Momentive Performance Materials - Water Security 2022

W0. Introduction

W0.1

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

Momentive Performance Materials group (Momentive) is one of the world's largest producers of silicones and silicone derivatives. With more than 80+ years of experience in research, development, and production of silicone materials, Momentive has a historical legacy of commercial first-ever silicone processes and products. Our vast product portfolio is comprised of many advanced silicone solutions, allowing us to serve several industries including automotive, aerospace, electronics, personal care, consumer products, building and construction, as well as specialized industries such as specialty fluids, silanes, and additives.

Headquartered in Waterford, New York, United States, Momentive is an indirect wholly-owned subsidiary of MOM Holding Company. On January 1, 2020, the quartz and specialty ceramics portion of our business was divested; this reporting period includes the silicones and silicone derivatives portfolio which is organized into three businesses: Performance Additives, Formulated Specialties, and Core Silicones & Intermediates. The company has 40+ locations in 20+ countries and more than 5000 employees. In 2021, the total revenue globally from our products and services was $2.68 B.

Momentive is technology and innovation focused, with 3,400 patents serving high-growth applications. We collaborate with our customers to enable solutions that help solve their sustainability challenges, improve their operational efficiency or reduce greenhouse gas (GHG) emissions of end products, such as advanced materials that enable automotive e-mobility and fuel-efficiency, construction sealants and coatings that enable energy efficient buildings, and agricultural additives that enable more efficient food production.

As is typical in our industry, we consume resources in the form of raw materials, energy, water and other feedstocks and commodities. These ingredients are mixed and reacted together, along with energy, utilizing our proprietary processes and specialized equipment to produce intermediate and finished products. Intermediate products may then be further processed or sold. Finished products are packaged and shipped to our customers around the world, where they are usually added as an ingredient or component into their products and/or formulations.

We track our resource consumption and raw material inputs, and our management system drives decisions based on these resources. Although water is not a primary ingredient in our product formulations—less than 10 percent of the water we withdraw is consumed in production--water management is a critical concern for Momentive, due to the volume of water required to cool manufacturing processes. A portion of the cooling water used in our operations is lost to evaporation, while the remaining volume is returned to watersheds after treatment. For some materials we manufacture, a significant amount of water is created during the manufacturing process, which is then collected and discharged or disposed of according to legal requirements.

Water sources for Momentive include surface water, ground water, municipal water sources (drinking water) and commercial water sources (e.g. drinking water, industrial water). Intake and discharge water quality is monitored by our Quality and Environmental, Health and Safety (EHS) teams, and we treat our water as needed before we use it and discharge it. Momentive's R&D department works to identify less harmful raw materials for use in manufacturing our products to reduce discharges from our operations. Since 2016, extensive process changes at our Leverkusen, Germany, site substantially transformed water consumption, resulting in less consumption.

Some of our manufacturing locations are in high-water stress areas, which places a premium on managing this precious resource. Water risks are also assessed as part of other company-wide risk assessments performed every two years. Understanding our water risk significantly guides our efforts to decrease our natural resource intake in our production processes.

In 2020, Momentive established 2025 Sustainability Goals that include innovating products that help solve customers' sustainability challenges, and reducing our impact through operational excellence at both our sites and throughout our supply chain. Our 2025 goals include a reduction in net water consumption by 10% versus a 2019 baseline by 2025. We have also set a goal to achieve a CDP score of A- by 2025.

At Momentive, we also engage stakeholders throughout our value chain to identify added water risk. This past year Momentive implemented a supplier questionnaire for new suppliers to disclose their water use and risks.

Please note that while the information and data herein are being provided to the best of the company's knowledge, Momentive makes no express or implied warranties regarding the accuracy of this information and data. Momentive reserves the right to amend or update the information and data.

W-CH0.1a

(W-CH0.1a) Which activities in the chemical sector does your organization engage in?

Specialty inorganic chemicals

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 2021	December 31 2021

W0.3

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

Belgium
Brazil
China
Germany
India
Italy
Japan
Netherlands
Republic of Korea
Thailand
United Kingdom of Great Britain and Northern Ireland
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

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	Vital	Drinking water needs at our plants depend on sufficient quantities of good quality fresh water, in order to avoid pre-treatment or purchase of treated water. Some of our products (< 10%) use good quality freshwater as a raw material. The primary use for good quality freshwater in direct operations is as a (minor) ingredient in our production processes, and we can also use it for steam production. Indirect processes like drinking, washing and sanitation consume water. We chose this importance rating of "vital" because if we did not have good quality freshwater to withdraw, we would have to create it, both for direct and indirect operations.
Sufficient amounts of recycled, brackish and/or produced water available for use	Important	Important	Recycled, industrial or ground water can be used in our indirect and direct processes as a coolant or heat transfer liquid, or as a transport medium within our plants. We chose the importance of "important" because without sufficient water to cool/heat our processes, or to transport product or waste, we would have to find a suitable replacement, either by finding water or replacing existing technology.

