturing site through automated meters. At minimum quarterly, volumes of water recycled and water reused are rolled up to compile a corporate quarterly total.

The provision of fully-functioning, safely managed WASH services to all workers

(9.2.1) % of sites/facilities/operations

Select from:
☑ 100%

(9.2.2) Frequency of measurement

Select from:

☑ Continuously

(9.2.3) Method of measurement

Monitored as part of strategy to meet regulatory requirements, requirements of GF's own Global EHS Standards and our Commitment to the Responsible Business Alliance (RBA) Code.

(9.2.4) Please explain

GF sites provide full access to water, adequate sanitation and hygiene for all workers, as per applicable regulatory requirements, requirements of GF's own Global EHS Standards and our Commitment to the Responsible Business Alliance (RBA) Code.
[Fixed row]

(9.2.2) What are the total volumes of water withdrawn, discharged, and consumed across all your operations, how do they compare to the previous reporting year, and how are they forecasted to change?

Total withdrawals

(9.2.2.1) Volume (megaliters/year)

23658

(9.2.2.2) Comparison with previous reporting year

Select from:

☑ About the same

(9.2.2.3) Primary reason for comparison with previous reporting year

Select from:

☑ Facility expansion

(9.2.2.4) Five-year forecast

Select from:

☑ About the same

(9.2.2.5) Primary reason for forecast

Select from:

☑ Increase/decrease in efficiency

(9.2.2.6) Please explain

Due to commencement of activities at our newest fab module in Singapore which began using water prior to production output absolute water withdrawal, increased by 3% from 2022 to 2023. Generally, we expect absolute water withdrawal to remain the about same, respectively slightly decrease. Here, GF applies a classification of changes of reporting year values to the preceding year values as follows: Changes that are within a variation of / - 5% are considered to be "about the same"; changes higher than /- 5% but not higher than /-10% are considered as "higher" / "lower"; changes higher than /- 10% are considered "much higher" / "much lower").

Total discharges

(9.2.2.1) Volume (megaliters/year)

20314

(9.2.2.2) Comparison with previous reporting year

Select from:

☑ About the same

(9.2.2.3) Primary reason for comparison with previous reporting year

Select from:

☑ Facility expansion

(9.2.2.4) Five-year forecast

Select from:

☑ About the same

(9.2.2.5) Primary reason for forecast

Select from:

☑ Increase/decrease in efficiency

(9.2.2.6) Please explain

Due to commencement of activities at our newest fab module in Singapore which began using and discharging water prior to production output, absolute water wastewater discharge increased by 2% from 2022 to 2023. Generally, we expect absolute waste water discharge to remain the about same, respectively slightly decrease. Here, GF applies a classification of changes of reporting year values to the preceding year values as follows: Changes that are within a variation of / - 5% are considered to be "about the same"; changes higher than /- 5% but not higher than /-10% are considered as "higher" / "lower"; changes higher than /- 10% are considered "much higher" / "much lower").

Total consumption

(9.2.2.1) Volume (megaliters/year)

3344

(9.2.2.2) Comparison with previous reporting year

Select from:

☑ Much higher

(9.2.2.3) Primary reason for comparison with previous reporting year

Select from:

☑ Facility expansion

(9.2.2.4) Five-year forecast

Select from:

☑ About the same

(9.2.2.5) Primary reason for forecast

Select from:

☑ Increase/decrease in efficiency

(9.2.2.6) Please explain

Due to commencement of activities at our newest fab module in Singapore which began using and discharging water prior to production output, absolute water consumption increased by 11% from 2022 to 2023. The percentage increase number is higher for water consumption than for water withdrawal and water discharge because the absolute volumes of water consumption are only a fraction of water withdrawal and water discharge volumes and therefor changes that in absolute numbers are similar to those of water withdrawal or water discharge appear higher when expressed as percentage of water consumption volumes. Generally, we expect absolute water consumption to remain the about same, respectively slightly decrease. Here, GF applies a classification of changes of reporting year values to the preceding year values as follows: Changes that are within a variation of / - 5% are considered to be "about the same"; changes higher than /- 5% but not higher than /-10% are considered as "higher" / "lower"; changes higher than /- 10% are considered "much higher" / "much lower").
[Fixed row]

(9.2.4) Indicate whether water is withdrawn from areas with water stress, provide the volume, how it compares with the previous reporting year, and how it is forecasted to change.

