

Welcome to your CDP Water Security Questionnaire 2023

W0. Introduction

W0.1

(W0.1) Give a general description of and introduction to your organization.

GlobalFoundries (GF) is a leading manufacturer of essential semiconductors. 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. With a focus on power efficiency and integrating more features on each chip, our differentiated portfolio of advanced semiconductor technologies is powering the innovations that are transforming how humanity lives, works and connects. With a talented and diverse workforce and an at-scale manufacturing footprint spanning the U.S., Europe and Asia, GF is a trusted technology source to a broad range of worldwide customers including the global leaders in semiconductor design. With our specialized manufacturing processes, vast library of intellectual property, and differentiated technologies, we unlock value for customers by enabling them to create new devices and products that are more intelligent and intuitive, more connected and secure, and more powerful and energy efficient. GF serves high-growth markets with a focus on automotive, smart mobile devices, communications infrastructure and data centers, home and industrial Internet of Things (IoT), and personal computing. GF also serves the worldwide aerospace, defense and critical infrastructure markets. Semiconductors are at the heart of technological advancement and progress. By providing a secure and reliable supply of chips to our customers, GF creates value for society by enabling these companies to both create products needed today and accelerate the innovation of more sustainable, safer, highly connected and increasingly useful products for the future.

Since GF's founding in 2009, we have invested more than \$23 billion to create a global manufacturing footprint with multiple state-of-the-art facilities across three continents, offering customers the flexibility and security their supply chains require. We currently operate four manufacturing sites, called fabs, located in: Dresden, Germany; Singapore; Malta, New York; and Burlington, Vermont. These world-class manufacturing sites across three continents provide the scale, technology differentiation, and geographic diversification that we believe are critically important to our customers' success. Our scaled footprint also gives us the flexibility and agility to meet the dynamic needs of our customers around the globe, help them mitigate geopolitical risk, and provide greater supply chain certainty. GF is committed to providing manufacturing capacity that grows with our customers for as long as they need it, where they need it.

To meet the current and future needs of our customers, GF offers a broad range of market-driven, purpose-built technology platforms that leverage our extensive patent portfolio and deep technical expertise. We focus on manufacturing feature-rich semiconductors that include digital, analog, mixed-signal, radio frequency, ultra-low power and embedded memory solutions that connect, secure and process data, and efficiently power the digital world around us. Customers depend on GF's securely manufactured chips and our differentiated semiconductor technologies for their growing number of applications that require low power, real-time connectivity and on-board intelligence. GF's world-class manufacturing expertise is complemented by a global network of research and development, design enablement, and customer support operations. Through an intense focus on collaboration, GF has built strong strategic partnerships with a broad base of more than 250 customers (as of December 31, 2022) many of which are the global leaders in their field. Underlying all we do is our company mission and values, including our longstanding and unwavering commitment to doing the right thing as a company. Just as the chips we manufacture are vital to the innovations that are leading to a cleaner, healthier future, GF is committed to minimizing our impact on the environment, driving positive change, and creating value through corporate responsibility.

W0.2

(W0.2) State the start and end date of the year for which you are reporting data.

	Start date	End date
Reporting year	January 1, 2022	December 31, 2022

W0.3

(W0.3) Select the countries/areas in which you operate.

Germany
Singapore
United States of America

W0.4

(W0.4) Select the currency used for all financial information disclosed throughout your response.

USD

W0.5

(W0.5) Select the option that best describes the reporting boundary for companies, entities, or groups for which water impacts on your business are being reported.

Companies, entities or groups over which operational control is exercised

W0.6

(W0.6) Within this boundary, are there any geographies, facilities, water aspects, or other exclusions from your disclosure?

No

W0.7

(W0.7) Does your organization have an ISIN code or another unique identifier (e.g., Ticker, CUSIP, etc.)?

Indicate whether you are able to provide a unique identifier for your organization.	Provide your unique identifier
Yes, a Ticker symbol	GFS

W1. Current state

W1.1

(W1.1) Rate the importance (current and future) of water quality and water quantity to the success of your business.

	Direct use importance rating	Indirect use importance rating	Please explain
Sufficient amounts of good quality freshwater available for use	Important	Important	Primary direct use: Semiconductor manufacturing processes use water, specifically ultrapure water (UPW). UPW is further purified from incoming fresh water or recycled from UPW previously used in the manufacturing process, specifically in wafer cleaning processes. Availability of sufficient amounts of good quality freshwater is therefore important to GF operations. Primary indirect use: Semiconductor manufacturing uses a number of ultrapure wet chemicals in defined high purity grades. It is understood that the manufacture of these materials requires the availability of sufficient amount of good quality freshwater. Therefore the availability of sufficient amounts of good quality freshwater is rated as important for indirect use.
Sufficient amounts of recycled, brackish and/or	Important	Neutral	Primary direct use: Semiconductor manufacturing processes use water, specifically ultrapure water (UPW). UPW is further purified from incoming fresh water or

produced water available for use			recycled from UPW previously used in the manufacturing process, specifically in wafer cleaning processes. GF has extensive water reclaim (recycling and reuse) programs in place at our manufacturing facilities. Water recycling is the process that feeds previously used UPW back into the UPW purification plant. Availability of sufficient amounts of our own recycled water from GF on-site water recycling plants is therefore important to GF operations. Availability of brackish or produced water is not important. Primary indirect use: Semiconductor manufacturing uses a number of ultrapure wet chemicals in defined high purity grades. It is understood that the manufacture of these materials requires the availability of sufficient amount of good quality freshwater, and potentially of recycled water. Availability of brackish or produced water is not important. Therefore the availability of sufficient amounts of recycled, brackish and/or produced water available for indirect use is rated neutral.
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W1.2

(W1.2) Across all your operations, what proportion of the following water aspects are regularly measured and monitored?