W1.2

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

	% of sites/facilities/operations	Please explain
Water withdrawals – total volumes	100%	All withdrawals - either from municipal systems, industrial systems or from ground/surface water sources - are metered, and reported monthly to Corporate Sustainability via our corporate Sustainability database. Water meters are the measurement method, and they are read monthly. Meters in use are both "revenue meters" owned by the municipal supply and "non-revenue meters," owned and maintained by Momentive. Corporate Sustainability sums water withdrawals in the database and performs quality control, and then reports consumption to management. Water is a material priority for Momentive and is included in our GRI aligned 2020-2021 Sustainability report
Water withdrawals – volumes by source	100%	Surface intakes (river/stream/lake withdrawals) are metered, and the meters are read and reported to site EHS. Site EHS in turn totals water withdrawals, by source, and reports them to Corporate Sustainability via our corporate sustainability database. Water meters are the measurement method, and they are read monthly. Drinking water withdrawals are metered by the supplying municipality, who also supply water quality testing results in accordance with applicable local law. Industrial water withdrawals are also metered, and are tested as needed to ensure quality standards are met.
Entrained water associated with your metals & mining sector activities - total volumes [only metals and mining sector]	<Not Applicable>	<Not Applicable>
Produced water associated with your oil & gas sector activities - total volumes [only oil and gas sector]	<Not Applicable>	<Not Applicable>
Water withdrawals quality	76-99	Ground/surface/lake intake water quality is measured and assessed as needed to provide statistical control of incoming water quality, which might range from daily to annually. Water is assessed for total dissolved solids (TDS), total suspended solids (TSS), salinity, pH, and other basic characteristics to establish usefulness and any treatment needed for cooling loop and tower use. Industrial water is measured and tested by the provider to meet contractual requirements for water quality, again ranging from daily testing to annual frequency. Drinking water is tested by the providing municipality annually as well as the receiving site after a service issue to verify quality. At some sites and for some uses, water quality is not a critical factor and quality is not assessed or measured.
Water discharges – total volumes	76-99	Direct surface discharges (river/stream/lake) are metered, and the meters are read and reported to site EHS. Site EHS in turn totals water withdrawals, by source, and reports them to the Sustainability department via our corporate Sustainability database. Water meters are the measurement method, and they are read monthly. Indirect sanitary and industrial discharges to municipal treatment systems are metered by the receiving municipality or treatment entity. Some storm water discharges are not metered, notably at our Brazil and Texas (US) sites: storm water from operating areas that are captured in secondary containment areas are examined or tested for contamination, and the storm water is released either to on-site or off-site treatment plants, or to surface waters as allowable by law. These sites are planning to upgrade their measurement systems to begin measuring discharge volumes in the future.
Water discharges – volumes by destination	76-99	Water discharge points, either to ground water, surface water, municipal treatment plant or industrial treatment plant are metered, with readings taken monthly for reporting to corporate. Some discharges, such as storm water discharges, are not measured at some of our sites where storm discharges are not regulated.
Water discharges – volumes by treatment method	100%	All discharges from our facilities to treatment plants are measured at the point of discharge by a water meter. Water meters are read monthly and the quantities communicated back/charged back to Momentive.
Water discharge quality – by standard effluent parameters	76-99	Not all of our discharges are required by law to be tested for discharge quality, such as our sanitary sewer discharges from the non-industrial portions of our plants. Regulated discharges are sampled and analyzed for required discharge parameters like biological oxygen demand (BOD), chemical oxygen demand (COD), TSS, TDS, pH, and other components. Frequency can range from daily to annual depending on the discharge and the level of regulation.
Water discharge quality – temperature	76-99	Some of our discharges into rivers are regulated for temperature of discharge. For these waste streams, we continuously measure discharge temperature.
Water consumption – total volume	76-99	Total volume of water consumption is calculated and reported by Corporate Sustainability using records and measurements provided by our production sites around the world via the corporate Sustainability database. We are working to make this calculation more robust.
Water recycled/reused	100%	Inside our facilities, water is continuously recycled, treated and reused to the extent feasible. Our cooling systems are closed loop, and waste water can be treated at some of our treatment plants and recycled back into the production process for reuse. There are process-specific tests (i.e., TSS, TDS, pH, BOD, COD, etc.) to ensure safety and usability. Water meters are in place to monitor recycling flow and rates. Recycled water inside our facilities does not count in water balance calculations.
The provision of fully-functioning, safely managed WASH services to all workers	100%	WASH facilities are provided at all our plant sites and laboratories. As a chemical company, safety showers are amply supplied for emergency use, and dedicated WASH facilities have been installed in some plants where local regulations demanded a higher level of service.

W1.2b

(W1.2b) What are the total volumes of water withdrawn, discharged, and consumed across all your operations, and how do these volumes compare to the previous reporting year?

	Volume (megaliters/year)	Comparison with previous reporting year	Please explain
Total withdrawals	32162	Higher	Our production in 2021 increased that resulted in higher water withdrawal and use.
Total discharges	22194	Lower	We consistently make efforts to decrease our effluent discharge in our production processes. A company transition to more water-efficient specialty chemicals production was also a factor. We anticipate decrease in water discharges in the future to meet our goal to reduce net water consumption by 10% by 2025. Please note that this amount of total discharge is only an estimate; we currently do not have meters placed at every discharge point.
Total consumption	9968	Higher	Our production in 2021 was higher than 2020 resulting in net increase in water consumption. Please note that this amount is only an estimate as our total discharge quantity is an estimate.

W1.2d

(W1.2d) Indicate whether water is withdrawn from areas with water stress and provide the proportion.

