

W0. Introduction

W0.1

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

Micron is a global leader in memory and storage solutions. With a relentless focus on our customers, technology leadership, manufacturing and operational excellence, Micron delivers a rich portfolio of high-performance DRAM, NAND and NOR memory and storage products. Every day, the innovations that our people create fuel the data economy, enabling advances in artificial intelligence (AI) and 5G applications that unleash opportunities — from the data center to the intelligent edge and across the client and mobile user experiences. Micron’s team members live our values: collaboration, customer focus, innovation, people and tenacity. We share a common goal to pursue technology and product innovation and manufacturing excellence for our customers, partners, communities and society. For nearly 45 years and with more than 52,000 patents granted (and growing), Micron has delivered products that have helped transform how the world uses information to enrich life for all.

Continuous improvement of our environmental performance is a long-term commitment and we take a proactive approach to environmental stewardship, occupational health and safety, and high-quality product standards. Compliance with applicable environmental regulations is considered a minimum standard and Micron implements additional programs where appropriate to provide greater environmental performance and protection. An integral part of this mission is Micron’s commitment to environmental compliance and protection that serves our team members, our customers and the communities in which we operate. Continuous improvement of our environmental performance is a long-term component of Micron’s business mission. Visit micron.com/sustainability for more information.

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.

- China
- Japan
- Malaysia
- Singapore
- Taiwan, China
- 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?

Yes

W0.6a

(W0.6a) Please report the exclusions.

Exclusion	Please explain
Excluded non-manufacturing locations, including office-based activities (design, marketing, sales)	Water use is negligible (<<1%) compared to water use of our manufacturing sites.

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, an ISIN code	US5951121038
Yes, a Ticker symbol	NASDAQ: MU

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	Vital	Important	Semiconductor manufacturing is a water-intensive process where each wafer used to make our products goes through a series of cleaning steps, which are dependent on ultra-pure water.
Sufficient amounts of recycled, brackish and/or produced water available for use	Important	Important	As semiconductor technologies have become more complex, demand for water has grown. Micron proactively manages water consumption by identifying opportunities to increase water efficiency and reduce raw water demand. Our manufacturing sites generate ultra-pure water from a combination of recycled water from our operations and local raw water resources.

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%	Daily	meter reading	Water withdrawals (total volume) are tracked across all locations on a daily basis at a minimum
Water withdrawals – volumes by source	100%	Daily	meter reading	Water withdrawals volume by source are tracked across all locations on a daily basis at a minimum
Entrained water associated with your metals & mining and/or coal sector activities - total volumes [only metals and mining and coal sectors]	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Produced water associated with your oil & gas sector activities - total volumes [only oil and gas sector]	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Water withdrawals quality	100%	Daily	online sensors	Quality of incoming water is tracked across all locations on a daily basis
Water discharges – total volumes	100%	Monthly	meter reading	Water discharge is tracked across all locations - frequency might vary as per local requirement.
Water discharges – volumes by destination	100%	Daily	meter reading	Water discharge by destination (Public sewer with POTW, Public sewer w/o POTW, Water body like river, sea, etc.) is tracked across all manufacturing locations.
Water discharges – volumes by treatment method	100%	Daily	meter reading	Water discharge is tracked across all locations on a daily basis
Water discharge quality – by standard effluent parameters	100%	Other, please specify (Continuous and periodic)	Online monitoring of critical parameters and periodic monitoring (weekly, monthly) of all parameters in accordance with local requirements.	Water discharge quality by standard effluent parameters is regularly monitored, reported, and documented by site-level environmental engineering team to ensure compliance with applicable standards/regulations. Discharge monitoring only applies to manufacturing locations then monitored 100%.
Water discharge quality – emissions to water (nitrates, phosphates, pesticides, and/or other priority substances)	100%	Other, please specify (Periodic monitoring)	sampling and analytical test	Periodic monitoring based upon local requirements for these specific parameters where applicable
Water discharge quality – temperature	100%	Other, please specify (Periodic monitoring)	Periodic monitoring based upon local requirements for this specific parameter	Temperature of water discharged is regularly monitored at all manufacturing locations. Discharge monitoring only applies to manufacturing locations then monitored 100%
Water consumption – total volume	100%	Monthly	Calculation: total withdrawal - total water discharge	Water consumption (total volume) is relevant across Micron manufacturing locations, hence monitored 100%.
Water recycled/reused	100%	Monthly	Meter reading and calculation	Water recycled and reused is regularly monitored and reported across Micron manufacturing locations. Recycled/reused water only applies to manufacturing locations then monitored 100%.
The provision of fully-functioning, safely managed WASH services to all workers	100%	Continuously	All facilities (manufacturing and non-manufacturing) have water supply, adequate sanitation and hygiene service for all workers.	All facilities (manufacturing and non-manufacturing) have water supply, adequate sanitation and hygiene service for all workers.

