CMS Energy Corporation - Water Security 2023

W0. Introduction

W0.1

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

CMS Energy Corporation (CMS Energy) is an energy company operating primarily in the State of Michigan, USA. It is the parent holding company of several subsidiaries, including its principal subsidiary, Consumers Energy Company (Consumers Energy and or CE), an electric and natural gas utility, and NorthStar Clean Energy Company (NorthStar), primarily a domestic independent power producer and marketer. Consumers Energy's electric utility operations include the generation, purchase, distribution, and sale of electricity, and its gas utility operations include the purchase, transmission, storage, distribution, and sale of natural gas. Consumers Energy serves about 6.7 million of Michigan's 10 million residents. NorthStar, through its subsidiaries and equity investments, is engaged in domestic independent power production, including the development and operation of renewable generation, and the marketing of independent power production.

This report is ONLY for the principal subsidiary of CMS Energy, Consumers Energy.

Consumers Energy acknowledges that the long-term sustainability of our Company depends upon our ability to listen to our stakeholders and conduct business that promotes environmental health, increases societal value, and brings economic success so that we can provide safe, reliable, and affordable energy to our customers. This commitment is advanced by our focus on the triple bottom line: people, planet, and prosperity.

In 2018, Consumers Energy committed to a set of Corporate Planet Breakthrough Goal to save 1 billion gallons of water through 2022 which was achieved a year ahead of schedule. In total during the 5-year period between 2018 and 2022 over 1.8 billion gallons of water were saved as a result of the Corporate Planet Goals.
1. This report is made as of the date hereof and contains "forward-looking statements" as defined in Rule 3b-6 of the Securities Exchange Act of 1934, Rule 175 of the Securities Act of 1933, and relevant legal decisions. The forward-looking statements are subject to risks and uncertainties and should be considered in the context of the risk and other factors detailed in CMS Energy's and Consumers Energy's SEC filings. Forward-looking statements should be read in conjunction with "FORWARD-LOOKING STATEMENTS AND INFORMATION" and "RISK FACTORS" sections of CMS Energy's and Consumers Energy's most recent Form 10-K and as updated in reports CMS Energy and Consumers Energy file with the SEC. CMS Energy's and Consumers Energy's "FORWARD-LOOKING STATEMENTS AND INFORMATION" and "RISK FACTORS" sections are incorporated herein by reference and discuss important factors that could cause CMS Energy's and Consumers Energy's results to differ materially from those anticipated in such statements. CMS Energy and Consumers Energy undertake no obligation to update any of the information presented herein to reflect facts, events or circumstances after the date hereof.
2. Nameplate capacity in section W-EU0.1b represents generation capacity during the summer months (planning year 2021 capacity as reported to Midcontinent Independent System Operator, Inc. and limited by interconnection service limits), for wind and solar generation, the amount represents the effective load-carrying capability.
3. "Gross Electricity Generation" in section W-EU0.1b is being reported as Net Electricity Generation in GWh. Net Generation is our preferred measure and is used in the intensity calculations in this section.

W-EU0.1a

(W-EU0.1a) Which activities in the electric utilities sector does your organization engage in?

Electricity generation
Distribution

W-EU0.1b

(W-EU0.1b) For your electricity generation activities, provide details of your nameplate capacity and the generation for each technology.

	Nameplate capacity (MW)	% of total nameplate capacity	Gross electricity generation (GWh)
Coal – hard	2043	40.6	10217
Lignite			
Oil			
Gas	2341	46.5	6684
Biomass			
Waste (non-biomass)			
Nuclear			
Fossil-fuel plants fitted with carbon capture and storage			
Geothermal			
Hydropower			
Wind	648	12.9	1829
Solar	5	0.1	7
Marine			
Other renewable			
Other non-renewable			
Total	5037	100	18752

W0.2

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

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

W0.3

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

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 financial 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
Hydroelectric Operations	This report focuses on Consumers Energy's largest sources of water withdrawals, our steam electric power generating facilities which operate under National Pollutant Discharge Elimination System (NPDES) permits and comprise a majority of our water use. Our hydroelectric plants and Ludington Pumped Storage Facility are not included in this report.
Electric Distribution Operations	This report focuses on Consumers Energy's largest sources of water withdrawals, our steam electric power generating facilities which operate under National Pollutant Discharge Elimination System permits and comprise a majority of our water use. Therefore, our electric distribution operations are not included in this report.
Gas Distribution, Transmission and Storage Operations	This report focuses on Consumers Energy's largest sources of water withdrawals, our steam electric power generating facilities which operate under National Pollutant Discharge Elimination System permits and comprise a majority of our water use. Therefore, our natural gas compressor stations are not included in this report.
Service Center, Call Centers and Office Buildings	This report focuses on Consumers Energy's largest sources of water withdrawals, our steam electric power generating facilities which operate under National Pollutant Discharge Elimination System permits and comprise a majority of our water use. Therefore, our service centers, call centers and office buildings are not included in this report.
Non-Utility Operations	This report focuses on Consumers Energy's largest sources of water withdrawals, our steam electric power generating facilities which operate under National Pollutant Discharge Elimination System permits and comprise a majority of our water use. Therefore, non-utility operations are not included in this report.