	% of sites/facilities/operations	Frequency of measurement	Method of measurement	Please explain
Water withdrawals – total volumes	100%	Continuously	Water withdrawals are monitored at each GF manufacturing site through automated water meters.	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

				to compile a corporate quarterly total volume of water withdrawn.
Water withdrawals – volumes by source	100%	Continuously	Water withdrawals by source are monitored at each GF manufacturing site through automated water meters.	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	100%	Continuously	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.	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	100%	Continuously	Water discharges are monitored at each GF manufacturing site through automated meters.	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	100%	Continuously	Water discharges by destination are monitored at each GF manufacturing site through automated meters.	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	100%	Continuously	Water discharges by treatment method are monitored at	Water discharges by treatment method are monitored at each GF manufacturing

			each GF manufacturing site through automated meters.	site through automated meters.
Water discharge quality – by standard effluent parameters	100%	Other, please specify Water quality parameters are controlled as per wastewater permits and/or regulatory requirements in place at all sites.	Analytical control of water quality parameters as per wastewater permits and/or regulatory requirements in place at each site.	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)	100%	Other, please specify Water quality parameters are controlled as per wastewater permits and/or regulatory requirements in place at all sites.	Analytical control of water quality parameters as per wastewater permits and/or regulatory requirements in place at each site.	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	100%	Other, please specify Temperature parameters are controlled as per wastewater permits in place at all sites.	Temperature parameters are controlled as per wastewater permits in place at each site.	Temperature parameters are controlled as per wastewater permits in place at each site.
Water consumption – total volume	100%	Quarterly	Calculated quarterly by subtracting the quarterly total of water discharge from the quarterly total of water withdrawal for all GF manufacturing sites.	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	100%	Continuously	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.	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	100%	Continuously	Monitored, also as part of strategy to meet GF's own Global EHS Standards, our Commitment to the Responsible Business Alliance (RBA) Code, and legal requirements.	GF sites provide full access to water, adequate sanitation and hygiene for all workers.
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W1.2b

(W1.2b) 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?

	Volume (megaliters/year)	Comparison with previous reporting year	Primary reason for comparison with previous reporting year	Five-year forecast	Primary reason for forecast	Please explain
Total withdrawals	26,851	About the same	Increase/decrease in efficiency	Lower	Increase/decrease in efficiency	While GF production output increased from 2021 to 2022, GF total water withdrawal only increased by 0.2% from 2021 to 2022. During 2022, GF implemented water conservation projects, that annually conserve 816 megaliters of water withdrawn and contributed to more than 4 % decrease in

						normalized water withdrawal in 2022 as compared to 2021. We expect our water withdrawal to decrease over the next years as we plan to increase our water efficiency by water conservation measures even as we grow: GF's goal is to improve water use efficiency by achieving a normalized water use of 0.32 liters/Manufacturing Index or less by 2025 (33% reduction from 2020 baseline). (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 +/- 1% are considered to be "about the
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						same"; changes higher than +/- 1% but not higher than +/- 10% are considered as "higher" / "lower"; changes higher than +/- 10% are considered "much higher" / "much lower").
Total discharges	23,657	About the same	Increase/decrease in efficiency	Lower	Increase/decrease in efficiency	While GF production output increased from 2021 to 2022, GF total water discharge only increased by 0.5% from 2021 to 2022. During 2022, GF implemented water conservation projects, that annually conserve 816 megaliters of water withdrawn and contributed to a 4 % decrease in normalized water discharge in 2022 as compared to 2021. We expect our water discharge to decrease in line with the expected water

						withdrawal trend over the next years as we plan to increase our water use efficiency by water conservation measures even as we grow: GF's goal is to improve water use efficiency by achieving a normalized water use of 0.32 liters /Manufacturing Index or less by 2025 (33% reduction from 2020 baseline. (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 +/- 1% are considered to be "about the same"; changes higher than +/- 1% but not higher than +/- 10% are considered as "higher" / "lower"; changes higher than +/-
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						10% are considered "much higher" / "much lower").
Total consumption	3,194	Lower	Increase/decrease in efficiency	Lower	Increase/decrease in efficiency	In 2022, total water consumption was 1.7% lower compared to 2021. GF calculates water consumption as the delta between total water withdrawal and total water discharged in our water balance. Water consumption in semiconductor manufacturing is water that evaporates from process via the controlled air exhausts. Water is not incorporated into products. During 2022, GF implemented water conservation projects that annually conserve 816 megaliters of water withdrawn, with focus on water reclaim and reduction of

						water consumption, so therefor while water withdrawal and water discharges remained about the same from 2021 to 2022, water consumption was reduced. We expect our water consumption to decrease in line with the expected water withdrawal trend over the next years as we plan to increase our water use efficiency by water conservation measures even as we grow: GF's goal is to improve water use efficiency by achieving a normalized water use of 0.32 liters /Manufacturing Index or less by 2025 (33% reduction from 2020 baseline. (Here, GF applies a classification of
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						changes of reporting year values to the preceding year values as follows: changes that are within a variation of +/- 1% are considered to be "about the same"; changes higher than +/- 1% but not higher than +/- 10% are considered as "higher" / "lower"; changes higher than +/- 10% are considered "much higher" / "much lower").
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W1.2d

(W1.2d) Indicate whether water is withdrawn from areas with water stress, provide the proportion, how it compares with the previous reporting year, and how it is forecasted to change.

	Withdrawals are from areas with water stress	Identification tool	Please explain
Row 1	No	WRI Aqueduct	GF manufacturing sites are not located in, and do not withdraw water from, areas that are assessed as high water stress areas. GFs 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. Reflecting the WRI assessment, three GF manufacturing sites (Singapore, Malta, NY and East Fishkill, NY) in are located in areas currently assessed with a baseline water stress of "Low". Two GF manufacturing sites are located in areas with a baseline water stress of

			“Low to Medium” (Burlington, VT), or “Medium to High” (Dresden, Germany). No GF manufacturing site is located in areas assessed with a baseline water stress of “High” or “Extremely High”, defined respectively as a range from 40 percent to 80 percent and a ratio above 80 percent of total water withdrawals to available renewable surface and groundwater supplies. According to the WRI Aqueduct tool, baseline water stress is expressed as the ratio of total water withdrawals to available renewable surface and groundwater supplies. Higher values indicate more competition among users. Evaluating future water stress scenarios for our GF manufacturing sites locations using the Water Risk Atlas shows a greater than “High” water stress for Singapore. GF is well aware of this scenario, addressing it by sourcing the Singapore PUB-supplied NEWater at our Singapore site and by continuing to drive water conservation and recycling projects.
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W1.2h

(W1.2h) Provide total water withdrawal data by source.

	Relevance	Volume (megaliters/year)	Comparison with previous reporting year	Primary reason for comparison with previous reporting year	Please explain
Fresh surface water, including rainwater, water from wetlands, rivers, and lakes	Not relevant				No direct withdrawal for use at GF manufacturing sites.
Brackish surface water/Seawater	Not relevant				No direct withdrawal for use at GF manufacturing sites.
Groundwater – renewable	Relevant	1,118	Much higher	Increase/decrease in efficiency	Groundwater withdrawal as a source for water supply was only relevant to the GF site in East Fishkill,