	Withdrawals are from areas with water stress	% withdrawn from areas with water stress	Comparison with previous reporting year	Identification tool	Please explain
Row 1	Yes	11-25	Higher	WRI Aqueduct	Production at few of the sites falling in high stress areas increased resulting in a small increase in water withdrawal.

W1.2h

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

	Relevance	Volume (megaliters/year)	Comparison with previous reporting year	Please explain
Fresh surface water, including rainwater, water from wetlands, rivers, and lakes	Relevant	27472	Higher	Fresh water intake was about 15% higher than last year due to higher production
Brackish surface water/Seawater	Not relevant	<Not Applicable>	<Not Applicable>	Not relevant. We don't use this water source.
Groundwater – renewable	Relevant	355	Higher	Our use of groundwater is very minimal.
Groundwater – non-renewable	Not relevant	<Not Applicable>	<Not Applicable>	Not relevant, we do not use this water source.
Produced/Entrained water	Not relevant	<Not Applicable>	<Not Applicable>	Not relevant. Some of our processes chemically create water. This water is treated and discharged in accordance with regulations
Third party sources	Relevant	4141	About the same	We receive water fron municipal and industrial sources for use in our processes and support our employees.

W1.2i

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

	Relevance	Volume (megaliters/year)	Comparison with previous reporting year	Please explain
Fresh surface water	Relevant	20173	Lower	We are continuously making effort to recycle the water and send lower volume of water to discharge.
Brackish surface water/seawater	Not relevant	<Not Applicable>	<Not Applicable>	We do not discharge to these destinations
Groundwater	Not relevant	<Not Applicable>	<Not Applicable>	We do not discharge to these destinations
Third-party destinations	Relevant	1643	About the same	This discharge is mainly the chemical sewage and other external disposal.

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	% of your sites/facilities/operations this volume applies to	Please explain
Tertiary treatment	Not relevant	<Not Applicable>	<Not Applicable>	<Not Applicable>	We do tertiary treatment of only a very small fraction of our discharge to meet local regulations
Secondary treatment	Not relevant	<Not Applicable>	<Not Applicable>	<Not Applicable>	
Primary treatment only	Not relevant	<Not Applicable>	<Not Applicable>	<Not Applicable>	
Discharge to the natural environment without treatment	Please select	<Not Applicable>	<Not Applicable>	<Not Applicable>	
Discharge to a third party without treatment	Please select	<Not Applicable>	<Not Applicable>	<Not Applicable>	
Other	Please select	<Not Applicable>	<Not Applicable>	<Not Applicable>	

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	2680000000	32352	82838.7734915925	We anticipate this efficiency to further improve because of a number of steps. These include shutting our resource intensive chemical operations as well as several water and steam recycling projects implementation.

W-CH1.3

(W-CH1.3) Do you calculate water intensity for your activities in the chemical sector?

Yes

W-CH1.3a

(W-CH1.3a) For your top five products by production weight/volume, provide the following water intensity information associated with your activities in the chemical sector.

Product type

Specialty inorganic chemicals

Product name

Average product

Water intensity value (m3)

36.5

Numerator: water aspect

Total water withdrawals

Denominator

Ton

Comparison with previous reporting year

Higher

Please explain

We undertook shutdown activity in one of our large sites that consumed higher than normal quantity of water. We also made more products that had higher water intensity, resulting in a small increase in water intensity. This is the intensity for the average Momentive product. We don't have the measurement systems capable of calculating water intensity for our top 5 products.

W1.4

(W1.4) Do you engage with your value chain on water-related issues?

Yes, our suppliers

Yes, our customers or other value chain partners

W1.4a

(W1.4a) What proportion of suppliers do you request to report on their water use, risks and/or management information and what proportion of your procurement spend does this represent?

Row 1

% of suppliers by number
Less than 1%

% of total procurement spend
Less than 1%

Rationale for this coverage
We initiated implementing a supplier ESG questionnaire for targeted suppliers. We will be monitoring the responses and expect the coverage to increase. Suppliers will be incentivized to report through capacity development and partnering exercises with our Sustainability and Procurement departments, and we are considering making participation a condition of contract.

Impact of the engagement and measures of success
By engaging with our suppliers in this manner we can determine level of ESG water risk associated with a supplier, whether there is a need for additional suppliers for a certain raw material, and understand where there could be greater supply risk in the future. Measures of success include percentage of suppliers that return requested data, and data quality in assessing water risk and balance.

Comment
Momentive recognizes that water use and water risks of our suppliers are important. We will work to obtain this information from many of our suppliers in the future.

W1.4b

(W1.4b) Provide details of any other water-related supplier engagement activity.

Type of engagement
No other supplier engagements

Details of engagement
<Not Applicable>

% of suppliers by number
<Not Applicable>

% of total procurement spend
<Not Applicable>

Rationale for the coverage of your engagement
Momentive recognizes that water use and water risks of our suppliers are important. We have recently implemented a new supplier questionnaire and will build upon this foundation in the future.

Impact of the engagement and measures of success
<Not Applicable>

Comment
<Not Applicable>

W1.4c

(W1.4c) What is your organization's rationale and strategy for prioritizing engagements with customers or other partners in its value chain?

