

Welcome to your CDP Water Security Questionnaire 2022

W0. Introduction

W0.1

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

For more than a century, Merck & Co., Inc. , Rahway, New Jersey, USA, a leading global biopharmaceutical company known as MSD outside of the United States and Canada. At Merck, known as MSD outside of the United States and Canada, we are unified around our purpose: We use the power of leading-edge science to save and improve lives around the world. For more than 130 years, we have brought hope to humanity through the development of important medicines and vaccines. We aspire to be the premier research-intensive biopharmaceutical company in the world – and today, we are at the forefront of research to deliver innovative health solutions that advance the prevention and treatment of diseases in people and animals. We foster a diverse and inclusive global workforce and operate responsibly every day to enable a safe, sustainable and healthy future for all people and communities.

Through innovative research, groundbreaking partnerships and smarter processes, we are working to advance our performance in four priority areas: Access to Health, Environmental Sustainability, Employees, and Ethics & Transparency. With a focus on these priority areas across our entire organization, we are committed to leading the future of healthcare.

Our company reported total sales of \$48.70 billion during 2021 with 68,000 employees worldwide as of December 31, 2021. Further information is available at www.merck.com.

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.

Algeria
Argentina
Australia
Austria
Belarus
Belgium
Bermuda
Brazil
Bulgaria
Canada
Chile
China
Colombia
Croatia
Cyprus
Czechia
Denmark
Ecuador
Egypt
Estonia
Finland
France
Germany
Greece
Guatemala
Hong Kong SAR, China
Hungary
Iceland
India
Indonesia
Ireland
Israel
Italy
Japan
Kazakhstan
Latvia
Lebanon
Lithuania
Malaysia
Mexico
Morocco
Netherlands
New Zealand
Norway
Peru
Philippines

Poland
Portugal
Puerto Rico
Republic of Korea
Romania
Russian Federation
Saudi Arabia
Serbia
Singapore
Slovakia
Slovenia
South Africa
Spain
Sweden
Switzerland
Taiwan, China
Thailand
Turkey
Ukraine
United Arab Emirates
United Kingdom of Great Britain and Northern Ireland
United States of America
Uruguay
Venezuela (Bolivarian Republic of)
Viet Nam

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
Small office and leased space.	Small offices and certain leased buildings are excluded from all sections of the report except for their estimated withdrawals and discharges in section W1.2B and W1.2h. We have estimated that the amount of water used at these facilities is approximately 3% of our total global water use.
Recent acquisitions	Recent acquisitions are excluded from all sections of the report except for their estimated withdrawals and discharges in section W1.2B and W1.2H. These facilities will be included in the future as sites become fully integrated to the company internal reporting processes.
Rainwater	Rainwater is excluded from our withdrawal volume but is included in our discharge volume in sections W1.2B and W1.2H. Rainwater is excluded as we do not have third-party verification of this data at this time. We will evaluate its inclusion in our third-party external data verification process for water withdrawal and discharge in the future.

W0.7

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

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

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	Our manufacturing processes cannot operate without clean water. Thus, high-quality freshwater is a vital component in the manufacture of our pharmaceutical, biological, and animal health products. Surface and groundwater constituted about 63% of our water withdrawal in 2021 with the remaining 37% coming from public water

			supply. If we do not have access to enough good quality freshwater, there will be additional costs to purify water to an appropriate level needed to manufacture our products. It is also an important component for our external manufacturing partners, as well as our overall supply chain. Our company, and our supply chain, is expected to be even more dependent on good quality freshwater in the future as we shift to producing more biologics, which generally require more water than other types of pharmaceutical manufacturing processes.
Sufficient amounts of recycled, brackish and/or produced water available for use	Important	Important	Our sites employ a variety of technologies and techniques aimed at reducing our water footprint and improving operational performance. Closed-loop cooling systems, which reduce freshwater use, are employed at many of our facilities worldwide. Reverse osmosis (RO) “reject water” is reused for non-potable and non-process applications such as cooling-tower feed water. In all, about 1.10million cubic meters of water was recovered, reused, or recycled at our facilities in 2021, which is equivalent to five percent of our total water use. Recycled (cooling) water is used as a primary means for heat removal for many of our manufacturing processes to reduce our water footprint and significantly reducing freshwater withdrawal. This strategy is also employed by our external manufacturing partners, as well as our overall supply chain. This dependency is expected to be about the same in our direct and indirect operations in the future.

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%	Our company measures and monitors water withdrawal volumes globally for all manufacturing sites, research sites, and large office buildings. This is to ensure an accurate water balance is maintained and to track progress against our water use targets.

		<p>Withdrawal volumes are measured either through utility bills, meters or through engineering estimates. Examples of measurement frequency would include continuous meters and monthly meter readings. While frequency of volume measurement varies site to site, water withdrawals are required to be entered quarterly by sites into an enterprise data collection and reporting software system as part of our internal Environmental Data Collection (EDC) process. The data is reviewed at the corporate level on a quarterly basis.</p>
Water withdrawals – volumes by source	100%	<p>Our company measures and monitors water withdrawal volumes by source globally for all manufacturing sites, research sites, and large office buildings. This is to ensure an accurate water balance is maintained and to track progress against our water use targets. Withdrawal volumes by source are measured either through utility bills, meters or through engineering estimates. Examples of measurement frequency would include continuous meters and monthly meter readings. While frequency of volume measurement varies site to site, water withdrawals are required to be entered quarterly into an enterprise data collection and reporting software system as part of our internal EDC process. This process differentiates withdrawals from surface water, groundwater, and public water suppliers. The data is reviewed at the corporate level on a quarterly basis.</p>
Water withdrawals quality	100%	<p>Our company's internal standard requires we maintain potable water supply in accordance with applicable regulatory requirements or World Health Organization (WHO) drinking water guidelines in the absence of local standards. Our facilities measure withdrawal quality where necessary in our operations. Any water used in our manufacturing or research processes is tested in accordance with the appropriate quality requirements. Frequency and method of measurement varies site to site but are done in accordance with required regulatory requirements.</p>