(9.2.4.1) Withdrawals are from areas with water stress

Select from:

☑ No

(9.2.4.8) Identification tool

Select all that apply

☑ WRI Aqueduct

(9.2.4.9) Please explain

GF uses the World Resources Institute's (WRI) "Aqueduct Water Risk Atlas" in our annual assessment to determine whether our manufacturing sites are located in, or withdraw water from, high water stress areas. No GF manufacturing site is located in areas currently assessed with a baseline water stress of "high" or "extremely high". (According to World Resources Institute's (WRI) "Aqueduct Water Risk Atlas", Version 4.0, "high" or "extremely high" water stress is defined respectively as a range from 40% to 80% and a ratio above 80% of total water withdrawals to available renewable surface and groundwater supplies. Reflecting the WRI water risk assessment, three of four GF manufacturing sites (Singapore, Malta, New York and Burlington, Vermont) are located in areas assessed with a baseline water stress of "low." Only one of our manufacturing sites is located in an area with a baseline water stress of "low to medium" (Dresden, Germany).
[Fixed row]

(9.2.7) Provide total water withdrawal data by source.

Fresh surface water, including rainwater, water from wetlands, rivers, and lakes

(9.2.7.1) Relevance

Select from:
☑ Not relevant

(9.2.7.5) Please explain

There was no water withdrawal from this source in 2023.

Brackish surface water/Seawater

(9.2.7.1) Relevance

Select from:
☑ Not relevant

(9.2.7.5) Please explain

There was no water withdrawal from this source in 2023.

Groundwater – renewable

(9.2.7.1) Relevance

Select from:

☑ Not relevant

(9.2.7.5) Please explain

There was no water withdrawal from this source in 2023.

Groundwater – non-renewable

(9.2.7.1) Relevance

Select from:

☑ Not relevant

(9.2.7.5) Please explain

There was no water withdrawal from this source in 2023.

Produced/Entrained water

(9.2.7.1) Relevance

Select from:

☑ Not relevant

(9.2.7.5) Please explain

There was no water withdrawal from this source in 2023.

Third party sources

(9.2.7.1) Relevance

Select from:

☑ Relevant

(9.2.7.2) Volume (megaliters/year)

23658

(9.2.7.3) Comparison with previous reporting year

Select from:

☑ About the same

(9.2.7.4) Primary reason for comparison with previous reporting year

Select from:

☑ Facility expansion

(9.2.7.5) Please explain

Due to commencement of activities at our newest fab module in Singapore which began using water prior to production output absolute water withdrawal, increased by 3% from 2022 to 2023. Because GF's water withdrawal is only from third party sources, the trend is the same as provided in response to question 9.2.2. Here, GF applies a classification of changes of reporting year values to the preceding year values as follows: Changes that are within a variation of / - 5% are considered to be "about the same"; changes higher than /- 5% but not higher than /-10% are considered as "higher" / "lower"; changes higher than /- 10% are considered "much higher" / "much lower").
[Fixed row]

(9.2.8) Provide total water discharge data by destination.

Fresh surface water

(9.2.8.1) Relevance

Select from:

☑ Relevant

(9.2.8.2) Volume (megaliters/year)

3876

(9.2.8.3) Comparison with previous reporting year

Select from:

☑ Lower

(9.2.8.4) Primary reason for comparison with previous reporting year

Select from:

☑ Increase/decrease in business activity

(9.2.8.5) Please explain

Absolute water wastewater discharge to surface water decreased by 9% from 2022 to 2023 because of changes in production output at the respective manufacturing site that discharges to surface water. Here, GF applies a classification of changes of reporting year values to the preceding year values as follows: Changes that are within a variation of / - 5% are considered to be "about the same"; changes higher than /- 5% but not higher than /-10% are considered as "higher" / "lower"; changes higher than /- 10% are considered "much higher" / "much lower").

Brackish surface water/seawater

(9.2.8.1) Relevance

Select from:

☑ Not relevant

(9.2.8.5) Please explain

There was no water discharge to this destination in 2023.

Groundwater

(9.2.8.1) Relevance

Select from:

☑ Not relevant

(9.2.8.5) Please explain

There was no water discharge to this destination in 2023.