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	58336	Higher	Increase/decrease in business activity	Higher	Facility expansion	Significant manufacturing expansion planned in the next 5 years. New factories will be designed with the latest water efficiency and reuse/recycle solutions to minimize water withdrawal.
Total discharges	43747	Higher	Increase/decrease in business activity	Higher	Facility expansion	Significant manufacturing expansion planned in the next 5 years. New factories will be designed with the latest water efficiency and reuse/recycle solutions to minimize water discharge.
Total consumption	14590	Higher	Increase/decrease in business activity	Higher	Facility expansion	Significant manufacturing expansion planned in the next 5 years. New factories will be designed with the latest water efficiency and reuse/recycle solutions to minimize water consumption.

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	% withdrawn from areas with water stress	Comparison with previous reporting year	Primary reason for comparison with previous reporting year	Five-year forecast	Primary reason for forecast	Identification tool	Please explain
Row 1	Yes	Less than 1%	About the same	Other, please specify (no change in geographies and water usage share)	Please select	Please select	WRI Aqueduct	Water stress assessment updated through WRI Aqueduct 3.0 water risk atlas. Results have not changed compared to CY2021 results. Only 1 location in China is classified as extremely high stress area that represents 0.9% of total withdrawals.

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	Relevant	1395	Higher	Increase/decrease in business activity	Increased loading at manufacturing location using surface water.
Brackish surface water/Seawater	Not relevant	<Not Applicable>	<Not Applicable>	<Not Applicable>	NOT APPLICABLE
Groundwater – renewable	Relevant	4574	Lower	Facility closure	CY22 data does not include water consumption of a facility separated at the end of CY21 that was using about 30% of total groundwater.
Groundwater – non-renewable	Not relevant	<Not Applicable>	<Not Applicable>	<Not Applicable>	NOT APPLICABLE
Produced/Entrained water	Not relevant	<Not Applicable>	<Not Applicable>	<Not Applicable>	NOT APPLICABLE
Third party sources	Relevant	52355	Higher	Increase/decrease in business activity	Increase in water incoming needs as per increased manufacturing volumes, mitigated by a significant increase of reuse/recycle water capacity.

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	5365	Lower	Increase/decrease in efficiency	Decreased by 5% thanks to the increased reuse/recycle capacity installed at relevant locations.
Brackish surface water/seawater	Not relevant	<Not Applicable>	<Not Applicable>	<Not Applicable>	NOT APPLICABLE
Groundwater	Not relevant	<Not Applicable>	<Not Applicable>	<Not Applicable>	NOT APPLICABLE
Third-party destinations	Relevant	38382	Higher	Increase/decrease in business activity	Consequence of total withdrawal increase - mitigated increase by additional reuse/recycle activities

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	43747	Higher	Increase/decrease in business activity	100%	We use tertiary treatment for all wastewater generated by our manufacturing locations and it has not changed compared to 2021 practice.
Secondary treatment	Not relevant	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>	Not applicable
Primary treatment only	Not relevant	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>	Not applicable
Discharge to the natural environment without treatment	Not relevant	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>	Not applicable
Discharge to a third party without treatment	Not relevant	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>	Not applicable
Other	Not relevant	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>	Not applicable

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	List the specific substances included	Please explain
Row 1	0	Pesticides	<Not Applicable>	we do not use pesticides in our manufacturing process.

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	271560000	58336	465510.148107515	Revenue-based efficiency is a highly variable (and therefore poor) metric in a cyclical industry. Micron does not project a trend.