Water discharges – total volumes	100%	Our company measures and monitors water discharge volumes globally for all manufacturing sites, research sites, and large office buildings. This is to ensure an accurate water balance is maintained. Discharge volumes are measured either through utility bills, meters or through engineering estimates. Examples of measurement frequency would include continuous meters and monthly meter readings. While frequency of volume measurement varies site to site, water discharges are required to be entered quarterly by sites into an enterprise data collection and reporting software system as part of our internal EDC process. The data is reviewed at the corporate level on a quarterly basis.
Water discharges – volumes by destination	100%	Our company measures and monitors water discharge volumes by destination globally for all manufacturing sites, research sites, and large office buildings. This is to ensure an accurate water balance is maintained. Discharge volumes are measured either through utility bills, meters or through engineering estimates. Examples of measurement frequency would include continuous meters and monthly meter readings. While frequency of volume measurement varies site to site, water discharges are required to be entered quarterly by sites into an enterprise data collection and reporting software system as part of our internal EDC process. This process differentiates discharges to surface water from discharges to third party treatment facilities. The data is reviewed at the corporate level on a quarterly basis.
Water discharges – volumes by treatment method	100%	Our company measures and monitors water discharge volumes by treatment method globally for all manufacturing sites, research sites, and large office buildings. This data is maintained at the operating sites and is monitored on an ongoing basis. Frequency and method of measurement vary by site. We have recently made changes to our enterprise data collection system to include the level of treatment of discharge from each site. We

		expect we will report on this information, as per the CDP treatment definitions, in the future.
Water discharge quality – by standard effluent parameters	76-99	Our company measures and monitors water discharge quality by standard effluent parameters globally for all manufacturing sites, research sites, and large office buildings. This data is maintained at the operating sites and is monitored on an ongoing basis. Frequency and method of measurement vary by site and may include but are not limited to continuous monitoring, periodic sampling, or other analytical methods in accordance with permits and applicable regulatory and Company requirements.
Water discharge quality – temperature	51-75	Discharge temperature is only measured at a subset of sites where it is deemed critical to monitor or if required by permit or regulation. This data is maintained at the operating sites and is monitored on an ongoing basis. Frequency and method of measurement vary by site. Methods may include but are not limited to continuous monitoring, periodic sampling or other analytical methods in accordance permits and, applicable regulatory and Company requirements.
Water consumption – total volume	100%	Our company measures and monitors water consumption volumes globally for all manufacturing sites, research sites, and large office buildings. This is to ensure an accurate water balance is maintained. Each operating site maintains a water balance identifying water consumption. Quantities are either metered or determined through engineering estimates. Frequency and method of measurement vary by site. Water consumption data are required to be entered quarterly by sites into an enterprise data collection and reporting software system as part of our EDC process. The data is reviewed at the corporate level on a quarterly basis.
Water recycled/reused	100%	Our company measures and monitors water recycled/reused volumes globally all manufacturing sites, research sites, and large office buildings. Quantities are either metered or determined through engineering estimates.

		Frequency and method of measurement vary by site. Water recycled/reused is required to be entered quarterly by sites into an enterprise data collection and reporting software system as part of our EDC process. The data is reviewed quarterly at the corporate level.
The provision of fully-functioning, safely managed WASH services to all workers	100%	Our company's facilities provide fully-functioning Water, sanitation, and hygiene (WASH) services to all workers as these services are deemed critical to the health and safety of our employees, the quality of our products, and the integrity of our operations. Our internal standard requires that potable water supplies are maintained in accordance with applicable regulatory requirements or World Health Organization (WHO) drinking water guidelines in the absence of local standards. Water withdrawals and discharges used for WASH services are included in the overall totals collected at each site.

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	19,371	About the same	Our reported water withdrawals include the amount that is measured and monitored for all of our global manufacturing and research sites, plus our large office buildings: 18,843 megaliters; and the estimated amount withdrawn from our small offices and leased facilities, which is calculated based on employee headcount data and applying standard assumptions for water use and discharge: 528 megaliters. We exclude rainwater collected at our sites (1,489 megaliters) from our total withdrawal because we do not include it in the scope of our limited data assurance for total withdrawal at this time (inclusion to be evaluated in the future). However, it is included in our discharge volume at the sites where it is

			<p>measured. We are committed to maintaining our global water use/withdrawals at or below 2015 levels through 2025. We achieved a 16% reduction of water withdrawals in 2020 versus the baseline year of 2015.</p> <p>Our thresholds for year over year comparison are as follows:</p> <ul style="list-style-type: none"> • "About the same" = < 10% change from the prior year • "Lower/higher" = between 11-20% change from the prior year • "Much lower/much higher" = > 20% change from the prior year
Total discharges	17,105	About the same	<p>Our reported water discharge includes the amount that is measured and monitored for all of our global manufacturing and research sites, plus our large office buildings: 16,577 megaliters; and the estimated amount discharged from our small offices and leased facilities, which is calculated based on employee headcount data and applying standard assumptions for water use and discharge: 528 megaliters. We exclude rainwater collected at our sites (1,489 megaliters) from our total withdrawal because we do not include it in the scope of our limited data assurance for total withdrawal. However, it is included in this discharge volume at the sites where it is measured.</p> <p>Our thresholds for year over year comparison are as follows:</p> <ul style="list-style-type: none"> • "About the same" = < 10% change from the prior year • "Lower/higher" = between 11-20% change from the prior year • "Much lower/much higher" = > 20% change from the prior year
Total consumption	4,391	About the same	<p>Our reported water consumption includes the amount that is measured or calculated by engineering estimates at our global manufacturing and research sites, including our large office buildings. We do not estimate consumption at our small offices and leased facilities as it is deemed to be negligible. Water consumption is variable based on manufacturing</p>