					NY. It is used in some cases to supplement the municipal water supply. Renewable groundwater withdrawal increased by 32% in 2022 as compared to 2021. The increase was due to a need to supplement municipal water supply during 2022. (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 +/- 1% are considered to be "about the same"; changes higher than +/- 1% but not higher than +/-10% are considered as "higher" / "lower"; changes higher than +/- 10% are
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					considered "much higher" / "much lower").
Groundwater – non-renewable	Relevant	1,044	Much lower	Increase/decrease in efficiency	Groundwater withdrawal as a source for water supply was only relevant to the GF site in East Fishkill, NY. It is used in some cases to supplement the municipal water supply. Non-renewable groundwater withdrawal decreased by 17% in 2022 as compared to 2021. The decrease was due to a lower need to supplement municipal water supply with non-renewable groundwater during 2022. (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 +/- 1% are considered to be "about the same"; changes higher than +/- 1% but not higher than +/-10% are considered as "higher" / "lower"; changes higher than +/- 10% are considered "much higher" / "much lower").
Produced/Entrained water	Not relevant				No direct withdrawal for use at GF manufacturing sites.
Third party sources	Relevant	24,690	About the same	Increase/decrease in efficiency	Third party water sources are GF's major water withdrawal source. GF 2022 water withdrawal from third parties stayed the same as in 2021. During 2022, GF implemented water conservation projects, that

					annually conserve 816 megaliters of water withdrawal and which contributed to a flat third party water withdrawal even while production volume was higher in 2022 than in 2021. (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 +/- 1% are considered to be "about the same"; changes higher than +/- 1% but not higher than +/- 10% are considered as "higher" / "lower"; changes higher than +/- 10% are considered "much higher"
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					/ "much lower").
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W1.2i

(W1.2i) Provide total water discharge data by destination.

	Relevance	Volume (megaliters/year)	Comparison with previous reporting year	Primary reason for comparison with previous reporting year	Please explain
Fresh surface water	Relevant	8,011	Higher	Increase/decrease in efficiency	Wastewater to fresh surface water is only relevant to two of GF's sites: Fab 9 (Burlington, VT, USA) and Fab 10 (East Fishkill, NY, USA) discharge directly to surface waters following a rigorous combination of industrial and biological treatment processes. The 2022 discharge to fresh surface water increased by 4% as compared to 2021. (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 +/- 1% are considered to be "about the same"; changes higher than +/- 1% but not higher than +/- 10% are considered as "higher" / "lower"; changes higher than +/- 10% are considered "much higher" / "much lower").
Brackish surface water/seawater	Not relevant				GF does not discharge to brackish surface water / seawater.
Groundwater	Not relevant				GF does not discharge to groundwater.
Third-party destinations	Relevant	15,646	Lower	Increase/decrease in efficiency	In 2022, water discharge to third party destinations was 1.3% lower than in 2021. (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 +/- 1% are considered to be

					"about the same"; changes higher than +/- 1% but not higher than +/- 10% are considered as "higher" / "lower"; changes higher than +/- 10% are considered "much higher" / "much lower").
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W1.2j

(W1.2j) Within your direct operations, indicate the highest level(s) to which you treat your discharge.

	Relevance of treatment level to discharge	Volume (megaliters/year)	Comparison of treated volume with previous reporting year	Primary reason for comparison with previous reporting year	% of your sites/facilities/operations this volume applies to	Please explain
Tertiary treatment	Relevant	23,582	About the same	Divestment from water intensive technology/process	100%	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 Fab 9 and Fab 10 is not treated in GF's own wastewater treatment, but sent to third party (municipal) wastewater treatment facilities. The total volume of waste water discharged in 2022 was about the same as in 2021. While the volume of wastewater may change from year to year, there is no change in the scope of wastewater treatment
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						applicability. (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 +/- 1% are considered to be "about the same"; changes higher than +/- 1% but not higher than +/- 10% are considered as "higher" / "lower"; changes higher than +/- 10% are considered "much higher" / "much lower").
Secondary treatment	Not relevant					Not relevant to GF, as all

						production wastewater is routed through tertiary treatment prior discharge. Sanitary wastewater from GF sites with the exception of Gf Fab 9 and Fab 10 is not treated in GF's own wastewater treatment, but sent to third party (municipal) wastewater treatment facilities.
Primary treatment only	Not relevant					Not relevant to GF, as all production wastewater is routed through tertiary treatment prior discharge. Sanitary wastewater from GF sites with the exception

						of Gf Fab 9 and Fab 10 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	Not relevant					Not relevant to GF, as all production wastewater is routed through tertiary treatment prior discharge. Sanitary wastewater from GF sites with the exception of Gf Fab 9 and Fab 10 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	Relevant	75	About the same	Increase/decrease in efficiency	100%	Sanitary water discharge with the exception of Fab 9 and Fab 10, is not treated in GF's own wastewater treatment, but sent to third party (municipal) wastewater treatment facilities.
Other	Not relevant					Not relevant to GF, as all production wastewater is routed through tertiary treatment prior discharge. Sanitary wastewater from GF sites with the exception of GF Fab 9 and Fab 10 is not treated in GF's own wastewater treatment, but sent to third

						party (municipal) wastewater treatment facilities.
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W1.2k

(W1.2k) Provide details of your organization's emissions of nitrates, phosphates, pesticides, and other priority substances to water in the reporting year.

	Emissions to water in the reporting year (metric tonnes)	Category(ies) of substances included	Please explain
Row 1	335	Nitrates	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. Two of GF's sites: Fab 9 (Burlington, VT, USA) and Fab 10 (East Fishkill, NY, USA) discharge directly to surface waters following a rigorous combination of industrial and biological treatment processes. The number reported represents the 2022 emissions of Nitrate compounds from Fab 9 and Fab 10 that were reported under the U.S. EPA Toxics Release Inventory (TRI) Program.

W1.3

(W1.3) Provide a figure for your organization's total water withdrawal efficiency.

	Revenue	Total water withdrawal volume (megaliters)	Total water withdrawal efficiency	Anticipated forward trend
Row 1	8,108,000,000	26,851	301,962.68295408	We expect our water withdrawal efficiency to increase over the next years as we plan to increase our water efficiency by water conservation measures even as we grow: GF's goal is to improve water use efficiency by achieving a normalized water use of

				0.32 liters /Manufacturing Index or less by 2025 (33% reduction from 2020 baseline).
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W1.4

(W1.4) Do any of your products contain substances classified as hazardous by a regulatory authority?

	Products contain hazardous substances	Comment
Row 1	No	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).

W1.5

(W1.5) Do you engage with your value chain on water-related issues?

	Engagement
Suppliers	Yes
Other value chain partners (e.g., customers)	Yes

W1.5a

(W1.5a) Do you assess your suppliers according to their impact on water security?

Row 1

Assessment of supplier impact

No, we do not currently assess the impact of our suppliers, but we plan to do so within the next two years

Please explain

GF requires suppliers to be in conformity to the Responsible Business Alliance (RBA) Code that includes water related requirements. We have implemented a risk-based

process that assesses our major suppliers' conformity to the RBA Code: Annually, GF works with its "major" suppliers via RBA tools and platforms to assess (using self-assessment information) and verify as applicable (through on-site audit report information) the risks at GF's major suppliers for nonconformance to the RBA Code, including its environmental and water related requirements.