Momentive and our customers value sustainable initiatives with regard to water quality and conservation, and expect our supply chain to have the same priorities. We aim to use as little water as possible for the purposes of our manufacturing, and try to reuse and treat as much what we can to minimize our footprint. In some cases, we also review our customers' water requirements and flow them down to our own supply chain in order to align with customer requirements. We prioritize based on water quantities consumed and water risk at operating locations. Success is measured qualitatively (our level of engagement) and quantitatively (our level of water consumption and risk). Measures of success include reduced water consumption, and shift away from areas of higher water risk.

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?
No

W3. Procedures

W-CH3.1

(W-CH3.1) How does your organization identify and classify potential water pollutants associated with its activities in the chemical sector that could have a detrimental impact on water ecosystems or human health?

Potential pollutants are identified using process knowledge, permit conditions and other regulatory/compliance requirements to create a list of potential pollutants of concern. Waste streams are assessed for the possible presence of these regulated substances, and sampling plans are developed. Samples are taken and analyzed to determine the presence of contaminants and evaluate compliance/non-compliance with discharge and permit limits, and operations or treatment schemes are adjusted to prevent release to ecosystems or harm to human health. We send water we have used for our processes to wastewater treatment both on and off site. The standards we follow are local laws and regulations and our environmental permits, and we scan regulatory developments to identify future requirements in advance of implementation, which may result in differing classifications at different sites around the world. One of the processes we use in this regard are ISO 14000 Environmental Management System standards, in which context, scope, and significance of impact are assessed, and risks/opportunities identified with control measures established, compliance obligations formalized, with internal and external audits to verify compliance.

W-CH3.1a

(W-CH3.1a) Describe how your organization minimizes adverse impacts of potential water pollutants on water ecosystems or human health. Report up to ten potential pollutants associated with your activities in the chemical sector.

Potential water pollutant	Value chain stage	Description of water pollutant and potential impacts	Management procedures	Please explain
Isopropanol	Direct operations	Small amount of alcohol in wastewater. Potential impact is increased BOD/COD, with impacts to aquatic life also possible. May also result in increased volatile organic compound (VOC) emissions.	Compliance with effluent quality standards Measures to prevent spillage, leaching, and leakages Providing best practices instructions on product use R&D into less harmful alternative products	Treated in wastewater treatment plant prior to discharge. significant reduction prior to release. The wastewater treatment processes we use are designed to reduce/eliminate this pollutant from the waste stream. Successfully monitored and evaluated through regular sampling, analysis and process adjustment.
Toluene	Direct operations	Small amount in parts per million quantities in wastewater. Potential impact is increased BOD/COD, with impacts to aquatic life also possible. May also result in increased VOC emissions.	Compliance with effluent quality standards Measures to prevent spillage, leaching, and leakages R&D into less harmful alternative products	Treated in wastewater treatment plant prior to discharge. Significant reduction prior to release. The wastewater treatment processes we use are designed to reduce/eliminate this pollutant from the waste stream. Successfully monitored and evaluated through regular sampling, analysis and process adjustment.
Hexamethylcyclotrisiloxane (D3)	Direct operations	Small amount in parts per billion quantities in wastewater. Potential impact is increased BOD/COD, with impacts to aquatic life also possible. VOC emissions possible.	Compliance with effluent quality standards Measures to prevent spillage, leaching, and leakages R&D into less harmful alternative products	Treated in wastewater treatment plant prior to discharge. Significant reduction prior to release. The wastewater treatment processes we use are designed to reduce/eliminate this pollutant from the waste stream. Successfully monitored and evaluated through regular sampling, analysis and process adjustment.
Acetone	Direct operations	Small amount in parts per billion quantities in wastewater. Potential impact is increased BOD/COD, with impacts to aquatic life also possible. VOC emissions possible.	Compliance with effluent quality standards Measures to prevent spillage, leaching, and leakages R&D into less harmful alternative products	Treated in wastewater treatment plant prior to discharge. Significant reduction prior to release. The wastewater treatment processes we use are designed to reduce/eliminate this pollutant from the waste stream. Successfully monitored and evaluated through regular sampling, analysis and process adjustment.
Octamethylcyclotetrasiloxane (D4)	Direct operations	Small amount in parts per billion quantities in wastewater. Potential impact is increased BOD/COD, with impacts to aquatic life also possible. VOC emissions possible.	Compliance with effluent quality standards Measures to prevent spillage, leaching, and leakages R&D into less harmful alternative products	Treated in wastewater treatment plant prior to discharge. Significant reduction prior to release. The wastewater treatment processes we use are designed to reduce/eliminate this pollutant from the waste stream. Successfully monitored and evaluated through regular sampling, analysis and process adjustment.
Decamethylcyclopentasiloxane (D5)	Direct operations	Small amount in parts per billion quantities in wastewater. Potential impact is increased BOD/COD, with impacts to aquatic life also possible. VOC emissions possible.	Compliance with effluent quality standards Measures to prevent spillage, leaching, and leakages R&D into less harmful alternative products	Treated in wastewater treatment plant prior to discharge. Significant reduction prior to release. The wastewater treatment processes we use are designed to reduce/eliminate this pollutant from the waste stream. Successfully monitored and evaluated through regular sampling, analysis and process adjustment.