Third-party destinations

(9.2.8.1) Relevance

Select from:
☑ Relevant

(9.2.8.2) Volume (megaliters/year)

16439

(9.2.8.3) Comparison with previous reporting year

Select from:
☑ About the same

(9.2.8.4) Primary reason for comparison with previous reporting year

Select from:
☑ Facility expansion

(9.2.8.5) Please explain

Due to commencement of activities at our newest fab module in Singapore which began using and discharging water prior to production output, absolute water wastewater discharge to third party destinations increased by 5% from 2022 to 2023. Here, GF applies a classification of changes of reporting year values to the preceding year values as follows: Changes that are within a variation of / - 5% are considered to be "about the same"; changes higher than /- 5% but not higher than /-10% are considered as "higher" / "lower"; changes higher than /- 10% are considered "much higher" / "much lower").
[Fixed row]

(9.2.9) Within your direct operations, indicate the highest level(s) to which you treat your discharge.

Tertiary treatment

(9.2.9.1) Relevance of treatment level to discharge

Select from:

☑ Relevant

(9.2.9.2) Volume (megaliters/year)

20250

(9.2.9.3) Comparison of treated volume with previous reporting year

Select from:

☑ About the same

(9.2.9.4) Primary reason for comparison with previous reporting year

Select from:

☑ Facility expansion

(9.2.9.5) % of your sites/facilities/operations this volume applies to

Select from:

☑ 100%

(9.2.9.6) Please explain

The total volume of waste water discharged in 2023 was 2% higher than in 2022. While the volume of wastewater may change from year to year, there is no change in the scope of wastewater treatment: At each of our manufacturing sites, we operate permitted wastewater treatment systems to manage effluent from production areas. These facilities treat the wastewater to meet regulatory requirements prior to discharge. Sanitary wastewater from GF sites with the exception of GF manufacturing site in Burlington, Vermont is not treated in GF's own wastewater treatment, but sent to third party(municipal) wastewater treatment facilities. Here, GF applies a classification of changes of reporting year values to the preceding year values as follows: Changes that are within a variation of / - 5% are considered to be "about the same"; changes higher than /- 5% but not higher than /-10% are considered as "higher" / "lower"; changes higher than /- 10% are considered "much higher" / "much lower").

Secondary treatment

(9.2.9.1) Relevance of treatment level to discharge

Select from:

☑ Not relevant

(9.2.9.6) Please explain

Not relevant to GF, as all production wastewater is routed through tertiary treatment prior discharge. Sanitary waste water from GF sites with the exception of GF's manufacturing site in Burlington, Vermont 9 is not treated in GF's own wastewater treatment, but sent to third party (municipal) wastewater treatment facilities.

Primary treatment only

(9.2.9.1) Relevance of treatment level to discharge

Select from:

☑ Not relevant

(9.2.9.6) Please explain

Not relevant to GF, as all production wastewater is routed through tertiary treatment prior discharge. Sanitary waste water from GF sites with the exception of GF's manufacturing site in Burlington, Vermont 9 is not treated in GF's own wastewater treatment, but sent to third party (municipal) wastewater treatment facilities.

Discharge to the natural environment without treatment

(9.2.9.1) Relevance of treatment level to discharge

Select from:

☑ Not relevant

(9.2.9.6) Please explain

Not relevant to GF, as all production wastewater is routed through tertiary treatment prior discharge. Sanitary waste water from GF sites with the exception of GF's manufacturing site in Burlington, Vermont is not treated in GF's own wastewater treatment, but sent to third party (municipal) wastewater treatment facilities.

Discharge to a third party without treatment

(9.2.9.1) Relevance of treatment level to discharge

Select from:

☑ Relevant

(9.2.9.2) Volume (megaliters/year)

64

(9.2.9.3) Comparison of treated volume with previous reporting year

Select from:

☑ About the same

(9.2.9.4) Primary reason for comparison with previous reporting year

Select from:

☑ Facility expansion

(9.2.9.5) % of your sites/facilities/operations this volume applies to

Select from:

☑ 71-80

(9.2.9.6) Please explain

This is the estimated volume of sanitary waste water from GF sites. With the exception of GF's manufacturing site in Burlington, Vermont 9, sanitary waste water is not treated in GF's own wastewater treatment, but sent to third party (municipal) wastewater treatment facilities.