			<p>and research activities year to year. Our thresholds for year over year comparison are as follows:</p> <ul style="list-style-type: none"> • "About the same" = < 10% change from the prior year • "Lower/higher" = between 11-20% change from the prior year • "Much lower/much higher" = > 20% change from the prior year
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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	Please explain
Row 1	Yes	<p>We use the World Resources Institute's (WRI's) Aqueduct water-risk-assessment tool to measure and map our water risks across the enterprise globally (i.e. all of our global manufacturing and research sites, plus our large office buildings).</p> <p>Water withdrawn from areas rated by WRI Aqueduct Water Risk Atlas as being in areas of "High" or "Extremely High" Baseline Water stress are considered being from stressed areas. In 2021 the percent of water withdrawals in areas of water stress that rated as "extremely high" or high" was 16%.</p> <p>Our thresholds for year over year comparison are as follows:</p> <ul style="list-style-type: none"> • "About the same" = < 10% change from the prior year • "Lower/higher" = between 11-20% change from the prior • "Much lower/much higher" = > 20% change from the prior year

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,	Relevant	2,557	About the same	Our company measures and monitors all fresh surface water we use as inputs to

water from wetlands, rivers, and lakes				<p>our processes as well as for heating/cooling and other utilities. We exclude site rainwater collected (1,489 megaliters) from our total withdrawal as it is not in the scope of our limited data assurance for total withdrawal at this time (inclusion to be evaluated in the future). However, it is included in our discharge volume at the sites where it is measured. Water withdrawal is variable based on manufacturing and research activities year to year.</p> <p>Our thresholds for year over year comparison are as follows:</p> <ul style="list-style-type: none"> • "About the same" = < 10% change from the prior year • "Lower/higher" = between 11-20% change from the prior year • "Much lower/much higher" = >20% change from the prior year
Brackish surface water/Seawater	Not relevant			We do not utilize brackish surface water/seawater and do not expect to in the future.
Groundwater – renewable	Relevant	9,670	About the same	Our company measures and monitors all renewable groundwater we use as inputs to our processes as well as for heating/cooling and other utilities. Water withdrawal is variable based on manufacturing and research activities year to year. Our thresholds for

				<p>year over year comparison are as follows:</p> <ul style="list-style-type: none"> • "About the same" = < 10% change from the prior year • "Lower/higher" = between 11-20% change from the prior year • "Much lower/much higher" = > 20% change from the prior year
Groundwater – non-renewable	Not relevant			Our company does not discharge to groundwater and do not expect to in the future.
Produced/Entrained water	Not relevant			Our company does not utilize non-renewable groundwater and do not expect to in the future.
Third party sources	Relevant	7,144	About the same	<p>Our company measures and monitors all third-party water used as inputs to our processes as well as for heating/cooling and other utilities. Our reported water from third party sources includes the amount that is measured and monitored at all of our global manufacturing and research sites, and large office buildings: 6,613 megaliters; and the estimated amount withdrawn from our small offices and leased facilities, which is calculated based on employee headcount data and applying standard assumptions for water use and discharge: 528 megaliters. Water withdrawal varies based on manufacturing and research activities year to year. Our thresholds for year over</p>

				<p>year comparison are as follows:</p> <ul style="list-style-type: none"> • "About the same" = < 10% change from the prior year • "Lower/higher" = between 11-20% change from the prior year • "Much lower/much higher" = > 20% change from the prior year
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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	10,932	About the same	<p>Our company measures and monitors discharges to surface water. Water discharge is variable based on manufacturing and research activities year to year.</p> <p>Our thresholds for year over year comparison are as follows:</p> <ul style="list-style-type: none"> • "About the same" = < 10% change from the prior year • "Lower/higher" = between 11-20% change from the prior year • "Much lower/much higher" = > 20% change from the prior year
Brackish surface water/seawater	Relevant but volume unknown			<p>The volumes are not expected to be significant and are currently captured in our surface water discharge volume. We have recently made changes to our EDC system to include this discharge destination. We expect we will report on this in the future.</p>
Groundwater	Not relevant			<p>We have recently made changes to our EDC system to include this</p>

				discharge destination. We expect we will report on this in the future.
Third-party destinations	Relevant	6,173	About the same	<p>Our company measures and monitors all of our discharges to third party destinations, such as municipal treatment plants. Our reported water discharged to third party destinations includes the amount that is measured and monitored at our global manufacturing and research sites, plus our large office buildings: 5,645 megaliters; and the estimated amount discharged from our small offices and leased facilities, which is calculated based on employee headcount data and applying standard assumptions for water use and discharge: 528 megaliters. Water discharge is variable based on manufacturing and research activities year to year. Our thresholds for year over year comparison are as follows:</p> <ul style="list-style-type: none"> • "About the same" = < 10% change from the prior year • "Lower/higher" = between 11-20% change from the prior year • "Much lower/much higher" = > 20% change from the prior year

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	Please explain
Tertiary treatment	Relevant but volume unknown	Our company sites employ a variety of treatment methods to meet internal standards and regulatory requirements. We use a combination of secondary treatment, tertiary treatment, and

		<p>other treatment technologies, such as advanced oxidation for the removal of active pharmaceutical ingredients (API). We have recently made changes to our EDC system to include the level of treatment of discharges from each site. We expect we will report on this information, as per the CDP treatment definitions, in the future. This information is currently maintained at the operating sites.</p>
Secondary treatment	Relevant but volume unknown	<p>Our company sites employ a variety of treatment methods to meet internal standards and regulatory requirements. We use a combination of secondary treatment, tertiary treatment, and other treatment technologies, such as advanced oxidation for the removal of active pharmaceutical ingredients (API). We have recently made changes to our EDC system to include the level of treatment of discharges from each site. We expect we will report on this information, as per the CDP treatment definitions, in the future. This information is currently maintained at the operating sites.</p>
Primary treatment only	Relevant but volume unknown	<p>Our company sites employ a variety of treatment methods to meet internal standards and regulatory requirements. We use a combination of secondary treatment, tertiary treatment, and other treatment technologies, such as advanced oxidation for the removal of active pharmaceutical ingredients (API). We have recently made changes to our EDC system to include the level of treatment of discharges from each site. We expect we will report on this information, as per the CDP treatment definitions, in the future. This information is currently maintained at the operating sites.</p>
Discharge to the natural environment without treatment	Relevant but volume unknown	<p>Certain waters by nature; for example, storm water, do not require primary, secondary, or tertiary treatment prior to discharge. We have recently made changes to our EDC system to include the level of treatment of discharges from each site. We expect we will report on this information, as per the CDP treatment definitions, in the future. This information is currently maintained at the operating sites.</p>
Discharge to a third party without treatment	Relevant but volume unknown	<p>Where on-site treatment is not provided, wastewater is discharged to third parties that have the technology and capacity to treat our wastewater. We have recently made changes to our EDC system to include the level of treatment of discharges from each site. We expect we will report on this information, as per the CDP treatment definitions, in the future. This information is currently maintained at the operating sites.</p>
Other	Relevant but volume unknown	<p>Our company sites employ a variety of treatment methods to meet internal standards and regulatory requirements. A subset of our sites utilize treatment methods for removal of wastewater</p>