GF has also used RBA's annual Environmental Survey that included water reporting to better understand / quantify and water use and targets throughout our supply chain. We plan to review additional tools as available to assess the impact of our suppliers on water security.

W1.5b

(W1.5b) Do your suppliers have to meet water-related requirements as part of your organization's purchasing process?

	Suppliers have to meet specific water-related requirements
Row 1	Yes, water-related requirements are included in our supplier contracts

W1.5c

(W1.5c) Provide details of the water-related requirements that suppliers have to meet as part of your organization's purchasing process, and the compliance measures in place.

Water-related requirement

Providing fully-functioning, safely managed WASH services to all workers

Mechanisms for monitoring compliance with this water-related requirement

On-site third-party audit

Supplier self-assessment

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

Retain and engage

Comment

GF requires suppliers to be in conformity to the Responsible Business Alliance (RBA) Code. The RBA Code has a number of water provisions and requires for example that "Workers are to be provided with ready access to clean toilet facilities, potable water and sanitary food preparation, storage, and eating facilities..."

The requirement be in conformity to the RBA Code is included in our Supplier Code of Conduct, our standard contract templates, Purchase Order Terms and Conditions, Global Supplier and Subcontractor Management Policy and Material Qualification Procedure.

We have implemented a risk-based process that assesses our major suppliers' conformity to the RBA Code: Annually, GF works with its "major" suppliers via RBA tools

and platforms to assess (using self-assessment information) and verify as applicable (through on-site audit report information) the risks at GF's major suppliers for nonconformance to the RBA Code, including its environmental and water related requirements.

Water-related requirement

Other, please specify

RBA Code requirements for a water management program

Mechanisms for monitoring compliance with this water-related requirement

On-site third-party audit

Supplier self-assessment

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

Retain and engage

Comment

GF requires suppliers to be in conformity to the RBA Code. The RBA Code requires to have a water management program that documents, characterizes, and monitors water sources, use and discharge; seeks opportunities to conserve water, controls channels of contamination and ensures regulatory compliance.

The requirement be in conformity to the RBA Code is included in our Supplier Code of Conduct, our standard contract templates, Purchase Order Terms and Conditions, Global Supplier and Subcontractor Management Policy and Material Qualification Procedure.

We have implemented a risk-based process that assesses our major suppliers' conformity to the RBA Code: Annually, GF works with its "major" suppliers via RBA tools and platforms to assess (using self-assessment information) and verify as applicable (through on-site audit report information) the risks at GF's major suppliers for nonconformance to the RBA Code, including its environmental and water related requirements.

W1.5d

(W1.5d) Provide details of any other water-related supplier engagement activity.

Type of engagement

Information collection

Details of engagement

Collect water quantity information at least annually from suppliers (e.g., withdrawal and discharge volumes)

% of suppliers by number

1-25

Rationale for your engagement

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 2022 GF major supplier list covered suppliers with a cumulative spend of more than 80 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 environmental and water impact.

The aim of the annual RBA major supplier engagement is: a) to assess the risks at GF's major suppliers for nonconformance to the RBA Code, including its environmental and water related requirements (using RBA SAQs (Self-Assessment Questionnaires) and RBA Audit tools), and b) to better understand / quantify and drive environmental sustainability throughout our supply chain: The annual RBA Environmental Survey covered water withdrawal and water discharge reporting as well as reporting on water targets .

GF's major suppliers are incentivized to report the requested RBA information, including the environmental and water-related information, because the annual results of the RBA Code conformity assessment and verification process are included in our Global Supplier Ratings process, which scores supplier performance with regard to Quality, Cost, Operations, Service, Technology and Business Continuity / Compliance. Failure to be in non-conformance to the RBA Code, and failure to provide requested RBA information results in a lower supplier score.

Impact of the engagement and measures of success

Impact of engagement: The annual major supplier engagement allows GF to assess whether GF's major suppliers are at risk of non-conformance to the RBA Code, including its environmental and water related requirements. This risk is assessed using RBA SAQs (Self-Assessment Questionnaires) and RBA Audit Information. The annual RBA Environmental Survey that GF major suppliers are required to complete includes questions on water withdrawal, water discharge and water targets.

Incentive: The annual results of the RBA Code conformity assessment and verification process are included in our Global Supplier Ratings process, which scores supplier performance with regard to Quality, Cost, Operations, Service, Technology and Business Continuity / Compliance. Failure to be in non-conformance to the RBA Code, and failure to provide requested RBA information results in a lower supplier score.

Success is measured by:

a) the number of major supplier sites (in percent) with a high risk to be in nonconformance to the RBA Code: The target is 0% of major suppliers with a (confirmed) high risk to be in non-conformance to the RBA Code, including its

environmental requirements. In 2022, GF obtained RBA SAQs for 168 major supplier sites, with zero SAQs scored high risk. Of the 36 RBA audits performed at GF major supplier sites in 2021-2022, there were zero priority findings (the most severe category) on environmental provisions of the RBA Code.

b) the number of major suppliers with completed reporting on environmental data and reduction targets (in percent). The target is to drive a maximum of major suppliers to complete environmental reporting to GF.

Comment

no additional comment

W1.5e

(W1.5e) Provide details of any water-related engagement activity with customers or other value chain partners.

Type of stakeholder

Other, please specify

Universities, and other semiconductor companies in R&D Consortia on numerous environmental, health and safety impacts of semiconductor manufacturing

Type of engagement

Innovation & collaboration

Details of engagement

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

Rationale for your engagement

GF funds research in collaboration with university and industry partners to identify innovations to further reduce the semiconductor industry's environmental footprint. These partnerships address some of our most material environmental topics, such as exploring novel process chemistry solutions, developing innovative solutions for GHG emissions reduction and abatement, and identifying new technologies for specific wastewater treatment processes.

Specifically, GF is actively partnering with universities (e.g. Clarkson University, Cornell University, and others) as well as other semiconductor companies in R&D projects on various environmental, health and safety (EHS) aspects of semiconductor manufacturing processes. In 2022, with other industry partners GF sponsored 13 such university research projects, with a large share on projects that are water-related. This includes projects that research novel wastewater separation and pollutant treatment processes, improved wastewater analytical techniques, and the evaluation of chemical process alternatives to reduce the amount of specific water pollutants.

Impact of the engagement and measures of success

Measure of success is successful completion of funded projects, with useful results for GF.

W2. Business impacts

W2.1

(W2.1) Has your organization experienced any detrimental water-related impacts?

No

W2.2

(W2.2) In the reporting year, was your organization subject to any fines, enforcement orders, and/or other penalties for water-related regulatory violations?