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	Please select	<Not Applicable>

W1.5

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

	Engagement	Primary reason for no engagement	Please explain
Suppliers	Yes	<Not Applicable>	<Not Applicable>
Other value chain partners (e.g., customers)	Yes	<Not Applicable>	<Not Applicable>

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

Considered in assessment

<Not Applicable>

Number of suppliers identified as having a substantive impact

<Not Applicable>

% of total suppliers identified as having a substantive impact

<Not Applicable>

Please explain

We engage suppliers in the CDP Supply Chain program and we measure response.

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	Comment
Row 1	No, but we plan to introduce water-related requirements within the next two years	Micron is going to evaluate what water related requirements shall be considered.

W1.5d

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

Type of engagement

Information collection

Details of engagement

Other, please specify (CDP Supply Chain - Water Security response)

% of suppliers by number

1-25

% of suppliers with a substantive impact

<Not Applicable>

Rationale for your engagement

Micron began piloting information collection from suppliers in early 2020, and joined CDP's supply chain program in early 2021 for both Climate Change and Water Risk programs.

We chose large, strategic suppliers that have the potential for significant greenhouse gas emissions and water consumption. CDP conducted outreach to suppliers and shared completed questionnaires with Micron. Micron reviewed responses and engaged with suppliers based on completeness and accuracy of response. We used data collected through CDP Supply Chain to review water performance and risks.

Impact of the engagement and measures of success

Measures of success include total number and percent of suppliers engaged, response rate, and number that improve their performance because of Micron's engagement. Total number of suppliers engaged through CDP's supply chain program in 2022 was 112 (compared to 67 in 2021), with response rate of 84% (compared to 79% of previous year)

Comment

Improved response rate and quality of the data compared to last year, despite the significantly increased number of suppliers engaged.

W1.5e

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

Type of stakeholder

Customers

Type of engagement

Education / information sharing

Details of engagement

Educate and work with stakeholders on understanding and measuring exposure to water-related risks

Rationale for your engagement

We recognize that our manufacturing process is water-intensive and contributes to the global environmental impact of technology. We routinely meet with our customers to understand how we are performing from their perspective.

We engage in several industry organizations alongside our customers, building industry consensus across a range of social and environmental issues specific to our industry – such as conflict minerals, supply chain labor standards and climate-related matters. This is why we partner with our customers to improve our water management program by implementing risk control measures and investing in water reduction-saving opportunities identified at all manufacturing locations.

Impact of the engagement and measures of success

Cross-functional teams review the outcomes of interactions with customers, as well as written customer requirement documents, and assess opportunities for improvement. A monthly meeting of executives and senior leaders drives accountability for the improvements we undertake in response to key customer expectations and requirements.

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	No	<Not Applicable>	not applicable

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	Please explain
Row 1	Yes, we identify and classify our potential water pollutants	Micron maintains an ongoing improvement program to reduce hazardous chemicals used in manufacturing and evaluates what can be done to mitigate environmental impacts that may stem from the use of chemicals. Micron's commitments to enhancing safety and reducing potential impact to human health and environment start with a rigorous review process of chemicals used at our facilities. This review is intended to prevent banned or restricted chemicals from reaching our operations and determines the proper handling, use, recycling or disposal of chemicals, including the identification and control of water pollutants.	<Not Applicable>

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

Other, please specify (Physical and chemical parameters)

Description of water pollutant and potential impacts

Physical and chemical parameters as applicable to our manufacturing process and as driven by local requirements

Value chain stage

Direct operations

Actions and procedures to minimize adverse impacts

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

Please explain

Each manufacturing site is equipped with a specific wastewater treatment facility that has dedicated lines for the removal of pollutants to ensure compliance with regulatory 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

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

Tools on the market

Enterprise risk management

International methodologies and standards

Tools and methods used

WRI Aqueduct

COSO Enterprise Risk Management Framework

Alliance for Water Stewardship Standard

Environmental Impact Assessment

ISO 14001 Environmental Management Standard

Contextual issues considered

Other, please specify (water availability and quality)

Stakeholders considered

Customers

Employees

Investors

Local communities

Regulators

Water utilities at a local level

Comment

Micron's goal is to integrate risk management practices companywide to improve decision-making in governance, strategy, objective-setting and daily operations. We do this by providing tools and knowledge, facilitating open global communication and monitoring continuously. Micron has a network of risk management teams operating across the company, including in our EHS, IT, business continuity, global quality management, enterprise risk management (ERM) and internal audit groups.