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 a standalone issue

Frequency of assessment
Every two years

How far into the future are risks considered?
More than 6 years

Type of tools and methods used
Tools on the market

Tools and methods used
WRI Aqueduct

Contextual issues considered
Water availability at a basin/catchment level
Water quality at a basin/catchment level
Implications of water on your key commodities/raw materials
Water regulatory frameworks
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
We use WRI's Aqueduct tool to assess water related risk for all of our operating sites.

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.

Using a multi-disciplinary, cross functional risk assessment team, sites, facilities and operations are periodically assessed for exposure to all the "normal" potential losses, along with water related issues, such as availability, quality, competition for resource, and brand/reputation risks. Potential events are cataloged (scenario planning). Most likely impacts and worst-case scenarios are evaluated against site resilience, ability to respond, and community, regional and other stakeholder concerns.

Potential damage to assets, harm to employees and impairment of business are evaluated; risk to brand and reputation are assessed. Climate, environmental and water risks are assessed as part of our approach. Appropriate response plans and capabilities are established to be able to respond best to a "most likely" event while developing cross-regional responses to more "worst case" events.

In addition to WRI Aqueduct tool, we also use specially designed surveys to assess water related risks to our operating sites.

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?

In determining the potential impact of any candidate event or impact, we evaluate the following for both positive and negative outcomes, the magnitude of potential impact, likelihood of occurrence, and controls in place:

- How much of our business will be affected?

Momentive has large, medium and small customers around the world. In deciding how much of our business will be potentially impacted by an event, we consider the size of the customer and the types and quantities of products that they purchase order to evaluate how much of the total business will be affected.

- How big will the impact be on our businesses?

Momentive has large, medium and small sites around the world. In deciding potential impact, the size of the site and the locations potentially impacted are considered in order to evaluate how much of the total business will be affected.

- How important is the impacted organization to the rest of the business

In considering potential impact to an organization, scale of the impact as well as importance to the overall enterprise of the impacted organization is assessed. Assigning and quantifying tangible and intangible values can assist in determining how important an event may be to the individual organization but also beyond that to the whole enterprise.

- Potential for stakeholder or customer concern or reaction or reputational harm

Momentive has an active "Customer Love" program and approach that attempts to assess stakeholder and customers concerns in advance of an event, map out potential response or concern scenarios, and plan for potential concerns or reactions.

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	4	26-50	These include both our large sites as well as some of the smaller sites.

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?

Country/Area & River basin

United States of America	Hudson River

Number of facilities exposed to water risk
1

% company-wide facilities this represents
1-25

Production value for the metals & mining activities associated with these facilities
<Not Applicable>

% company's annual electricity generation that could be affected by these facilities
<Not Applicable>

% company's global oil & gas production volume that could be affected by these facilities
<Not Applicable>

% company's total global revenue that could be affected
41-50

Comment
Our manufacturing site at Waterford, NY is located along this River basin.

Country/Area & River basin

United States of America	Mississippi River

Number of facilities exposed to water risk
1

% company-wide facilities this represents
1-25

Production value for the metals & mining activities associated with these facilities
<Not Applicable>

% company's annual electricity generation that could be affected by these facilities
<Not Applicable>

% company's global oil & gas production volume that could be affected by these facilities
<Not Applicable>

% company's total global revenue that could be affected
11-20

Comment
Our Sistersville, WV site is located along this river basin.

Country/Area & River basin

Germany	Rhine

Number of facilities exposed to water risk
1

% company-wide facilities this represents
1-25

Production value for the metals & mining activities associated with these facilities
<Not Applicable>

% company's annual electricity generation that could be affected by these facilities
<Not Applicable>

% company's global oil & gas production volume that could be affected by these facilities
<Not Applicable>

% company's total global revenue that could be affected
11-20

Comment
Our Leverkusen site is located on river Rhine

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

United States of America	Hudson River

Type of risk & Primary risk driver

Acute physical	Drought

Primary potential impact
Increased operating costs

Company-specific description
Anything that causes a change to our ability to withdraw water from the river could cause a disruption in our ability to make and ship product. Changing or lower river levels will reduce the water we can withdraw for cooling and could increase operating costs.

Timeframe
1-3 years

Magnitude of potential impact
Medium-low

Likelihood
Likely

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
Financial impact will depend on amount by which water levels are reduced. Lower water levels will demand greater recycle in closed loop cooling systems requiring greater treatment and possible on-site treatment plant installation.

Primary response to risk
Adopt water efficiency, water reuse, recycling and conservation practices

Description of response
Better conservation of resource and resource productivity/efficiency will reduce the amount of water needed for the same cooling tower performance.

Cost of response

Explanation of cost of response
Cost depends on required response. A slight decrease in water levels would require little or no special response; a great decline in water level would likely require us to redesign our intake/recycle cooling water and blow down/release process.

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	Evaluation in progress	We are starting to examine our value chain - upstream and downstream - for risks and hazards associated with water. We anticipate assessing availability, quality, consumption, climate related changes, and competition for water resources in our supply chain. We anticipate completing this assessment in the 2021-2022 time frame.