		containing active pharmaceutical ingredients that do not meet the definition of primary treatment, secondary treatment, or tertiary treatment. We have recently made changes to our EDC system to include the level of treatment of discharge from each site. We expect we will report on this information, as per the CDP treatment definitions, in the future. This information is currently maintained at the operating sites.
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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	48,704,000,000	19,371	2,514,273.91461463	Unknown at this time.

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%

Rationale for this coverage

Our Business Partner Code of Conduct requests suppliers conserve natural resources and engage in activities aimed at reducing water usage.

Environmental sustainability principles are integrated in each stage of our supplier management program. Our Global Supplier Management Group (GSMG) drives the program and maintains the associated standards and processes by which suppliers are identified, qualified and managed.

External manufacturers of active pharmaceutical ingredients and finished products are screened for Environmental Health and Safety (EHS) compliance, in addition to quality, supply and technical competence requirements. The EHS screening and onsite assessment is led by Global Safety and the Environment (GSE) and includes a survey

covering such topics as regulatory compliance, fatalities and major incidents. Questions regarding water-related issues are incorporated. In 2021 ninety-six assessments were performed with prospective or current external manufacturers.

The external manufacturers we contract with are periodically reassessed using a risk-based approach; higher-risk external manufacturers are subject to more frequent onsite assessments.

We co-lead the Pharmaceutical Supply Chain Initiative (PSCI) Environment Team and work together with GSE and peer organizations to develop supplier survey(s), training, tools, and maturity modeling.

Since 2016, this team has been working together to standardize PSCI's environmental supplier data request to reduce the number of different requests to suppliers and to minimize the number of surveys suppliers receive.

The survey covers greenhouse gas emissions, energy, waste and water, and is in four sections:

- Established program: alignment with the Business Partner Code of Conduct
- Manage impact: data for each environmental indicator
- Reduce emissions: environmental targets
- Apportion emissions: supplier emissions that are specific to each company

Below is a summary of the training and tools developed and/or provided by the PSCI Environment Team in 2021:

- 10 environmental sustainability guides
- 14 responsible sourcing guides for key materials
- Responsible Sourcing of Raw Materials training
- Sustainable Packaging training
- Revised PSCI Principles training
 - o Scope 3 Guidance
 - o Scope 3 Awareness Training
 - o Supplier Maturity Model
 - o Supplier Training Matrix
 - o Responsible Sourcing Training
 - o Product Stewardship Regulation Overview
 - o Chemical Legislation Overview

Comment

W1.4b

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

Type of engagement

Onboarding & compliance

Details of engagement

Requirement to adhere to our code of conduct regarding water stewardship and management

% of suppliers by number

76-100

% of total procurement spend

76-100

Rationale for the coverage of your engagement

Our company's Business Partner Code of Conduct, along with our company's Supplier Performance Expectations, are communicated to existing and potential third-party suppliers and are included in requests for information, proposals and quotes as well as in our purchase-order terms and conditions. We select suppliers that share our commitment to our values and principles, as defined in our Business Partner Code of Conduct and Supplier Expectations Letter. In addition, we participate in the Pharmaceutical Supply Chain Initiative's Pharmaceutical Industry Principles. Our Global Sourcing & Procurement and Supplier Management team is responsible for maintaining the standards by which suppliers are identified, qualified and managed. Supplier selection and management follow a robust sourcing management process, in which environmental sustainability, economic inclusion and supplier diversity principles are integrated throughout each stage. Throughout the supplier life cycle, our company establishes expectations, assesses risk, supports supplier development and manages performance.

Impact of the engagement and measures of success

Using a risk-based approach, supplier assessments and audits are conducted based on multiple factors (e.g., risk profile, engagement and activity type and geography). The assessments and audits evaluate a supplier's ability to meet both industry and our own standards for quality, safety and ethical business practices. While wastewater discharge and overall environmental compliance are included in our internal pre-assessment and these audits, issues specifically related to water risk are not yet incorporated. The standard PSCI supplier self-assessment questionnaire does include questions related to understanding if the supplier is operating in a high stress area. In some instances, this questionnaire is used as a surrogate for our internal pre-assessment.

Where assessments and audits identify deficiencies or opportunities for improvement, we monitor suppliers to ensure that our concerns are addressed in a responsible and compliant manner. As part of our oversight and monitoring, we have established mechanisms to report, track and monitor supplier plans to address nonconformance and help drive continued improvement.

Comment

Type of engagement

Innovation & collaboration

Details of engagement

Educate suppliers about water stewardship and collaboration

% of suppliers by number

Unknown

% of total procurement spend

Unknown

Rationale for the coverage of your engagement

As an active member of the PSCI Environment Team, we are involved in creating training resources for participating pharmaceutical suppliers relating to, but not limited to, reducing their greenhouse gas emissions, waste, water, and biodiversity impacts. In 2021, there were two PSCI webinars focused on water-related issues. They were also incorporated into the 2021 PSCI Annual Meeting agenda. PSCI trained many suppliers during these live sessions, but we are not able to determine the associated spend or percentage of suppliers within our supply chain. In addition to the live sessions, PSCI also made available tools, primers, and session recordings.