Our ERM organization accumulates key risk information from the executive risk committee, made up of select company executives, along with risk assessments performed by other teams. These results are regularly presented to the executive risk committee, the audit committee of the board of directors, and Micron's full board of directors for consideration.

Water-related risks and opportunities are identified and prioritized by EHS and Sustainability, considering criteria that include business continuity, impact to brand/reputation, relevance to regional operations, alignment with Micron business strategy, impact to communities, and compliance considerations. Micron routinely monitors water regulations and policy to understand and evaluate impacts to, and opportunities for, our business, customers, and the communities where we operate.

Value chain stage

Supply chain

Coverage

Partial

Risk assessment procedure

Water risks are assessed as part of other company-wide risk assessment system

Frequency of assessment

Not defined

How far into the future are risks considered?

Up to 1 year

Type of tools and methods used

Other

Tools and methods used

Internal company methods

External consultants

Contextual issues considered

Other, please specify (water availability and quality)

Stakeholders considered

Suppliers

Comment

Micron identifies water risks in its supply chain using site-level business continuity processes, ongoing risk analysis and 3rd party risk monitoring services.

(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	Micron generates water-use projections at least once a year, and more frequently if needed (e.g. in connection with major acquisitions or construction).	These projections are evaluated in the context of water availability, contractual obligations, physical and technical constraints (e.g., infrastructure), regulatory limits and community needs (e.g., public commitments, goals, etc.).	local authorities, local community	Based upon risk assessment results, actions are then defined to ensure appropriate supply for our operations.

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?

Yes, only within our direct operations

W4.1a

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

A substantive strategic impact on Micron's business is one which directly and significantly affects the company's markets or ability to manufacture its products. One indicator used to define substantive strategic impact is customer ratings of Micron performance, which frequently include water-related indicators.

One example of our risk/opportunity identification and management process includes the risk of enhanced reporting obligations. The likelihood of this occurring and how impactful it would be without treatment is evaluated to determine the inherent risk and then treatment details, including who, what, and when are determined and tracked to closure. The treatments for this example include monitoring water-related regulations and policy to understand and evaluate impacts to, and opportunities for, our business, customers, and the communities where we operate. When applicability is determined, an action plan is developed and monitored through execution.

W4.1b

(W4.1b) What is the total number of facilities exposed to water risks with the potential to have a substantive financial or strategic impact on your business, and what proportion of your company-wide facilities does this represent?

	Total number of facilities exposed to water risk	% company-wide facilities this represents	Comment
Row 1	1	Less than 1%	1 out of 12 of our manufacturing sites (including 1 site that was divested in October 2021) has been classified as high water risk, and within a region of water stress. No change compared to what reported last year (CY2020). The water risk assessment has been updated by using the WRI Aqueduct Water Risk Tool 3.0 and confirmed that only 1 site in China is now classified as exposed to extremely high overall water risk and water stress. Other individual facilities are seen as low overall risk but may nonetheless face risks on a periodic basis, such as the 2020-21 drought in Taiwan.

W4.1c

(W4.1c) By river basin, what is the number and proportion of facilities exposed to water risks that could have a substantive financial or strategic impact on your business, and what is the potential business impact associated with those facilities?

W4.2

(W4.2) Provide details of identified risks in your direct operations with the potential to have a substantive financial or strategic impact on your business, and your response to those risks.

Country/Area & River basin

China	Huang He (Yellow River)
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Type of risk & Primary risk driver

Chronic physical	Rationing of municipal water supply
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Primary potential impact

Reduction or disruption in production capacity

Company-specific description

Water is a critical input to our manufacturing process, particularly wafer fabrication, and any reduction in quantity or quality levels would impact our manufacturing process. The Chinese region where Micron's site is located is classified as a high-risk area by the WRI Aqueduct Water Risk tool 3.0. The operation in China is less water-dependent, thus driving a low severity.

Timeframe

More than 6 years

Magnitude of potential impact

Medium-low

Likelihood

More likely than not

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure - minimum (currency)

<Not Applicable>

Potential financial impact figure - maximum (currency)

<Not Applicable>

Explanation of financial impact

Micron recognizes that a reduction in water quantity or quality could impact Micron's operations, resulting in the potential for a variable financial impact.