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
Products and services

Primary water-related opportunity
New R&D opportunities

Company-specific description & strategy to realize opportunity
Both risks and opportunities related to growing business and consumer demand for innovative products and technologies that can facilitate better performance and decreased resource usage, including water, have changed how we approach our product portfolio. Generally, our silicones drive better performance when they are incorporated into our customers products. Our silicones help to reduce use-phase water consumption (e.g. improved wetting for an agricultural chemical thereby reducing dilution water). Our overall product strategy is shifting to include a specific portion (with goals) of our product portfolio to be green/sustainable over time. Momentive is committed to producing products that not only meet customer needs but also help solve societal challenges and deliver environmental benefits.

Estimated timeframe for realization
4 to 6 years

Magnitude of potential financial impact
Medium-high

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
Increased sales from new-to-market solutions could drive significant new sales. For example, our super spreader chemicals have the opportunity to reduce the amount of water used to apply agricultural chemicals, and more efficient chemical application can reduce overall crop water use.

W5. Facility-level water accounting

W5.1

(W5.1) For each facility referenced in W4.1c, provide coordinates, water accounting data, and a comparison with the previous reporting year.

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 water-related performance standards for direct operations Company water targets and goals Commitments beyond regulatory compliance Commitment to water stewardship and/or collective action Recognition of environmental linkages, for example, due to climate change	Our water policy is corporate in scope and covers all of our facilities that consume significant water or use water for production purposes. We have water standards that dictate types of fixtures and water performance. Water is included as a significant aspect of our ISO 14000 Environmental Management System. All manufacturing sites capture and report water consumption and discharge data in our corporate Sustainability database.

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	Please explain
Chief Executive Officer (CEO)	Our CEO is a member of the Board of Directors and has responsibility for water related issues. The CEO reviews energy, GHG, waste, water and renewable energy strategy, goals and performance for the entire company. The CEO has overall responsibility for execution of the annual operating plan that is approved by the Board of Directors, including capital expenditures for water and climate related functions and projects. For example, the CEO champions our 5-year company-wide strategic plan, which includes climate protection goals (energy, GHG, water and waste reduction goals; goals to increase the portion of renewable energy). These goals are for the period 2020-2025.
Board-level committee	Momentive's Board of Directors provides high level strategic direction and oversees the continued development and improvement of Momentive's Environmental, Social and Corporate Governance (ESG) performance. The Operations Committee of the Board of Directors reviews Momentive's ESG performance on a quarterly basis. The Compensation, Nominating & Governance Committee of the Board of Directors discusses and approves the incorporation of sustainability performance into our incentive structure.
Other C-Suite Officer	Our Senior Vice President (SVP), Environmental, Health and Safety (EHS) & Operations Excellence, who reports to the CEO, is the liaison to the Operations Committee of the Board of Directors and reports to the Operations Committee on water related issues, as well as other environmental, health, safety, quality and continuous improvement issues. This SVP enables water related performance by leading the EHS, Quality, Continuous Improvement, Product Stewardship, Sustainability and Global Engineering functions and ensuring an overarching approach to Sustainability across manufacturing in the three businesses through leadership of the Operations Council. This SVP ensures that the capital investment process includes water protection criteria and that capital budgets are set and adequate. This SVP sponsors a cross-functional Sustainability Steering Committee and employs dedicated Corporate Sustainability staff. The Corporate Sustainability Team coordinates Momentive's sustainability programs and initiatives, provides periodic reports to the Executive Leadership Team and the Committee, and develops external reports, including the annual sustainability report, with the support of a cross-functional Project Management Office. For example, in 2021, this SVP championed the 2020-2021 Sustainability Report prepared by Momentive, which was aligned with GRI reporting guidelines. The report required collaboration from across the company, and featured disclosures on water consumption and water risk. This SVP also championed the publication of our 1st Communication on Progress (COP) for our commitment towards 10 principles of UN Global Compact.
President	Our business Presidents & General Managers (Performance Additives, Formulated Specialties, and Core Silicones & Intermediates) are responsible for delegating, managing and reporting on sustainability performance and steps being taken to reduce water consumption and risk across their respective businesses, including manufacturing and technology. They work in concert with the activities and priorities set by the SVP, EHS & Operations Excellence and support the integration of sustainability thinking and continuous improvement within their respective businesses. They are responsible for business and site level budgeting for sustainability and water related spending. They ensure that projects and initiatives to achieve reduction goals (such as water consumption reduction goals) are included in budgets. For example, the businesses are focusing on processes that reduce our consumption of water through greater efficiency.

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 - all meetings	Monitoring implementation and performance Overseeing acquisitions and divestiture Overseeing major capital expenditures Reviewing and guiding annual budgets Reviewing and guiding business plans Reviewing and guiding major plans of action Reviewing and guiding risk management policies Reviewing and guiding strategy Reviewing and guiding corporate responsibility strategy Reviewing innovation/R&D priorities Setting performance objectives	Momentive's Operations Committee of the Board of Directors and Executive Leadership Team (ELT) review Momentive's ESG performance on a quarterly basis. The Operations Committee provides high level direction and oversees the continued development and improvement of Momentive's ESG performance, including progress against goals for addressing water related issues, recommends the general budget for EHS & Sustainability capital spending, and oversees initiatives to improve operational efficiencies in manufacturing and integrated supply chain. Momentive's Compensation, Nominating & Governance Committee of the Board of Directors provides high level direction and oversees the design and implementation of the compensation policies, strategies, plans and programs for our key employees, including incentives tied to sustainability performance. Water related issues are reviewed by the CEO and ELT monthly where energy, GHG, waste and water KPIs are presented by the SVP, EHS & Operations Excellence. Needed interventions at the business level are managed by the President & General Managers and briefed up to the ELT. Total company performance in energy, GHG, waste and water KPIs are managed by the entire ELT under the CEO's leadership, with regular meetings where Sustainability topics are addressed. The ELT discusses and sets priorities for water related matters and progress against goals to increase water efficiency and reduce water consumption.