	Water-related regulatory violations	Fines, enforcement orders, and/or other penalties	Comment
Row 1	Yes	Fines, but none that are considered as significant	The fine was not considered a significant fine.

W2.2a

(W2.2a) Provide the total number and financial value of all water-related fines.

Row 1

Total number of fines

1

Total value of fines

2,175

% of total facilities/operations associated

20

Number of fines compared to previous reporting year

Higher

Comment

GLOBALFOUNDRIES received notice of compounded fine from SGP Public Utility Board (PUB) for a discharge in January 2022. By February 2022, the root cause has been identified and corrective action implemented, and no reoccurrence has been identified by GF nor informed to GF by PUB.

A financial penalty of \$3,000 SGD (2175 USD as converted using the 2022 IRS Yearly Average Currency Exchange Rate) resulted from the NOV.

GF was not assessed a water related financial penalty or fine in the previous year, so while not considered significant the 2022 water-related fine was higher than in 2021, when there was no water-related fine.

W3. Procedures

W3.1

(W3.1) 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?

	Identification and classification of potential water pollutants	How potential water pollutants are identified and classified
Row 1	Yes, we identify and classify our potential water pollutants	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.

W3.1a

(W3.1a) Describe how your organization minimizes the adverse impacts of potential water pollutants on water ecosystems or human health associated with your activities.

Water pollutant category

Inorganic pollutants

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.

Value chain stage

Direct operations

Actions and procedures to minimize adverse impacts

Assessment of critical infrastructure and storage condition (leakages, spillages, pipe erosion etc.) and their resilience
Beyond compliance with regulatory requirements
Industrial and chemical accidents prevention, preparedness, and response
Water recycling
Reduction or phase out of hazardous substances
Discharge treatment using sector-specific processes to ensure compliance with regulatory requirements

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.

W3.3

(W3.3) Does your organization undertake a water-related risk assessment?

Yes, water-related risks are assessed

W3.3a

(W3.3a) Select the options that best describe your procedures for identifying and assessing water-related risks.

Value chain stage

Direct operations
Supply chain

Coverage

Full

Risk assessment procedure

Water risks are assessed as part of an established enterprise risk management framework

Frequency of assessment

Annually

How far into the future are risks considered?

1 to 3 years

Type of tools and methods used

Enterprise risk management
Other

Tools and methods used

Enterprise Risk Management
Internal company methods
Scenario analysis

Contextual issues considered

Water availability at a basin/catchment level
Water quality at a basin/catchment level
Impact on human health
Implications of water on your key commodities/raw materials
Water regulatory frameworks
Status of ecosystems and habitats
Access to fully-functioning, safely managed WASH services for all employees

Stakeholders considered

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

Comment

GF manages risk at the enterprise, business function and manufacturing site levels to meet our commitments to customers, shareholders, the community and employees. We have incorporated identification and oversight of ESG risks, including water related risks, into our ERM (Enterprise Risk Management), which is consistent with the ISO 31000 Risk Management standard and the COSO ("Committee of Sponsoring Organizations") framework. Management and maintenance of risk mitigation is an on-going task, and our manufacturing sites and critical business functions engage in a regular review and

assessment of risks. Risks are identified through a variety of assessment methodologies conducted by both internal and external resources. The frequency of these assessments depends on risk type but is typically annual. During this process, risks are prioritized, and mitigation strategies are identified, validated and measured. Within our ERM, responsibilities for identifying and managing risks, including water-related risks, reside with the appropriate GF functional business owners. For example, GF manufacturing sites manage water related risks on fab operations, maintaining appropriate business continuity plans and mitigation measures.

Additionally, a focused TCFD aligned assessment of climate-related risks, including water-related implications was conducted in 2022. The most significant risks identified are those that may have substantive impact and were analyzed further in a qualitative scenario-based analysis.

W3.3b

(W3.3b) Describe your organization's process for identifying, assessing, and responding to water-related risks within your direct operations and other stages of your value chain.

	Rationale for approach to risk assessment	Explanation of contextual issues considered	Explanation of stakeholders considered	Decision-making process for risk response
Row 1	GF manages risk at the enterprise, business function and manufacturing site levels to meet our commitments to customers, shareholders, the community and employees. We have incorporated identification and oversight of ESG risks (including water related risks) into our ERM, which is consistent with the ISO 31000 Risk Management standard and the COSO ("Committee of Sponsoring Organizations")	Water availability and quality at a basin/catchment level: Semiconductor manufacturing processes use water, specifically ultrapure water (UPW). Availability of sufficient amounts of good quality water at local level is therefore important to GF operations. Water related regulatory frameworks: These define the requirements for water withdrawal and wastewater discharge at our manufacturing sites.	Customers: Impact from any water-related risk (actual / or perceived) on customers is important for the company to understand and address. Employees: Employees are at the heart of everything we do, an important stakeholder group to our company. For employees, potential risk specifically relating to access to fully functioning, safely managed WASH services for all employees, and impacts to human	Management and maintenance of risk mitigation is an on-going task, and our manufacturing sites and critical business functions engage in a regular review and assessment of risks. Risks are identified through a variety of assessment methodologies conducted by both internal and external resources. The frequency of these assessments depends on risk type but is typically annual. During this process, risks are prioritized, and mitigation

	framework. Management and maintenance of risk mitigation is an on-going task, and our manufacturing sites and critical business functions engage in a regular review and assessment of risks. Risks are identified through a variety of assessment methodologies conducted by both internal and external resources. The frequency of these assessments depends on risk type but is typically annual. During this process, risks are prioritized, and mitigation strategies are identified, validated and measured.	Status of ecosystems and habitats, and Impact on human health: Depending on individual manufacturing site's water sources and wastewater discharge destinations, this may be relevant, for example, where a GF site's water withdrawal and discharge may have impact on regional ecosystems and habitats, or on drinking water. Access to fully functioning, safely managed WASH services for all employees: All of GF sites have fully functioning, safely managed WASH services for all employees in place. This is a legal requirement at each of our sites, a requirement of the RBA Code to which we are committed to, and our EHS Policy commits us to a beyond compliance approach. Impact of water on key commodities: Semiconductor manufacturing uses a number of ultrapure wet chemicals in defined high purity grades. It is	health is considered relevant. Local Communities and Water Utilities at local level are relevant stakeholder groups, specifically in regards to potential risks to water availability and quality at a basin/catchment level, as well as to status of ecosystems and habitats, and Impact on human health. Investors: Impact from any water-related risk (actual / or perceived) on investors is important for the company to understand and address. Regulators: Regulators are relevant stakeholders, specifically in regards to potential risks on GF from water related regulatory frameworks changes. Suppliers: are relevant stakeholders, specifically in regards to potential water related risks on key commodities in the supply chain	strategies are identified, validated and measured. Within our ERM, responsibilities for identifying and managing risks reside with the appropriate GF functional business owners.
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		understood that the manufacture of these materials requires the availability of sufficient amount of good quality freshwater.		
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W4. Risks and opportunities

W4.1

(W4.1) Have you identified any inherent water-related risks with the potential to have a substantive financial or strategic impact on your business?