Impact of the engagement and measures of success

These training materials provided will help suppliers reduce their water use and evaluate their water-related risks. While we currently do not have a way to measure the impacts of this engagement, we are evaluating tools that will allow us to measure our suppliers' performance.

Comment

W1.4c

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

Our company contributes to efforts surrounding water availability and quality in the areas in which we operate, consistent with being a signatory to the UN CEO Water Mandate. These efforts impact local communities, employees, as well as customers in these areas. They also work towards improving water availability and quality for our operations over the long term. Positive partner, community and employee feedback is an important indicator as to the success of this program. Since 2016 we have donated \$100,000 annually to a non-profit organization for a water project that improves water quality and/or quantity and enable collective action and community engagement in areas close to the facilities we operate. We encourage local employee involvement in the projects.

In 2021, through The Nature Conservancy (TNC), we supported a reforestation project in Montes Claros, Minas Gerais, Brazil through a contribution of \$100,000 to the Belo Horizonte Water Fund. This project included the restoration of native forest, implementation of soil conservation techniques, improvements to dirt roads, and conservation of existing forests in the Juramento River watershed. The Juramento River is a source of potable water for the City of Montes Claros. The TNC expects that this project will improve water security in the city of Montes Claros through, increasing rainwater infiltration, creating a more stable outflow of water over the course of the year, and reducing erosion and sedimentation. Water security at our manufacturing operations located in Montes Claros is directly impacted by this project.

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?

Yes, fines, enforcement orders or other penalties but none that are considered as significant

W2.2a

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

Row 1

Total number of fines

2

Total value of fines

178,370

% of total facilities/operations associated

3.4

Number of fines compared to previous reporting year

Higher

Comment

In 2021, we had 8 water-related enforcement orders.

W3. Procedures

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

Annually

How far into the future are risks considered?

3 to 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

Stakeholder conflicts concerning water resources at a basin/catchment level

Implications of water on your key commodities/raw materials

Water regulatory frameworks

Status of ecosystems and habitats

Access to fully-functioning, safely managed WASH services for all employees

Stakeholders considered

Customers

Employees

Investors

Local communities
NGOs
Regulators
Suppliers
Water utilities at a local level
Other water users at the basin/catchment level

Comment

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.

Our company uses an Enterprise Risk Management (ERM) process whereby risks are identified by the facilities, corporate functions, and business operations. The risks are assessed both quantitatively and qualitatively. Prioritization is based on potential impact and likelihood of occurrence. In this manner, the company's risks are brought together across all operations and the highest risks move forward and are identified in our Annual Report (Form 10-K), section 1.A. Risk Factors. These risks are included as part of the company's ERM process.

Having enough good, high-quality water is critical to the manufacture of pharmaceuticals and often needs to be purified further to meet product quality standards. Impact to customers is a core consideration as water risk is indirectly captured via patient access to medicines and our ability to reliably supply them for both ourselves and our key suppliers.

We assess water risk throughout our network as a standard business practice in accordance with the CEO Water Mandate Target-Setting Guidance.

The process to evaluate Water related risk at a basin/catchment level is as follows:

1. The World Resource Institute's (WRI) Aqueduct Water Risk Atlas tool is used as an initial step to map water risk. Sites are categorized annually using the "Baseline Water Stress" indicator, which is the ratio of total annual water withdrawals to total annual renewable supply, and accounts for upstream consumptive use. Higher stress values indicate more competition among water users.
2. Sites that are identified as high risk are further assessed utilizing a catchment-specific approach to confirm that the catchments are, in fact, experiencing high water stress. Other contextual issues are also evaluated when looking in these catchments and factor into the overall risk rating.
3. Sites that are known to experience water risk, regardless of the Aqueduct Water Risk Atlas tool assessment, are included as high-risk sites.
4. Water conservation plans are put in place at high-risk sites that use more than 100,000m³ of water per year. We work with a third-party, water-use expert to evaluate opportunities for water-use reductions at these sites, resulting in site-specific water conservation plans.
5. Sites that do not meet the water use threshold will continue to be monitored for operational risk and conservation plans will be put in place as needed.

- Using tools from NGOs such as WRI and interaction with them at water-related conferences helps to inform our water risk management approach.
- In accordance with our water public policy, we are working to understand the water challenges in the communities in which we operate, determine how our operations impact those locations and local water utilities, and identify appropriate water management practices for protecting and improving local water quality including impacts on ecosystems.

We use the information from our product environmental risk assessments (performed consistent with the most stringent applicable global regulations, including the regulatory review processes of the U.S. Food and Drug Administration and the European Medicines Agency) to establish or update our internal, compound-specific Environmental Quality Criteria (EQCs), which are used to confirm that wastewaters discharged from our facilities do not contain levels of residual products that present a risk to human health or the environment. Our manufacturing facilities are required to use these EQCs, along with industry-accepted risk-assessment methods, to establish procedures for managing and controlling active pharmaceutical ingredients (APIs) in their wastewater.

- Access to fully-functioning, safely managed WASH services is crucial to the manufacture of high-quality pharmaceuticals and to ensure the health of our employees and their local community. Our internal standard requires we maintain potable water supply in accordance with applicable regulatory requirements or World Health Organization (WHO) drinking water guidelines in the absence of local standards.
- Any basin/catchment level stakeholder conflict or risk that could jeopardize site supply or have implications of water on our key suppliers, commodities, and raw materials is taken very seriously.
- Regulators are our primary stakeholder when evaluating water regulatory framework risk. We have an internal regulatory surveillance standard in which water-related regulatory frameworks are included and performed monthly at the corporate and local level to understand the impacts on our operations and our sites.
- Investor expectations are rising regarding how companies manage their approach to limited natural resources, like water. Access to water is included in our materiality assessment, goals are set to manage our use and risk and our water policy is updated as expectations change.
- If other stakeholders at the local level are at the basin/catchment level are identified they will be included in this report.