Other

(9.2.9.1) Relevance of treatment level to discharge

Select from:

☑ Not relevant

(9.2.9.6) Please explain

Not relevant to GF, as all production wastewater is routed through tertiary treatment prior discharge. Sanitary waste water from GF sites with the exception of GF's manufacturing site in Burlington, Vermont 9 is not treated in GF's own wastewater treatment, but sent to third party (municipal) wastewater treatment facilities.
[Fixed row]

(9.2.10) Provide details of your organization’s emissions of nitrates, phosphates, pesticides, and other priority substances to water in the reporting year.

(9.2.10.1) Emissions to water in the reporting year (metric tons)

10

(9.2.10.2) Categories of substances included

Select all that apply

☑ Nitrates

(9.2.10.4) Please explain

Water quality parameters are controlled as per wastewater permits and/or regulatory requirements in place at each site. Wastewater permits or procedures for each site clearly define the water quality parameters and the frequency and methods of controls as well as action plans in case of exceedance. All our sites’ wastewater is monitored for Nitrate, respectively total Nitrogen, as well as for selected trace metals according to applicable permits and regulatory requirements. One of GF's manufacturing sites, our Burlington, Vermont site, discharges directly to surface waters following a rigorous combination of industrial and biological treatment processes. The number reported represents the 2023 emissions of Nitrate compounds from our Burlington, Vermont fab that were reported under the U.S. EPA Toxics Release Inventory (TRI) Program.
[Fixed row]

(9.3) In your direct operations and upstream value chain, what is the number of facilities where you have identified substantive water-related dependencies, impacts, risks, and opportunities?

Direct operations

(9.3.1) Identification of facilities in the value chain stage

Select from:

☑ No, we have assessed this value chain stage but did not identify any facilities with water-related dependencies, impacts, risks, and opportunities

(9.3.4) Please explain

As provided in response to 2.2.2, per the processes within our environmental management system and our materiality analysis, GF has not identified any substantive (as per threshold provided in response to 2.4) water related impact, risk or opportunities for our manufacturing sites. As also described in our response to 2.2.2, GF uses the World Resources Institute's (WRI) "Aqueduct Water Risk Atlas" in our annual assessment to determine whether our manufacturing sites are located in, or withdraw water from, high water stress areas. None of GF's manufacturing sites is located in areas currently assessed with a baseline water stress of "high" or "extremely high." Also, none of GF manufacturing sites are located in areas predicted with high or extreme water stress in the medium term (2030) and long term (2050) time horizon.

Upstream value chain

(9.3.1) Identification of facilities in the value chain stage

Select from:

☑ No, we have assessed this value chain stage but did not identify any facilities with water-related dependencies, impacts, risks, and opportunities

(9.3.4) Please explain

As provided in response to 2.2.2, per the processes within our environmental management system and our materiality analysis, GF has not identified any substantive (as per threshold provided in response to 2.4) water related impact, risk or opportunities for our upstream value chain. As also described in our response to 2.2.2, GF uses climate change physical scenario analysis that also covers water scarcity for both our own manufacturing sites as well as for selected supplier sites. The 2024 scenario analysis on water scarcity did not result in an elevated risk for water scarcity for selected major supplier sites (upstream value chain) nor for GF's manufacturing sites for both time horizons covered (2030 and 2050).
[Fixed row]

(9.3.1) For each facility referenced in 9.3, provide coordinates, water accounting data, and a comparison with the previous reporting year.

	Dependencies, impacts, risks, and/or opportunities identified at this facility	Withdrawals or discharges in the reporting year
Row 1	*Select all that apply* ☑ Impacts	*Select from:* ☑ Yes, withdrawals and discharges

[Add row]

(9.4) Could any of your facilities reported in 9.3.1 have an impact on a requesting CDP supply chain member?

Select from:

☑ No facilities were reported in 9.3.1

(9.5) Provide a figure for your organization's total water withdrawal efficiency.

	Revenue (currency)	Total water withdrawal efficiency	Anticipated forward trend
	7392000000	*312452.45*	*We expect improvements in water withdrawal efficiency along GF's water efficiency target that is provided in response to question 9.15.1*

[Fixed row]

(9.12) Provide any available water intensity values for your organization's products or services.