Primary response to risk

Adopt water efficiency, water reuse, recycling and conservation practices

Description of response

Not only are clean water sources important to our communities, they are also one of the primary resources used in the manufacture of semiconductors. Micron looks proactively for opportunities to manage water consumption in manufacturing operations globally on an ongoing basis. Water is a key resource for our manufacturing process and Micron looks at water saving opportunities, starting from improving process efficiency to increasing the water recycle rate globally, particularly at Micron locations with stressed water resources.

Cost of response**Explanation of cost of response****Country/Area & River basin**

Taiwan, China	Other, please specify (Taichung and Taoyuan)
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Type of risk & Primary risk driver

Acute physical	Drought
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Primary potential impact

Reduction or disruption in production capacity

Company-specific description

Water is a critical input to our manufacturing process, particularly wafer fabrication, and any reduction in quantity or quality levels would impact our manufacturing process. While our sites in Taiwan are not classified as high-risk by the WRI Aqueduct Water Risk Tool 3.0, Micron continues to monitor water risks in this area, considering the potential impact coming from a reduced quality and quantity of incoming water.

Micron also engages in local water restoration to mitigate its risks in Taiwan. We have for many years been a steward of the Nankan and Dongmen rivers in Taoyuan, Taiwan, where in 2022 we donated \$5 million for ammonia nitrogen removal and water quality improvement in the two rivers. We also donated nearly \$10 million to help fund a dredging project that will restore storage capacity to the Shihmen Reservoir, the region's primary water source.

Timeframe

More than 6 years

Magnitude of potential impact

Medium-high

Likelihood

About as likely as not

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure - minimum (currency)

<Not Applicable>

Potential financial impact figure - maximum (currency)

<Not Applicable>

Explanation of financial impact

Micron recognizes that a reduction in water quantity or quality could impact Micron's operations, resulting in the potential for a variable financial impact.

Primary response to risk

Adopt water efficiency, water reuse, recycling and conservation practices

Description of response

Not only are clean water sources important to our communities, they are also one of the primary resources used in the manufacture of semiconductors. Micron looks proactively for opportunities to manage water consumption in manufacturing operations globally on an ongoing basis. Our intent is to minimize the impact to this important resource and maximize our business resilience as global water supply becomes increasingly constrained.

Cost of response

Explanation of cost of response

Country/Area & River basin

Singapore	Other, please specify (Singapore)
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Type of risk & Primary risk driver

Acute physical	Drought
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Primary potential impact

Reduction or disruption in production capacity

Company-specific description

Water is a critical input to our manufacturing process, particularly wafer fabrication, and any reduction in quantity or quality levels would impact our manufacturing process. While Singapore is not classified as a high-risk area by the WRI Aqueduct Water Risk Tool 3.0, Micron continues to monitor water risks in this area, considering the potential impact coming from a reduced quality and quantity of incoming water.

Timeframe

More than 6 years

Magnitude of potential impact

Medium-high

Likelihood

About as likely as not

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure - minimum (currency)

<Not Applicable>

Potential financial impact figure - maximum (currency)

<Not Applicable>

Explanation of financial impact

Micron recognizes that a reduction in water quantity or quality could impact Micron's operations, resulting in the potential for a variable financial impact.

Primary response to risk

Adopt water efficiency, water reuse, recycling and conservation practices

Description of response

Not only are clean water sources important to our communities, they are also one of the primary resources used in the manufacture of semiconductors. Micron looks proactively for opportunities to manage water consumption in manufacturing operations globally on an ongoing basis. Our intent is to minimize the impact to this important resource and maximize our business resilience as global water supply becomes increasingly constrained. In Singapore, Micron has been incorporating water-saving measures at the design stage at our new buildings and industrial processes. At the same time, we are investing resources to improve the water use efficiency at our existing factories. In Singapore, we derive 96% of our water from rain capture, onsite recycling and NEWater supply. NEWater is a product of centralized treatment of used water that is repurposed for non-potable use, which helps reduce the demand on reservoirs that provide potable water

Cost of response

Explanation of cost of response

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	Micron's risk processes have not identified inherent water-related risks in the supply chain at this point.

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?

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

W4.3a

(W4.3a) Provide details of opportunities currently being realized that could have a substantive financial or strategic impact on your business.