W4. Risks and opportunities

W4.1

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

No

W4.1a

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

Our annual report (Form 10-K) defines "substantive" risks as those that could materially adversely impact the Company's business, financial condition, results of operations or prospects. Risks that rise to this level are captured and discussed in our 10-K in section 1.A, Risk Factors. For more information see <http://www.merck.com/investors/>

W4.2b

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

	Primary reason	Please explain
Row 1	Risks exist, but no substantive impact anticipated	<p>We assess water risk throughout our network as a standard business practice. Performing this assessment ensures that we can adapt our strategy to changing stressors in each catchment. It enables us to better prioritize facilities and catchments for water stewardship activities and lays the foundation for potential future water targets in priority locations.</p> <p>In 2021, the WRI Aqueduct Water Risk Atlas tool identified two of our manufacturing and/or research facilities as being in areas with "extremely high" and eight with "high" Baseline Water Stress. There were three fewer sites in areas of "extremely high" risk than in 2020 due to changes to our site network.</p> <p>As a result of the above methodology, we have two sites that have water conservation plans in place.</p> <p>The sites that use the most water in our network are located in the United States. Of these, two are in areas of "high" Baseline Water Stress according to the Aqueduct Water Risk Atlas tool, but through the assessment process, are considered medium risk.</p>

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	Although we have identified suppliers that operate facilities in areas of high water stress, determined by the WRI Aqueduct Water Risk tool, potential supply interruptions at these sites are not expected to have a substantive financial or strategic impact on the company. While we have many thousands of suppliers, we used our previously modelled input/output spend analysis data to identify suppliers with the biggest impact. In our Business Partner Code of Conduct we request that suppliers conserve natural resources and engage in activities aimed at reducing water usage. We also ask that they have systems in place to quantify the amount of water used. Our Business Partner Code of Conduct, along with our company's Supplier Performance Expectations, are communicated to existing and potential third-party suppliers and are included in requests for information, proposals, and quotes as well as in our purchase-order terms and conditions. We select suppliers that share our commitment to our values and principles, as defined in our Business Partner Code of Conduct and Supplier Expectations Letter. In addition, we participate in the Pharmaceutical Supply Chain Initiative's Pharmaceutical Industry Principles. Our Global Sourcing & Procurement and Supplier Management team is responsible for maintaining the standards by which suppliers are identified, qualified and managed. Supplier selection and management follow a robust sourcing management process, in which environmental sustainability, economic inclusion and supplier diversity principles are integrated throughout each stage. Throughout the supplier life cycle, our company establishes expectations, assesses risk, supports supplier development and manages performance.

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

In general our sites employ a variety of technologies and techniques aimed at reducing our water footprint and improving operational performance. Our water-use-reduction initiatives include:

- Consideration of water use in process design
- Cooling-system optimization
- Prompt repairs and maintenance of steam-distribution systems and traps
- Recovery and reuse of steam condensate and “reject water”
- Process-water purification system optimization
- Avoiding the use of water in mechanical seals, such as those in pumps

Estimated timeframe for realization

Current - up to 1 year

Magnitude of potential financial impact

Low

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact

In 2021, the Sustainability Capital Fund was utilized to fund water reduction projects at our site in Rahway, NJ. These projects included a smart irrigation system and condensate return projects.

Type of opportunity

Efficiency

Primary water-related opportunity

Improved water efficiency in operations

Company-specific description & strategy to realize opportunity

Environmental sustainability principles are integrated in each stage of our supplier management program. Our Global Supplier Management Group (GSMG) drives the program and maintains the associated standards and processes by which suppliers are identified, qualified, and managed.

We co-lead the PSCI Environment Team and works together with GSE and peer organizations to develop supplier survey(s), training, tools, and maturity modeling.

Since 2016, this team has been working together to standardize PSCI's environmental supplier data request to reduce the number of different requests to suppliers and to minimize the number of surveys suppliers receive.

Below is a summary of the training and tools developed and/or provided by the PSCI Environment Team in 2021:

- 10 environmental sustainability guides
- 14 responsible sourcing guides for key materials
- Responsible Sourcing of Raw Materials training
- Sustainable Packaging training
- Revised PSCI Principles training
 - o Scope 3 Guidance
 - o Scope 3 Awareness Training
 - o Supplier Maturity Model
 - o Supplier Training Matrix
 - o Responsible Sourcing Training
 - o Product Stewardship Regulation Overview
 - o Chemical Legislation Overview

Estimated timeframe for realization

1 to 3 years

Magnitude of potential financial impact

Low

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact

Improved water efficiency in our supply chain.

Type of opportunity

Efficiency

Primary water-related opportunity

Other, please specify

Improve water quality or water efficiency

Company-specific description & strategy to realize opportunity

In 2021, our company issued its inaugural \$1 billion sustainability bond with the intention to fully allocate the net proceeds within twenty-four months of its issuance. Proceeds from the bond will support projects and partnerships in our priority ESG areas. The bond will help support Access to Essential Service by further advancing health equity and reaching people in low- and middle-income countries and in U.S. underserved populations. Our Environmental projects will help us achieve our carbon neutrality goals, help reduce our operational greenhouse gas (GHG) emissions and improve water quality or water efficiency.

See Merck's website for more information on the bond framework:

<https://www.merck.com/wp-content/uploads/sites/5/2021/12/Merck-Sustainability-Financing-Framework.pdf>

Estimated timeframe for realization

1 to 3 years

Magnitude of potential financial impact

Low

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact

Information on the financial impact of the projects allocated to the bond will be included in the Annual ESG Bond progress report.