No

W4.1a

(W4.1a) How does your organization define substantive financial or strategic impact on your business?

GF's ERM (Enterprise-wide Risk Management) integrates risk management practices into business processes and operations for safeguarding assets, achieving competitive advantage and enabling GF's growth and success. ESG risks, including water related risks, are evaluated within GF's ERM.

GF defines "substantive financial or strategic impact" as an impact that has a high probability to manifest a significant impact to the business.

GF uses risk severity and vulnerability to determine if a potential risk is significant considering impacts on:

- GF property, operations, and business continuity,
- GF personnel;
- upstream supply chain, utilities, and materials cost and continuity, and/or
- compliance, regulatory and quality related, and resulting reputational risks.

An impact that exceeds a defined threshold of severity and vulnerability combined and/ or if it exceeds 1% of annual corporate revenue is considered to be a substantive impact.

GF's risk factors are described in our 2022 Annual Report on Form 20-F ("Key Information", section D "Risk Factors Summary"), filed on April 14, 2023.

W4.2b

(W4.2b) Why does your organization not consider itself exposed to water risks in its direct operations with the potential to have a substantive financial or strategic impact?

Primary reason	Please explain
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Row 1	Risks exist, but no substantive impact anticipated	GF's ERM (Enterprise-wide Risk Management) integrates risk management practices into business processes and operations for safeguarding assets, achieving competitive advantage and enabling GF's growth and success. ESG risks, including water related risks, are evaluated within GF's ERM. GF defines "substantive financial or strategic impact" as an impact that has a high probability to manifest a significant impact to the business. GF uses risk severity and vulnerability to determine if a potential risk is significant considering impacts on: - GF property, operations, and business continuity, - GF personnel; - upstream supply chain, utilities, and materials cost and continuity, and/or - compliance, regulatory and quality related, and resulting reputational risks. An impact that exceeds a defined threshold of severity and vulnerability combined and/ or if it exceeds 1% of annual corporate revenue is considered to be a substantive impact. Water-related risks in GF's direct operations have not been prioritized at the level of significant (substantive) risks to date.
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W4.2c

(W4.2c) Why does your organization not consider itself exposed to water risks in its value chain (beyond direct operations) with the potential to have a substantive financial or strategic impact?

	Primary reason	Please explain
Row 1	Risks exist, but no substantive impact anticipated	GF's ERM (Enterprise-wide Risk Management) integrates risk management practices into business processes and operations for safeguarding assets, achieving competitive advantage and enabling GF's growth and success. ESG risks, including water related risks, are evaluated within GF's ERM. GF defines "substantive financial or strategic impact" as an impact that has a high probability to manifest a significant impact to the business. GF uses risk severity and vulnerability to determine if a potential risk is significant considering impacts on: - GF property, operations, and business continuity, - GF personnel; - upstream supply chain, utilities, and materials cost and continuity, and/or - compliance, regulatory and quality related, and resulting reputational risks. An impact that exceeds a defined threshold of severity and vulnerability combined and/ or if it exceeds 1% of annual corporate revenue is considered to be a substantive impact.

		Water-related risks in our upstream supply chain have not been prioritized at the level of significant (substantive) risks to date.
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W4.3

(W4.3) Have you identified any water-related opportunities with the potential to have a substantive financial or strategic impact on your business?

No

W4.3b

(W4.3b) Why does your organization not consider itself to have water-related opportunities?

	Primary reason	Please explain
Row 1	Opportunities exist, but none with potential to have a substantive financial or strategic impact on business	GLOBALFOUNDRIES manufacturing sites are located around the globe, implying a spread of risk – regional risks or threats should impact only a fraction of our operations. Moreover, GF manufacturing sites are located outside of high baseline water stress regions (as per WRI Aqueduct Water Risk Atlas), representing an opportunity in regards to resilience against water-related risks. To date water-related opportunities have not been quantified in regards to a potential substantive financial or strategic impact on business.

W6. Governance

W6.1

(W6.1) Does your organization have a water policy?

Yes, we have a documented water policy that is publicly available

W6.1a

(W6.1a) Select the options that best describe the scope and content of your water policy.

	Scope	Content	Please explain
Row 1	Company-wide	Description of business dependency on water Description of business impact on water	GF's Global EHS Policy and Standards are the foundation of our multisite ISO 14001 certified Environmental Management System. 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

	Commitment to prevent, minimize, and control pollution Commitment to reduce water withdrawal and/or consumption volumes in direct operations Commitment to safely managed Water, Sanitation and Hygiene (WASH) in the workplace Commitments beyond regulatory compliance Reference to company water-related targets Recognition of environmental linkages, for example, due to climate change	conservation (including water conservation), wastewater, groundwater and stormwater management. GLOBALFOUNDRIES EHS Policy is based on the following principles: - Beyond Compliance - Sustainable Manufacturing - Forward-thinking - Stakeholder Engagement Our 2023 CR Report describes the relevance of water to our business (i.e. our business dependence on water), GF's management approach to wastewater, groundwater and stormwater management, as well as our water goal to further improve our water use efficiency by achieving a normalized water use of 0.32 liters /MI or less by 2025. GF is a member of the Responsible Business Alliance (RBA) and committed to the RBA Code. The RBA Code has the requirements to provide Water, Sanitation, and Hygiene (WASH) services by requiring that "Workers are to be provided with ready access to clean toilet facilities, potable water and sanitary food preparation, storage, and eating facilities..." GF is committed to this requirement though our commitment to the RBA Code.
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W6.2

(W6.2) Is there board level oversight of water-related issues within your organization?

Yes

W6.2a

(W6.2a) Identify the position(s) (do not include any names) of the individual(s) on the board with responsibility for water-related issues.

Position of individual or committee	Responsibilities for water-related issues
Board-level committee	The Board oversees the Company's ESG matters and programs through the ARCC and the Company's management team presents updates to the ARCC at least biannually. The ARCC guides the company's approach to ESG-related strategy, policies and disclosures, specifically including for water related topics. The ARCC's ESG-related recommendations are reported to the full Board for strategic decision-making. The ARCC also reviews the results of ESG-related audits, including those performed by GF's Internal Audit function. Through the ARCC, in 2022, GF has established Board-level ESG goals, including

	a water related goal to improve water use efficiency to 0.32 Liter per Manufacturing Index (MI) by 2025.
Board Chair	The Board oversees the Company's ESG matters and programs through the ARCC and the Company's management team presents updates to the ARCC at least biannually. The ARCC's ESG-related recommendations are reported to the full Board for strategic decision-making.