Row 1

(9.12.1) Product name

Finished die patterned semiconductor wafers

(9.12.2) Water intensity value

0.0003

(9.12.3) Numerator: Water aspect

Select from:

☑ Water withdrawn

(9.12.4) Denominator

*Manufacturing Index (MI) Manufacturing output as wafer area (cm²) * #of lithography mask steps*

(9.12.5) Comment

The unit reported here for water withdrawal in the nominator is M³ as per CDP guidance: The denominator is a metric called "Manufacturing Index", (MI) a standard industry normalization factor. (The MI is derived from the number of wafers manufactured, the number of lithography masking steps in our fabrication processes (reflecting process complexity), and the total area of wafers manufactured.) GF normally tracks and reports this metric in Liter/ MI (rather than M³/MI). In 2023 GF's normalized water withdrawal was 0.35 Liter /MI.
[Add row]

(9.13) Do any of your products contain substances classified as hazardous by a regulatory authority?

(9.13.1) Products contain hazardous substances

Select from:

☑ No

(9.13.2) Comment

All chemicals used at GF must be in compliance with the GF Specification for Banned, Restricted and Declarable Materials Management (FE-0033) which includes both regulatory and customer-driven requirements. Similarly, all GF products must also meet the banned, restricted and declarable requirements of the FE-0033 specification. Applicable regulatory requirements include the EU Directive on restricted use of certain hazardous substances in electrical and electronic equipment (RoHS Directive), its sister directives in other jurisdictions, such as China RoHS, and other legislation that regulates substances contained in products (also called "articles"), and the EU Regulation on Registration, Evaluation, and Authorization of Chemicals (REACH) provisions on the presence of designated Substances of Very High Concern (SVHCs).
[Fixed row]

(9.14) Do you classify any of your current products and/or services as low water impact?

(9.14.1) Products and/or services classified as low water impact

Select from:
☑ No, and we do not plan to address this within the next two years

(9.14.3) Primary reason for not classifying any of your current products and/or services as low water impact

Select from:
☑ Judged to be unimportant, explanation provided

(9.14.4) Please explain

GF has a strong focus on water conservation for our manufacturing operations and has set a goal for improving water efficiency by achieving a normalized water use of 0.32 liters /Manufacturing Index or less by 2025 (33% reduction from 2020 baseline).Technologies from GF are helping to address some of the world's most pressing climate, resource sustainability and societal challenges. While GF products may enable solutions to water related challenges, GF products do not use water in the use phase of the life cycle. Therefor, at this stage, GF does not classify any current products / or services as low water impact.
[Fixed row]

(9.15) Do you have any water-related targets?

Select from:
☑ Yes

(9.15.1) Indicate whether you have targets relating to water pollution, water withdrawals, WASH, or other water-related categories.

Water pollution

(9.15.1.1) Target set in this category

Select from:

☑ No, but we plan to within the next two years

(9.15.1.2) Please explain

GF's Global EHS Policy and Standards are the foundation of our ISO 14001 certified Environmental Management System, and they follow a "beyond compliance" approach. We are already striving to exceed the requirements of applicable regulations, this includes applicable wastewater permit requirements, but we have not yet established it as a public goal.

Water withdrawals

(9.15.1.1) Target set in this category

Select from:

☑ Yes

Water, Sanitation, and Hygiene (WASH) services

(9.15.1.1) Target set in this category

Select from:

☑ No, and we do not plan to within the next two years

(9.15.1.2) Please explain

GF is a member of the Responsible Business Alliance (RBA) and committed to the RBA Code. The RBA Code includes the requirement to provide Water, Sanitation, and Hygiene (WASH) services by requiring that "Workers shall be provided with ready access to clean toilet facilities, potable water and sanitary food preparation,

storage, and eating facilities." GF is already committed to RBA Code and is meeting this requirement for all of our manufacturing facilities, so we do not plan to establish it as a new public goal.

Other

(9.15.1.1) Target set in this category

Select from:

☑ No, and we do not plan to within the next two years

(9.15.1.2) Please explain

At this time, we do not have any other specific plans.
[Fixed row]

(9.15.2) Provide details of your water-related targets and the progress made.