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	<ul style="list-style-type: none"> Description of business dependency on water Description of business impact on water Description of water-related performance standards for direct operations Description of water-related standards for procurement Reference to international standards and widely-recognized water initiatives Company water targets and goals Commitment to align with public policy initiatives, such as the SDGs Commitments beyond regulatory compliance Commitment to water-related innovation Commitment to stakeholder awareness and education Commitment to water stewardship and/or collective action 	<p>The scope of our policy is companywide as water is critical for the discovery and production of our medicines and vaccines. We also recognize that water is critical to the health of people, the planet and our business. Water is at the core of sustainable development and is critical for socio-economic development, healthy ecosystems and human survival. It is vital for reducing the global burden of disease and improving the health, welfare and productivity of populations. The United Nations (UN) has declared access to safe drinking water and sanitation as a basic human right that is essential for population health. We are committed to achieving sustainable water management within our operations and our supply chain, and through our core business, partnerships, advocacy and employees, to reduce the impact of water-borne illness globally as part of our overall efforts to improve global health. Additionally, in recognition of the critical importance of water to our business and the global community, we have endorsed the UN CEO Water Mandate, a public commitment to adopt and implement a comprehensive approach to water management and have aligned our water program with its principles. We have also recognized “Clean Water and Sanitation” as one of the eight UN Sustainable Development Goals (SDGs) that we have prioritized as being closely aligned to our mission. We have developed water use targets and water risk management goals to guide the use of water in our operations and supply chain.</p> <p>In addition to the rationale above, our approach and public commitments related to water use and risk in</p>

		<p>Commitment to safely managed Water, Sanitation and Hygiene (WASH) in the workplace</p> <p>Commitment to safely managed Water, Sanitation and Hygiene (WASH) in local communities</p> <p>Acknowledgement of the human right to water and sanitation</p> <p>Recognition of environmental linkages, for example, due to climate change</p>	<p>direct operations and expectations for suppliers are detailed in our policy. Additionally, our approach on water quality is included, with a separate policy in place specific to Pharmaceuticals in the Environment. Lastly it identifies where our public disclosures surrounding these policies is located and highlights our collaboration with external partners and collective action commitments through the UNCEO Water Mandate. We recognize that access to WASH services is crucial to the manufacture of high-quality pharmaceuticals, in our facilities and in those of our suppliers as stated in the rationale above.</p> <p> 1</p>
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 1water-stewardship-policy.pdf

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
Board-level committee	Recognizing the interconnected relationship between climate and water-related matters, water use, and risk are part of our overall environmental sustainability strategy. The Governance Committee assists the Board in its oversight of the company's ESG matters and strategy related thereto, including reviewing the company's environmental sustainability practices.

W6.2b

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

Frequency that water-related issues are a	Governance mechanisms into which water-related issues are integrated	Please explain

	scheduled agenda item		
Row 1	Sporadic - as important matters arise	Other, please specify The full Board and Governance Committee consider water-related matters in their review of overall strategy and risk management.	The Board provides oversight with respect to environmental, social and governance (“ESG”) matters and strategy related thereto. The Governance Committee assists the Board in its oversight of these matters and strategy related thereto. As part of that, the Governance Committee reviews the Company's environmental sustainability practices, its supply chain manufacturing strategy and governance, as well as third party sourcing programs. The VP of Safety and the Environment reports to the Governance Committee at least annually.

W6.2d

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

	Board member(s) have competence on water-related issues	Criteria used to assess competence of board member(s) on water-related issues
Row 1	Yes	The Board is dedicated to the effective oversight of the Company's business and key risks the Company faces and is deliberate in ensuring the Board has the right mix of perspectives, skills, and expertise to address the Company's current and anticipated needs as opportunities and challenges facing the Company evolve. The Governance Committee is responsible for screening and nominating director candidates to be considered for election by the Board. In its regular discussions regarding Board composition – and especially in conjunction with the annual Board and committee evaluations — the Governance Committee works with the Board to determine the appropriate mix of professional experience, expertise, educational background and other qualifications that are particularly desirable in light of our current and future business strategies. One of the Company's priority ESG topics is Environmental Sustainability. A number of our Board members have experience managing or serving as Board members of companies with focused priorities on water-related issues.

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)

Other C-Suite Officer, please specify
 Executive Vice-President and General Counsel as member of the Environmental, Health, & Safety Council

Responsibility

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

Frequency of reporting to the board on water-related issues

As important matters arise

Please explain

The EHS Council is composed of senior-level executives (including the Executive Vice-President and General Counsel) representing all business units. It is responsible for overall EHS governance, leadership, and driving enterprise wide EHS management and performance excellence. In 2021 they met four times, with additional communications as needed.

The Council’s responsibilities include:

- Establishing EHS strategy, policy and business risk mitigation controls
- Ensuring cross-divisional engagement in the design and implementation of EHS business processes
- Sponsoring and implementing a sustainability strategy
- Monitoring the EHS performance of the Company and establish continuous improvement targets
- Enhancing visibility and transparency of EHS risks, processes and issues

Outcomes from the meetings are reported to company’s Board of Directors and Executive Committee regarding progress on goals, objectives and metrics, as well as other material issues.

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	No, and we do not plan to introduce them in the next two years	

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, direct engagement with policy makers

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?

Our company's EHS regulatory surveillance process ensures proactive identification of new or changing water regulatory requirements in the jurisdictions where we operate. The process is administered by our Global Safety & Environment organization who also performs regulatory advocacy as needed on these topics. A review and approval process is in place for advocacy efforts to ensure that any advocacy efforts are aligned with our public policies and commitments. The review and approval process engages the appropriate subject matter experts as well as legal and policy staff as appropriate.

One of the key processes in place to ensure that all of our direct and indirect activities seeking to influence policy, consistent with our water policy and commitments, is our membership in two key advocacy associations, the Antimicrobial Resistance Industry Alliance (AMRIA) and the European Federation of Pharmaceutical Industries and Associations (EFPIA).

As of one the founding members of the AMRIA, an example of proactive engagement on Pharmaceuticals in the Environment is our commitment to the AMRIA charter. In the AMRIA, members established discharge targets for antibiotics from manufacturing facilities consistent with our public policy statement.

In addition, we have representatives on EFPIA to ensure that all our indirect and direct activities will influence water and pharmaceutical policy consistent with our water and sustainability commitments.