Type of opportunity

Efficiency

Primary water-related opportunity

Improved water efficiency in operations

Company-specific description & strategy to realize opportunity

Over the past few years, Micron has implemented several projects to improve water use efficiency of the manufacturing process and of the facilities supporting systems (UPW plant, cooling tower, etc.). For new construction, Micron has been incorporating water-saving measures in the design stage for new buildings and industrial processes, at the same time Micron has made significant investments to improve the water use efficiency at the existing factories.

By improving water efficiency we also reduce operational costs, particularly in countries where water price is increasing.

Estimated timeframe for realization

1 to 3 years

Magnitude of potential financial impact

Medium

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure – minimum (currency)

<Not Applicable>

Potential financial impact figure – maximum (currency)

<Not Applicable>

Explanation of financial impact

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	Commitments beyond regulatory compliance	Company-wide EHS policy including the commitment to go beyond legal compliance, pollution reduction and prevention. EHS Policy is available on the public website https://www.micron.com/about/our-commitment/operating-thoughtfully/environment-health-and-safety-policy Water Management program and goals published in the Sustainability Report available on the public website www.micron.com/sustainability

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 Governance and Sustainability Committee of Micron's Board of Directors oversees the company's development and integration of sustainability efforts, including water.

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 Overseeing acquisitions, mergers, and divestitures Overseeing major capital expenditures Overseeing the setting of corporate targets Reviewing and guiding corporate responsibility strategy Reviewing and guiding strategy Setting performance objectives	Micron's sustainability strategy (including with regard to water), action plans, performance objectives, and progress against goals and targets are presented to the Board's Governance and Sustainability committee at least annually. Risk management policies and significant risk findings are reported to the Board's Audit Committee

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	Primary reason for no board-level competence on water-related issues	Explain why your organization does not have at least one board member with competence on water-related issues and any plans to address board-level competence in the future
Row 1	Not assessed	<Not Applicable>	<Not Applicable>	<Not Applicable>

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)

Sustainability committee

Water-related responsibilities of this position

Setting water-related corporate targets

Frequency of reporting to the board on water-related issues

Annually

Please explain

Micron's Executive VP, Global Operations has oversight responsibility of our facilities and their operations, including water use and related risks, and an Operations representative sits on Micron's Sustainability Council. The Sustainability Council is comprised of senior leaders representing the various aspects of sustainability, including supply chain, procurement, sales, and global manufacturing. Micron has also deployed an Environmental Sustainability operations team focused on managing our water conservation and other initiatives, which reports out to senior executives and the sustainability council on a periodic basis. The Sustainability Council and Environmental Sustainability operations team drives our water strategy and focuses on how we can improve the impact of our operations on the environment.

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	Please refer to 6.4a for details

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	Other, please specify (all employees)	Reduction of water withdrawals – direct operations Improvements in water efficiency – direct operations Implementation of water-related community project	Incentive tied to goal achievement on an annual basis	Executives and every Team Member are eligible for monetary and non-monetary recognition for their contribution towards sustainability and water-related activities through our global peer recognition and other programs.
Non-monetary reward	Other, please specify (all employees)	Reduction of water withdrawals – direct operations Improvements in water efficiency – direct operations Implementation of water-related community project	Incentive tied to goal achievement on an annual basis	Executives and every Team Member is eligible for monetary and non-monetary recognition for their contribution towards sustainability and water-related activities through our global peer recognition and other programs.

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?

Micron has established a Global Ethics and Policy Committee to, among other things, review potential environmental issues and obligations (regulatory and from interested parties) and to ensure that Company policies align with appropriate responses. This committee is made up of the most senior executives in the Company, including all EVPs and SVPs who report directly to the Chief Executive Officer. The Committee meets as needed to review and assess those issues that help to inform Company policies including those associated with environmental risks, including water.

W6.6

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

Yes (you may attach the report - this is optional)

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	Yes, water-related issues are integrated	5-10	Water availability, risks, and management, including a 2030 target to achieve 75% water reuse, recycling and recovery by 2030, are included in our long-term business objectives.
Strategy for achieving long-term objectives	Yes, water-related issues are integrated	5-10	Micron has developed a strategy for achieving its 2030 water target that includes improvements in facility water efficiency and reuse, and partnership with our local communities to support water restoration.
Financial planning	Yes, water-related issues are integrated	5-10	Micron has publicly committed to spend approximately \$1 billion of capital expenditures by 2028 to support progress toward our long-term environmental targets, including our 2030 water target.