Row 1

(9.15.2.1) Target reference number

Select from:

☑ Target 1

(9.15.2.2) Target coverage

Select from:

☑ Organization-wide (direct operations only)

(9.15.2.3) Category of target & Quantitative metric

Water withdrawals

☑ Reduction in withdrawals per unit of production

(9.15.2.4) Date target was set

06/29/2022

(9.15.2.5) End date of base year

12/30/2020

(9.15.2.6) Base year figure

0.43

(9.15.2.7) End date of target year

12/30/2025

(9.15.2.8) Target year figure

0.32

(9.15.2.9) Reporting year figure

0.35

(9.15.2.10) Target status in reporting year

Select from:

☑ Underway

(9.15.2.11) % of target achieved relative to base year

73

(9.15.2.12) Global environmental treaties/initiatives/ frameworks aligned with or supported by this target

Select all that apply

☑ Sustainable Development Goal 6

(9.15.2.13) Explain target coverage and identify any exclusions

The target covers all GF manufacturing sites and there are no exclusions.

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

Our strategy to achieve target is to implement projects to conserve water and to further increase our recycling and reuse rates. In 2023 GF executed projects that are expected to annually save more than 341Thousand m^3 of water. GF 2023 normalized water withdrawal (water withdrawal in Liter / MI) was 19% below 2020 levels.

(9.15.2.16) Further details of target

There are no further details relevant for the target that we want to provide here.
[Add row]

C10. Environmental performance - Plastics

(10.1) Do you have plastics-related targets, and if so what type?

	Targets in place
	Select from: ☑ No, and we do not plan to within the next two years

[Fixed row]

C11. Environmental performance - Biodiversity

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

	Actions taken in the reporting period to progress your biodiversity-related commitments
	Select from: ☑ No, we are not taking any actions to progress our biodiversity-related commitments, but we plan to within the next two years

[Fixed row]

(11.3) Does your organization use biodiversity indicators to monitor performance across its activities?

	Does your organization use indicators to monitor biodiversity performance?
	Select from: ☑ No, we do not use indicators, but plan to within the next two years

[Fixed row]

(11.4) Does your organization have activities located in or near to areas important for biodiversity in the reporting year?

Legally protected areas

(11.4.1) Indicate whether any of your organization's activities are located in or near to this type of area important for biodiversity

Select from:

☑ Yes (partial assessment)

(11.4.2) Comment

Assessment of proximity to legally protected areas (as defined by local/regional/national governments) important for biodiversity conducted for each GF manufacturing facility.

UNESCO World Heritage sites

(11.4.1) Indicate whether any of your organization's activities are located in or near to this type of area important for biodiversity

Select from:

☑ Yes (partial assessment)

(11.4.2) Comment

Assessment of proximity to UNESCO World Heritage locations conducted for each GF manufacturing facility.

UNESCO Man and the Biosphere Reserves

(11.4.1) Indicate whether any of your organization's activities are located in or near to this type of area important for biodiversity

Select from:

☑ Yes (partial assessment)

(11.4.2) Comment

Assessment of proximity to UNESCO Man and Biosphere Reserves locations conducted for each GF manufacturing facility.

Ramsar sites

(11.4.1) Indicate whether any of your organization's activities are located in or near to this type of area important for biodiversity

Select from:

☑ Yes (partial assessment)

(11.4.2) Comment

Assessment of proximity to Ramsar locations conducted for each GF manufacturing facility.

Key Biodiversity Areas

(11.4.1) Indicate whether any of your organization's activities are located in or near to this type of area important for biodiversity

Select from:

☑ Not assessed

(11.4.2) Comment

GF has not completed any biodiversity specific assessment to determine if/what company activities are located in or near areas important for biodiversity. We plan to do so within the next year and are currently taking steps to begin the assessment process.

Other areas important for biodiversity

(11.4.1) Indicate whether any of your organization's activities are located in or near to this type of area important for biodiversity

Select from:

☑ Not assessed

(11.4.2) Comment

GF has not completed any biodiversity specific assessment to determine if/what company activities are located in or near areas important for biodiversity. We plan to do so within the next year and are currently taking steps to begin the assessment process.
[Fixed row]

(11.4.1) Provide details of your organization's activities in the reporting year located in or near to areas important for biodiversity.