W6.2b

(W6.2b) Provide further details on the board's oversight of water-related issues.

	Frequency that water-related issues are a scheduled agenda item	Governance mechanisms into which water-related issues are integrated	Please explain
Row 1	Scheduled - some meetings	Monitoring implementation and performance Monitoring progress towards corporate targets Overseeing the setting of corporate targets Providing employee incentives Reviewing and guiding corporate responsibility strategy Reviewing and guiding strategy	The Board oversees the Company's ESG matters and programs through the ARCC and the Company's management team presents updates to the ARCC at least biannually. The ARCC guides the company's approach to ESG-related strategy, policies and disclosures, specifically including for water related topics. The ARCC's ESG-related recommendations are reported to the full Board for strategic decision-making. GF has established Board-level ESG goals, including water related goals. Accountability for achieving these goals is placed on the company's Senior Leadership Team (SLT).

W6.2d

(W6.2d) Does your organization have at least one board member with competence on water-related issues?

	Board member(s) have competence on water-related issues	Criteria used to assess competence of board member(s) on water-related issues
Row 1	Yes	Criteria used to assess competence of at least one board member on water-related issues are based on Board Members relevant experience or skills, such as industry experience, financial skills or leadership skills.

		For example, relevant experience or skills on water-related issues includes leadership experience in companies with documented actions to integrate ESG (Environmental, Social and Governance) considerations into their decision making. Relevant experience or skills on water-related issues also includes relevant industry experience and leadership in companies whose business model primarily is to drive clean technologies, sustainable development and, or renewable energy advancement.
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W6.3

(W6.3) Provide the highest management-level position(s) or committee(s) with responsibility for water-related issues (do not include the names of individuals).

Name of the position(s) and/or committee(s)

Chief Executive Officer (CEO)

Water-related responsibilities of this position

Setting water-related corporate targets
 Monitoring progress against water-related corporate targets
 Managing annual budgets relating to water security
 Providing water-related employee incentives

Frequency of reporting to the board on water-related issues

Quarterly

Please explain

Key ESG policy decisions and long-term goals, including GF's water related goal, are approved by the Chief Executive Officer, in addition to the oversight provided by the Board and the ARCC.

GF has established Board-level ESG goals that include a water related goal.

Accountability for achieving these goals is placed on the company's Senior Leadership Team (SLT), led by the CEO

In 2023, the Board's ESG goals (including the company's water goal) became a component of the Company's incentive-based compensation program for the Senior Leadership Team.

W6.4

(W6.4) Do you provide incentives to C-suite employees or board members for the management of water-related issues?

	Provide incentives for management of water-related issues	Comment
Row 1	Yes	no additional comment

W6.4a

(W6.4a) What incentives are provided to C-suite employees or board members for the management of water-related issues (do not include the names of individuals)?

	Role(s) entitled to incentive	Performance indicator	Contribution of incentives to the achievement of your organization's water commitments	Please explain
Monetary reward	Corporate executive team	Improvements in water efficiency – direct operations	The incentive contributes to an increased focus of GF's Senior Leadership Team (SLT) on the status of progress against our water goal to improve water use efficiency to 0.32 Liter per Manufacturing Index (MI) by 2025.	In 2022, GF has established Board-level ESG goals, including a water related goal to improve water use efficiency to 0.32 Liter per Manufacturing Index (MI) by 2025. In 2023, the Board's ESG goals became a component of the Company's incentive-based compensation program for the Senior Leadership Team.
Non-monetary reward	Chief Sustainability Officer (CSO)	Improvements in water efficiency – direct operations Company performance against a sustainability index with water-related factors (e.g., DJSI, CDP Water Security score, etc.)	According to our ESG governance structure, GF's Head of Global ESG and GF's Global EHS and CSR Director have key responsibility to drive GF's water related programs and attainment of our water goal. Positive progress of GF's water related programs and progress towards our goal will reflect positively to the annual performance review of GF's Head of Global ESG and GF's Global EHS and CSR Director.	GF focuses on leadership and professional skill development and provide the opportunity for personal development through our performance management processes. All GF employees participate in this annual process which is designed to help GF employees and managers align and engage in goal setting and professional development planning to deliver results for our company, and for our employees' future and growth.

W6.5

(W6.5) Do you engage in activities that could either directly or indirectly influence public policy on water through any of the following?

Yes, trade associations

W6.5a

(W6.5a) What processes do you have in place to ensure that all of your direct and indirect activities seeking to influence policy are consistent with your water policy/water commitments?

As according to the mechanisms within our ESG Governance structure: The Global EHS & CSR Director and/or the Head of Global ESG oversee our trade associations engagement regarding ESG related topics, including environmental 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 is responsible for setting strategic direction, conducting management reviews, and providing guidance and approval regarding ESG related topics, including environmental and water-related topics.

W6.6

(W6.6) Did your organization include information about its response to water-related risks in its most recent mainstream financial report?

No, and we have no plans to do so

W7. Business strategy

W7.1

(W7.1) Are water-related issues integrated into any aspects of your long-term strategic business plan, and if so how?

	Are water-related issues integrated?	Long-term time horizon (years)	Please explain
Long-term business objectives	No, water-related issues were reviewed but not considered as strategically relevant/significant	5-10	Water related issues are not assessed as having a significant influence.
Strategy for achieving long-term objectives	No, water-related issues were reviewed but not considered as strategically relevant/significant	5-10	Water related issues are not assessed as having a significant influence.
Financial planning	Yes, water-related issues are integrated	5-10	Water related issues are integrated as part of strategic utility cost

			considerations, such as investment costs for water conservation projects.
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W7.2

(W7.2) 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?

Row 1

Water-related CAPEX (+/- % change)

18

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

-54

Water-related OPEX (+/- % change)

23

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

6

Please explain

The percentages provided for water-related CAPEX and OPEX changes are based on actual water-related spend data in both categories for 2021 and 2022.

The water related CAPEX increase of 18% from 2021 to 2022 was caused mainly by spend for water-related facilities upgrade projects.

The water related OPEX increase of 23 % from 2021 to 2022 was caused mainly by price increases for water at one of GF's manufacturing sites.

The percentages provided for the anticipated forward trend for water-related CAPEX and OPEX are based on actual spend data for 2022 and on forecasted 2023 spend in both categories.

The anticipated forward trend for water-related CAPEX of -54% from 2022 to 2023 is due to completion of certain expansion projects.

The anticipated forward trend for water-related OPEX of 6% from 2022 to 2023 is nearly flat.

W7.3

(W7.3) Does your organization use scenario analysis to inform its business strategy?