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)
Chief Executive Officer (CEO)

Responsibility
Assessing water-related risks and opportunities
Managing water-related risks and opportunities

Frequency of reporting to the board on water-related issues
Quarterly

Please explain
Our CEO is a member of the Board of Directors and has responsibility for water issues. The CEO reviews energy, GHG, waste, water and renewable energy strategy, goals and performance for the entire company. The CEO has overall responsibility for execution of the annual operating plan that is approved by the Board of Directors, including capital expenditures for water and climate related functions and projects. For example, the CEO champions our 5-year company-wide strategic plan, which includes climate protection goals (energy, GHG, water and waste reduction goals; goals to increase the portion of renewable energy). These goals are for the period 2020-2025. In 2021, the CEO also championed for a dedicated capital budget for projects that contributes significantly to our 2025 Sustainability goals, including goals related to water, even when these projects do not meet the threshold for financial returns.

Name of the position(s) and/or committee(s)
Other C-Suite Officer, please specify (Sr. Vice President, EHS and Operations Excellence)

Responsibility
Assessing water-related risks and opportunities
Managing water-related risks and opportunities

Frequency of reporting to the board on water-related issues
Quarterly

Please explain
Our Senior Vice President (SVP), Environmental, Health and Safety (EHS) & Operations Excellence, who reports to the CEO, is the liaison to the Operations Committee of the Board of Directors and reports to the Operations Committee on water related issues as well as other environmental, health, safety, and continuous improvement issues. This SVP ensures that the capital investment process includes water protection criteria and that capital budgets are set and adequate. The SVP sponsors a cross-functional Sustainability Steering Committee and employs dedicated Corporate Sustainability staff. The Corporate Sustainability Team coordinates sustainability programs, provides reports to the ELT, and develops external reports. For example, in 2021, this SVP championed the 2020-2021 Sustainability Report prepared by Momentive, which was aligned with GRI reporting guidelines. This required collaboration from across the company, and featured disclosures on GHG emissions and climate protection.

Name of the position(s) and/or committee(s)
Other C-Suite Officer, please specify (Executive Leadership Team)

Responsibility
Assessing water-related risks and opportunities
Managing water-related risks and opportunities

Frequency of reporting to the board on water-related issues
Quarterly

Please explain
Water related issues are reviewed by the CEO and ELT monthly where energy, GHG, waste and water KPIs are presented by the SVP, EHS & Operations Excellence. Needed interventions at the business level are managed by the President & General Managers and briefed up to the ELT. Total company performance in energy, GHG, waste and water KPIs are managed by the entire ELT under the CEO's leadership, with regular meetings where Sustainability topics are addressed. The ELT discusses and sets priorities for water related matters and progress against goals to increase water efficiency and reduce water consumption.

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	During 2020 we incorporated sustainability performance into our incentive structure for the 2021 plan year. Please see details below.

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	Please explain
Monetary reward	Other, please specify (All employees)	Reduction of water withdrawals Improvements in efficiency - direct operations Supply chain engagement Other, please specify (Behavior change related indicator; Company performance against a water-related sustainability index; Policies, actions and reporting in water management)	Safety & Sustainability comprises 10% of Momentive's 2021 annual incentive plan for employees worldwide in an incentive-eligible position. Sustainability was added in 2021 to ensure that we are rewarding actions central to Momentive's long term viability and growth. An industry-trusted standard was chosen due to its importance to our customers and includes the management of water-related issues for Momentive and our supply chain.
Non-monetary reward	Other, please specify (All employees)	Other, please specify (Behavior change related indicator)	We have an established company wide recognition program ("Inspire" program) with monetary and non-monetary rewards as well as a specific Safety & Sustainability award program. All employees and project teams are eligible for consideration. Some sites recognize a "Sustainability Employee of the Month" and reward them with a parking space, lunch and a celebration.

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?

Momentive has a Global Director, Government & Industry Relations who provides input on policy positions to trade associations in which Momentive is active. We have a Corporate Sustainability leader who facilitates internal networks to ensure that different businesses, geographies and sites have a common approach consistent with our corporate strategy on water security/stewardship/management.

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	Yes, water-related issues are integrated	5-10	Water availability is considered when planning new facilities and increasing production capacity. For example, some of our facilities are not allowed to increase consumption over time. We must carefully consider business objectives in light of this limit, and add efficiency if we wish to grow business at these locations (more production using the same amount of water).
Strategy for achieving long-term objectives	Yes, water-related issues are integrated	5-10	Water availability is considered when planning new facilities and increasing production capacity. Our 2020-2025 company strategy includes water reduction goals in order to avoid water as a limiting factor in achieving our long term objectives.
Financial planning	No, water-related issues were reviewed but not considered as strategically relevant/significant	5-10	Water related issues usually do not rise to the level of significance in our financial planning structure, due to the low cost of the underlying resource.