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)

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

Water-related OPEX (+/- % change)

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

Please explain

W7.3

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

	Use of scenario analysis	Comment
Row 1	Yes	Micron has sought inputs on the potential impacts of climate change resulting from warming under business-as-usual, 2°C and 1.5°C scenarios, which will have impacts on water resources

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		Water related outcomes derive from a consequent decreased precipitation and increased temperatures, leading to potential increased water costs caused by water shortages.	

W7.4

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

Row 1

Does your company use an internal price on water?

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

Please explain

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	Definition used to classify 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	<Not Applicable>	Judged to be unimportant, explanation provided	Micron's products do not use water, and generally do not have implications for water use.

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, and we do not plan to within the next two years	
Water withdrawals	Yes	<Not Applicable>
Water, Sanitation, and Hygiene (WASH) services	No, and we do not plan to within the next two years	
Other	Yes	<Not Applicable>

W8.1b

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

Target reference number

Target 1

Category of target

Other, please specify (Water reuse, recycle and restoration)

Target coverage

Company-wide (direct operations only)

Quantitative metric

Other, please specify (63% of water reuse, recycling and restoration compared to total water used in our operation (withdrawal + reused/recycled water).)

Year target was set

2020

Base year

2020

Base year figure

50

Target year

2022

Target year figure

63

Reporting year figure

65

% of target achieved relative to base year

115.384615384615

Target status in reporting year

Achieved

Please explain

In the 2023 sustainability report we provided an update on progress toward Water Stewardship Goal. <https://www.micron.com/about/our-commitment/operating-thoughtfully/sustainability>

Water conservation goal: combination of internal reuse and recycled water and external restoration projects.

We achieved 65% in CY22 with a 12% increase compared to CY21 performance and achieved the intermediate CY22 goal of 63%.

Target reference number

Target 2

Category of target

Other, please specify (Water reuse, recycle and restoration)

Target coverage

Company-wide (direct operations only)

Quantitative metric

Other, please specify (75% of water reuse, recycling and restoration compared to total water used in our operation (withdrawal + reused/recycled water) by 2030)

Year target was set

2020

Base year

2020

Base year figure

50

Target year

2030

Target year figure

75

Reporting year figure

65

% of target achieved relative to base year

60

Target status in reporting year

Underway

Please explain

In the 2023 sustainability report we provided an update on progress toward Water Stewardship Goal. <https://www.micron.com/about/our-commitment/operating-thoughtfully/sustainability>

Water conservation goal: combination of internal reuse and recycled water and external restoration projects.

We achieved 65% in CY22 with a 12% increase compared to CY21 performance.

W9. Verification

W9.1

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

Yes

Micron 2023 Assurance Statement.PDF

W9.1a

(W9.1a) Which data points within your CDP disclosure have been verified, and which standards were used?

Disclosure module	Data verified	Verification standard	Please explain
W1 Current state	Total water withdrawn, total water consumed, % withdrawn from areas with water stress	ISAE 3000	These data points were reviewed in conjunction with verification of sustainability data reported under the Sustainability Accounting Standards Board Semiconductor Reporting Standard in Micron's annual sustainability report.

W10. Plastics

W10.1

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

	Plastics mapping	Value chain stage	Please explain
Row 1	Please select	<Not Applicable>	

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	Value chain stage	Please explain
Row 1	Please select	<Not Applicable>	

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	Value chain stage	Type of risk	Please explain
Row 1	Please select	<Not Applicable>	<Not Applicable>	

W10.4

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

	Targets in place	Target type	Target metric	Please explain
Row 1	Please select	<Not Applicable>	<Not Applicable>	

W10.5

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

	Activity applies	Comment
Production of plastic polymers	Please select	
Production of durable plastic components	Please select	
Production / commercialization of durable plastic goods (including mixed materials)	Please select	
Production / commercialization of plastic packaging	Please select	
Production of goods packaged in plastics	Please select	
Provision / commercialization of services or goods that use plastic packaging (e.g., retail and food services)	Please select	

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.

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	Vice President, EHS & Sustainability	Chief Sustainability Officer (CSO)