Use of scenario analysis	Comment
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Row 1	Yes	In 2022, GF conducted a TFCD-aligned climate risk assessment and a qualitative scenario analysis that utilized selected low and high emissions scenarios.
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W7.3a

(W7.3a) Provide details of the scenario analysis, what water-related outcomes were identified, and how they have influenced your organization's business strategy.

	Type of scenario analysis used	Parameters, assumptions, analytical choices	Description of possible water-related outcomes	Influence on business strategy
Row 1	Climate-related	In 2022, GF conducted a TFCD-aligned climate risk assessment and a qualitative scenario analysis that utilized selected low and high emissions scenarios (Transition scenarios: IEA STEPS, EIA SDS; physical climate scenarios: SSP5-8.5, SSP1-2.6) to analyze selected potential climate-related risk areas. These included acute physical risk for GF operations, chronic physical risk for GF operations, acute physical risk in GF supply chain.	Potential water-related outcomes were implied in the qualitative scenario analysis for the potential climate related physical risks included in the qualitative scenario analysis: Acute physical risk for GF operations, chronic physical risk for GF operations, acute physical risk in GF supply chain. We do not expect any of the evaluated risks to present material impacts in the short-term (within the next 2 years) to mid-term (2-5 years). As water-related outcomes were implied in the analysis, we also do not expect any significant water related outcomes in the short-term (within the next 2 years) to mid-term (2-5 years).	Based on the analysis results, as we do not expect any of the evaluated risks to present material impacts in the short-term (within the next 2 years) to mid-term (2-5 years), we also do not expect any significant water related outcomes in the timeframe covered. Our business strategy will continue to focus on water efficiency.

W7.4

(W7.4) Does your company use an internal price on water?

Row 1

Does your company use an internal price on water?

Yes

Please explain

GF manufacturing sites each use an internal water price to assess water conservation projects. Because GF manufacturing sites are located around the globe, local water context differs significantly from region to region and from site to site, so that the water prices used are specific to each GF manufacturing facility.

W7.5

(W7.5) Do you classify any of your current products and/or services as low water impact?

	Products and/or services classified as low water impact	Primary reason for not classifying any of your current products and/or services as low water impact	Please explain
Row 1	No, and we do not plan to address this within the next two years	Judged to be unimportant, explanation provided	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. Therefore, at this stage, GF does not classify any current products / or services as low water impact.

W8. Targets

W8.1

(W8.1) Do you have any water-related targets?

Yes

W8.1a

(W8.1a) Indicate whether you have targets relating to water pollution, water withdrawals, WASH, or other water-related categories.

	Target set in this category	Please explain
Water pollution	No, but we plan to within the next two years	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	Yes	
Water, Sanitation, and Hygiene (WASH) services	No, and we do not plan to within the next two years	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 are to be provided with ready access to clean toilet facilities, potable water and sanitary food preparation, storage, and eating facilities..." GF is already committed to and is meeting this requirement, so does not plan to establish it as a public goal.
Other	No, and we do not plan to within the next two years	At this time, we do not have any other specific plans.

W8.1b

(W8.1b) Provide details of your water-related targets and the progress made.

Target reference number

Target 1

Category of target

Water withdrawals

Target coverage

Company-wide (direct operations only)

Quantitative metric

Reduction in withdrawals per unit of production

Year target was set

2022

Base year

2020

Base year figure

0.48

Target year

2025

Target year figure

0.32

Reporting year figure

0.36

% of target achieved relative to base year

75

Target status in reporting year

Underway

Please explain

Our goal is to: Improve water use efficiency by achieving a normalized water use of 0.32 liters /Manufacturing Index (MI) or less by 2025 (33% reduction from 2020 baseline). We normalize data from operations using an industry standard Manufacturing Index (MI). The MI is derived from the number of wafers manufactured, the number of masking steps in our fabrication processes (reflecting process complexity), and the total area of wafers produced.

Absolute 2022 water withdrawal slightly decreased by 1.5 percent since 2020 even though production increased. In 2022 alone GF executed projects that annually save more than 816 thousand m³ of water. As a consequence, in 2022, GF's water intensity (our normalized rate of water withdrawal) decreased by nearly 24 percent compared to 2020 representing a significant improvement in water efficiency.

W9. Verification

W9.1

(W9.1) Do you verify any other water information reported in your CDP disclosure (not already covered by W5.1a)?

No, we do not currently verify any other water information reported in our CDP disclosure

W10. Plastics

W10.1

(W10.1) Have you mapped where in your value chain plastics are used and/or produced?

	Plastics mapping	Please explain
Row 1	Not mapped – and we do not plan to within the next two years	GF manufactures die patterned semiconductors, so our primary business activities are not related to manufacture or use of plastics.

W10.2

(W10.2) Across your value chain, have you assessed the potential environmental and human health impacts of your use and/or production of plastics?

	Impact assessment	Please explain
Row 1	Not assessed – and we do not plan to within the next two years	GF manufactures die patterned semiconductors, so our primary business activities are not related to manufacture or use of plastics.

W10.3

(W10.3) Across your value chain, are you exposed to plastics-related risks with the potential to have a substantive financial or strategic impact on your business? If so, provide details.

	Risk exposure	Please explain
Row 1	Not assessed – and we do not plan to within the next two years	GF manufactures die patterned semiconductors, so our primary business activities are not related to manufacture or use of plastics.

W10.4

(W10.4) Do you have plastics-related targets, and if so what type?

	Targets in place	Please explain
Row 1	No – and we do not plan to within the next two years	GF manufactures die patterned semiconductors, so our primary business activities are not related to manufacture or use of plastics.

W10.5

(W10.5) Indicate whether your organization engages in the following activities.

	Activity applies	Comment
Production of plastic polymers	No	Not a business activity. GF manufactures die patterned semiconductors.
Production of durable plastic components	No	Not a business activity . GF manufactures die patterned semiconductors.
Production / commercialization of durable plastic goods (including mixed materials)	No	Not a business activity . GF manufactures die patterned semiconductors.
Production / commercialization of plastic packaging	No	Not a business activity . GF manufactures die patterned semiconductors.
Production of goods packaged in plastics	No	Not a business activity . GF manufactures die patterned semiconductors.
Provision / commercialization of services or goods that use plastic packaging (e.g., retail and food services)	No	Not a business activity . GF manufactures die patterned semiconductors.

W11. Sign off

W-FI

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

No additional comment.

W11.1

(W11.1) Provide details for the person that has signed off (approved) your CDP water response.

	Job title	Corresponding job category
Row 1	Head of Global ESG	Chief Sustainability Officer (CSO)

Submit your response

In which language are you submitting your response?

Please confirm how your response should be handled by CDP

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

Please indicate your consent for CDP to share contact details with the Pacific Institute to support content for its Water Action Hub website.

Please confirm below