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	<p>In 2021, internal water reduction targets continued to be integrated into our company’s key performance indicators for manufacturing facilities as part of a long-term business objective planning. Progress on these targets is evaluated quarterly and reported to manufacturing division leadership, where much of our water use lies.</p> <p>Through these annual key performance indicators, momentum is kept towards the achievement of our 2025 goal to reduce or maintain water use at 2015 levels.</p> <p>Because access to water is critical to our operations, our standard practice is to map the risk for sites that operate in areas under water stress and develop management plans for those sites. We also understand that water risk can be magnified by climate change, making the understanding of our future risk exposure even more critical.</p>
Strategy for achieving long-term objectives	Yes, water-related issues are integrated	5-10	<p>Each manufacturing site is required to develop a 5-year roadmap. The annual key performance indicators are determined each year based on the progress towards our 2025 goal.</p> <p>Each year the water risk for the sites is evaluated utilizing the WRI Aqueduct tool.</p>
Financial planning	No, water-related issues not yet reviewed, but there are plans to do so in the next two years		<p>As each manufacturing site develops its 5-year roadmap financial planning is discussed. Water related issues can be addressed through the Sustainability capital fund and are considered as part of our capital expansion.</p>

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)

24

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

83

Water-related OPEX (+/- % change)

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

Please explain

Our company has recently initiated several substantial capital projects to upgrade water infrastructure in addition to the previously reported capital fund associated with water infrastructure. The additional capital expenditure from these projects resulted in an increase in capital expenditure in 2021. The investment in 2022 is anticipated to be 83% greater than 2021 spend. Our company continues to invest in water related infrastructure at our operating sites and have expenditures forecasted

W7.3

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

	Use of scenario analysis	Comment
Row 1	No, but we anticipate doing so within the next two years	While we understand the potential risks to our company, we have not yet performed a company-wide climate scenario analysis which will inform us on water-related outcomes. In 2021, we began performing a Task Force on Climate-Related Financial Disclosures (TCFD) gap analysis and will be conducting a scenario planning analysis to see what parts of our business are at highest risk due to climate change with water-related outcomes. The results will be used to inform our business strategy further.

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 evaluating ways to determine the true cost of water. We are working with consultants and internal stakeholders.

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	Please explain
Row 1	No, and we do not plan to address this within the next two years	As an industry, manufacture of pharmaceuticals in not water intensive.

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	Goals are monitored at the corporate level	<p>Our global water strategy aims to achieve sustainable water management within our operations, which supports UN Sustainable Development Goal (SDG) 6, “Clean Water and Sanitation.” This is accomplished through:</p> <ul style="list-style-type: none"> • Ensuring that our wastewater discharges comply with local and national standards, as well as internal company requirements • Understanding and controlling our operational water footprint • Managing water risk at our facilities • Reporting publicly on our water use and goals <p>We have established companywide water goals to help us manage water-related risks in our operations.</p> <ul style="list-style-type: none"> • By 2025, we will maintain global water use at or below 2015 levels. <p>The rationale for our goal is as follows:</p> <ul style="list-style-type: none"> • Our aim is to decouple water use from growth and to maintain our global water use at or below 2015 levels. • We recognize contextual factors related to our water use and that it is important to mitigate water-related risks specifically for priority site in basins of high stress. <p>Internally, we monitor the company, site, and business unit</p>

		<p>performance against this goal quarterly. Progress against the goals for the company is reported internally to the EHS Council and publicly via our ESG Progress Report annually. In 2021, internal water reduction targets continued to be integrated into the company’s key performance indicators for manufacturing facilities as part of a long-term business objective planning. Progress on these targets are evaluated quarterly and reported to manufacturing division leadership, where most of our water use lies.</p> <p>The meaningful outcomes of these efforts are as follows:</p> <ul style="list-style-type: none"> • 16% reduction in water withdrawal compared to the 2015 baseline • Fully understand our water-related risk and focus our efforts to mitigate the risk with the completion of water conservation and management plans at priority sites • Translation of a goal into standard business practice with the inclusion for sites in high water stress basins to have water risk management plans in place, in our internal water standard • Justification for the expansion of the sustainability capital fund for water-related projects and immediate qualification of projects • Integration of sustainability (specifically water use reduction) into the company’s key performance indicator for manufacturing facilities
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W8.1b

(W8.1b) Provide details of your water goal(s) that are monitored at the corporate level and the progress made.

Goal

Other, please specify

By 2025, we will maintain global water use at or below 2015 levels to ensure water security

Level

Company-wide

Motivation

Water stewardship

Description of goal

By 2025, we will maintain global water use at or below 2015 levels to ensure water security

Baseline year

2015

Start year

2016

End year

2025

Progress

We have achieved an 16% reduction of water withdrawals in 2021 versus the baseline year of 2015.

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

 ERM CVS - Assurance Statement for Merck - 2021-2022 ESG and CDP.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 withdrawals, Total discharges, Withdrawals from third party sources	ISAE 3000	ERM CVS conducted a limited assurance review in its capacity as an independent third party in accordance with ERM CVS' assurance methodology which is aligned with the International Standard on Assurance Engagements ISAE 3000.

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	Vice President, Global Safety and the Environment	EHS manager

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)].

No

SW. Supply chain module

SW0.1

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

	Annual revenue
Row 1	48,704,000,000

SW1.1

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

No, CDP supply chain members do not buy goods or services from facilities listed 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	No, this is confidential data	

SW2.1

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

Requesting member

Novartis

Category of project

Other

Type of project

Other, please specify

None at this time

Motivation

N/A

Estimated timeframe for achieving project

Other, please specify

N/A

Details of project

N/A

Projected outcome

N/A

Requesting member

CVS Health

Category of project

Other

Type of project

Other, please specify

None at this time

Motivation

N/A

Estimated timeframe for achieving project

Other, please specify

N/A

Details of project

N/A

Projected outcome

N/A

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

N/A

Water intensity value

0

Numerator: Water aspect

Other, please specify

N/A

Denominator

N/A

Comment

N/A

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