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)

0

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

0

Water-related OPEX (+/- % change)

0

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

0

Please explain

We do not anticipate significant change in water related expenditure.

W7.3

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

	Use of scenario analysis	Comment
Row 1	Yes	We perform climate related risk assessments as part of our business strategy. Our Executive Leadership engages with our insurance carrier to do the risk assessment and develop action items. In 2019, Momentive began planning our 2020-2025 business strategy, including sustainability goals. As part of goal setting, we used elements of 2DS, IEA 450, IRENA and Greenpeace scenarios to align our future GHG emissions with a 2.0°C or below scenario for our company. These scenarios were selected due to the prominence of renewable energy in achieving reductions. Since it will be difficult for us to eliminate energy use entirely, replacing fossil energy with renewable energy is currently the most viable way for us to reduce GHG emissions. As a result of our scenario based planning, Momentive has set a company-wide 50% renewable energy goal for 2025, with the intention of creating subsequent goals to further decarbonize our energy supply over time to match scenario timelines and objectives.

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	Other, please specify (FM Global)		Possible outcomes include transferring product lines between sites due to flooding or storms.	Potential new capital investment at sites not impacted by flooding or hurricanes relative to sites impacted by climate-driven flooding or storms

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, but we are currently exploring water valuation practices

Please explain

We are currently exploring this for future use.

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	Please select	<Not Applicable>	<Not Applicable>	

W8. Targets

W8.1

(W8.1) Describe your approach to setting and monitoring water-related targets and/or goals.

	Levels for targets and/or goals	Monitoring at corporate level	Approach to setting and monitoring targets and/or goals
Row 1	Company-wide targets and goals Business level specific targets and/or goals Site/facility specific targets and/or goals	Targets are monitored at the corporate level	Our approach it to set company-wide goals using a water stewardship approach, and to encourage greater water efficiency and reduce absolute water consumption. We approach reduced water consumption by setting absolute targets because we feel that reducing overall water consumption has a greater impact then reducing water intensity. Corporate goals for water reductions are set and rolled down to business and country/regional levels. Individual site targets are also set, but it is understood that some sites may increase water consumption while other sites decrease consumption. Our program accepts and encourages these trade-offs as long as the net movement is toward less water consumption. Regardless of consumption levels, all sites are expected to have consumption reduction and water efficiency programs.

W8.1a

(W8.1a) Provide details of your water targets that are monitored at the corporate level, and the progress made.

Target reference number
Target 1

Category of target
Water consumption

Level
Company-wide

Primary motivation
Water stewardship

Description of target
Reduction of water consumption. 10% reduction in absolute net consumption of water.

Quantitative metric
Other, please specify (% reduction in water consumption)

Baseline year
2019

Start year
2020

Target year
2025

% of target achieved
0

Please explain
We have set a net water reduction target of 10% by 2025 with a baseline year of 2019. IN 2021, our absolute water withdrawal increased marginally due to increased production. However, our water intensity decreased by 10%.

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, but we are actively considering verifying within the next two years

W10. 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.

W10.1

(W10.1) Provide details for the person that has signed off (approved) your CDP water response.

	Job title	Corresponding job category
Row 1	Senior Vice President, EHS & Operations Excellence	Other C-Suite Officer

W10.2

(W10.2) Please indicate whether your organization agrees for CDP to transfer your publicly disclosed data on your impact and risk response strategies to the CEO Water Mandate's Water Action Hub [applies only to W2.1a (response to impacts), W4.2 and W4.2a (response to risks)].

Yes

SW. Supply chain module

SW0.1

(SW0.1) What is your organization's annual revenue for the reporting period?

	Annual revenue
Row 1	2680000000

SW1.1

(SW1.1) Could any of your facilities reported in W5.1 have an impact on a requesting CDP supply chain member?

No facilities were reported in W5.1

SW1.2

(SW1.2) Are you able to provide geolocation data for your facilities?

	Are you able to provide geolocation data for your facilities?	Comment
Row 1	Yes, for all facilities	We have this information and use it to evaluate water related risk.

SW1.2a

(SW1.2a) Please provide all available geolocation data for your facilities.

Identifier	Latitude	Longitude	Comment
Waterford, NY	42.817	-73.6694	Chemicals; Silicones
Sisterville, WV	39.5142	-81.0615	Chemicals; Silicones
Leverkusen, Germany	51.0129	6.99144	Chemicals; Silicones
Termoli, Italy	42.0005	14.9953	Chemicals; Silicones

SW2.1

(SW2.1) Please propose any mutually beneficial water-related projects you could collaborate on with specific CDP supply chain members.

SW2.2

(SW2.2) Have any water projects been implemented due to CDP supply chain member engagement?

No

SW3.1

(SW3.1) Provide any available water intensity values for your organization's products or services.

Product name
All Momentive products

Water intensity value
0.1

Numerator: Water aspect
Water withdrawn

Denominator
2021 aggregated production in Metric Tonnes from all sites.

Comment
We do not calculate product-wise water intensity. The above number (Cubic meter/MT) is for entire Momentive.

Submit your response

In which language are you submitting your response?
English

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	Yes	Public

Please confirm below
I have read and accept the applicable Terms