Row 1

(11.4.1.2) Types of area important for biodiversity

Select all that apply

☑ Legally protected areas

☑ UNESCO World Heritage sites

☑ UNESCO Man and the Biosphere Reserves

☑ Ramsar sites

(11.4.1.3) Protected area category (IUCN classification)

Select from:

☑ Unknown

(11.4.1.4) Country/area

Select from:

☑ Germany

(11.4.1.5) Name of the area important for biodiversity

Legally protected areas: special area of conservation (habitat), special protection area (birds); UNESCO World Heritage: Park Mużakowski; UNESCO Man and the Biosphere Reserves: Oberlausitzer Heide- und Teichlandschaft; Ramsar site: Peitzer Ponds

(11.4.1.6) Proximity

Select from:

☑ Data not available

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

In Dresden Germany, GF operates highly sophisticated equipment and tools for the manufacturing of semiconductors, this includes 52,000 sqm of clean room space.

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

Select from:

☑ Not assessed

Row 2

(11.4.1.2) Types of area important for biodiversity

Select all that apply

☑ Legally protected areas

☑ UNESCO World Heritage sites

☑ Ramsar sites

(11.4.1.3) Protected area category (IUCN classification)

Select from:

☑ Unknown

(11.4.1.4) Country/area

Select from:

☑ Singapore

(11.4.1.5) Name of the area important for biodiversity

Legally protected areas: Central Catchment Nature Reserve; UNESCO World Heritage: Singapore Botanic Gardens; Ramsar sites: Sungai Pulai, Tanjung Piai, Pulau Kukup

(11.4.1.6) Proximity

Select from:

☑ Data not available

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

In Singapore, GF operates highly sophisticated equipment and tools for the manufacturing of semiconductors, this includes 87,000 sqm of clean room space.

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

Select from:

☑ Not assessed

Row 3

(11.4.1.2) Types of area important for biodiversity

Select all that apply

☑ Legally protected areas

☑ UNESCO Man and the Biosphere Reserves

(11.4.1.3) Protected area category (IUCN classification)

Select from:

☑ Unknown

(11.4.1.4) Country/area

Select from:

☑ United States of America

(11.4.1.5) Name of the area important for biodiversity

Legally protected areas: Manning Cove Preserve, Ballston Creek Preserve, Round Lake Preserve; UNESCO Man and the Biosphere Reserves: Champlain/Adirondack

(11.4.1.6) Proximity

Select from:

☑ Data not available

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

In Malta New York, GF operates highly sophisticated equipment and tools for the manufacturing of semiconductors, this includes 58,000 sqm of clean room space.

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

Select from:

☑ Not assessed

Row 4

(11.4.1.2) Types of area important for biodiversity

Select all that apply

☑ Legally protected areas

☑ UNESCO Man and the Biosphere Reserves

☑ Ramsar sites

(11.4.1.3) Protected area category (IUCN classification)

Select from:

☑ Unknown

(11.4.1.4) Country/area

Select from:

☑ United States of America

(11.4.1.5) Name of the area important for biodiversity

Legally protected areas: Mt Mansfield State Forest, Camel's Hump State park; UNESCO Man and the Biosphere Reserves: Champlain/Adirondack; Ramsar site: Missisquoi Delta and Bay Wetlands

(11.4.1.6) Proximity

Select from:

☑ Data not available

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

In Burlington Vermont, GF operates highly sophisticated equipment and tools for the manufacturing of semiconductors, this includes 41,000 sqm of clean room space.

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

Select from:

☑ Not assessed

[Add row]

C13. Further information & sign off

(13.1) Indicate if any environmental information included in your CDP response (not already reported in 7.9.1/2/3, 8.9.1/2/3/4, and 9.3.2) is verified and/or assured by a third party?

	Other environmental information included in your CDP response is verified and/or assured by a third party	Primary reason why other environmental information included in your CDP response is not verified and/or assured by a third party	Explain why other environmental information included in your CDP response is not verified and/or assured by a third party
	Select from: ☑ No, but we plan to obtain third-party verification/assurance of other environmental information in our CDP response within the next two years	*Select from:* ☑ Not an immediate strategic priority	*Verification of other environmental information has not been pursued so far as it has not been a strategic need or priority.*

[Fixed row]

(13.3) Provide the following information for the person that has signed off (approved) your CDP response.

(13.3.1) Job title

Director Corporate EHS and Sustainability

(13.3.2) Corresponding job category

Select from:

☑ Environment/Sustainability manager

[Fixed row]

(13.4) Please indicate your consent for CDP to share contact details with the Pacific Institute to support content for its Water Action Hub website.

Select from:

☑ Yes, CDP may share our Disclosure Submission Lead contact details with the Pacific Institute