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	CMS

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	Direct Use: Quality freshwater from nearby lakes, rivers, and groundwater is withdrawn primarily for non-contact cooling purposes. In addition, water quality is important in steam generation as specific chemicals, including some salts, can result in boiler and condenser tube/pipe corrosion over time. This use is rated as "vital for operations" because without this water input, our steam electric generating facilities would not be able to operate as currently configured. While our intake systems can accommodate moderate fluctuations in water levels, maintaining historic lake and river levels is important to ongoing utilization of our current water intake infrastructure without significant and costly modification through 2025 for coal-fired generation. Indirect Use: This use is rated as "important" because freshwater is essential to fuel exploration, production, and processing, which is vital to our operations.
Sufficient amounts of recycled, brackish and/or produced water available for use	Important	Important	Direct: Recycled water is used for non-contact cooling and other plant processes and reduces the amount of freshwater withdrawn for these uses. Two of our generating facilities use primarily recycled water for condenser cooling. Indirect Use: This use is rated as "important" because recycling and reusing water is essential for fuel exploration, production, and processing, particularly in arid climates with less freshwater availability.

W1.2

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

	% of sites/facilities/operations	Frequency of measurement	Method of measurement	Please explain
Water withdrawals – total volumes	100%	Other, please specify (Measurements are taken at intervals determined by their respective NPDES permits issued by the State of Michigan and reported on a Monthly basis.)	Flow meter and/or calculated flow are used as methods for measurement, depending on the location.	Water withdrawn is monitored at 100% of sites (steam electric generating facilities) due to the vital importance of water to site operations and to track potential environmental risks. Water withdrawal volumes are required to be reported in a number of programs including water stewardship tracking, annual reporting of water usage to the Michigan Department of Environment, Great Lakes, and Energy (EGLE), and annual reporting to the United States Department of Energy, Energy Information Administration Form 923 Supplemental
Water withdrawals – volumes by source	100%	Other, please specify (Measurements are taken at intervals determined by their respective NPDES permits issued by the State of Michigan and reported on a Monthly basis.)	Flow meter and/or calculated flow are used as methods for measurement, depending on the location.	Water withdrawn from surface water, groundwater and municipal sources is monitored at 100% of sites (steam electric generating facilities) for the purposes of tracking water quality and availability from local systems.
Entrained water associated with your metals & mining and/or coal sector activities - total volumes [only metals and mining and coal sectors]	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Produced water associated with your oil & gas sector activities - total volumes [only oil and gas sector]	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Water withdrawals quality	100%	Other, please specify (Measurements are taken at intervals determined by their respective NPDES permits issued by the State of Michigan and reported on a Monthly basis.)	Water quality is measured using analytical laboratory methods and reported monthly to the State of Michigan in our NPDES permit discharge monitoring reports (DMR).	Water withdrawal quality is monitored at 100% of sites (steam electric generation) to determine the necessary level of treatment required for use.
Water discharges – total volumes	100%	Other, please specify (Measurements are taken at intervals determined by their respective NPDES permits issued by the State of Michigan and reported on a Monthly basis.)	Flow meter and/or calculated flow are used as methods for measurement, depending on the location.	Water discharge volumes are monitored at 100% of sites (steam electric generating facilities) due to the vital importance of water to site operations and to track potential environmental risks. Water discharge volumes are required to be reported in a number of programs including water quality monitoring associated with site NPDES permits, annual reporting of water usage to the Michigan Department of Environment, Great Lakes, and Energy (EGLE), and annual reporting for the United States Department of Energy, Energy Information Administration Form 923 Supplemental.
Water discharges – volumes by destination	100%	Other, please specify (Measurements are taken at intervals determined by their respective NPDES permits issued by the State of Michigan and reported on a Monthly basis.)	Flow meter and/or calculated flow are used as methods for measurement, depending on the location.	Water volume discharged by destinations, including Great Lakes, inland lakes, rivers, ground and municipal water systems, is tracked for 100% of sites (steam electric generating facilities) for purposes of ensuring minimal adverse impact to local ecosystems and ensuring the majority of water withdrawn is returned to the watershed. Additionally, these volumes are required to be reported for water quality monitoring associated with site NPDES permits, annual reporting of water usage to the Michigan Department of Environment, Great Lakes, and Energy (EGLE), and annual reporting for the United States Department of Energy, Energy Information Administration Form 923 Supplemental.
Water discharges – volumes by treatment method	100%	Other, please specify (Measurements are taken at intervals determined by their respective NPDES permits issued by the State of Michigan and reported on a Monthly basis.)	Water quality is measured using analytical laboratory methods and reported monthly to the State of Michigan in our NPDES permit discharge monitoring reports (DMR).	Water discharged following different treatment methods is tracked for 100% of sites (steam electric generating facilities) to monitor treatment system effectiveness and capacity as well as for required water quality monitoring associated with site NPDES permits.

	% of sites/facilities/operations	Frequency of measurement	Method of measurement	Please explain
Water discharge quality – by standard effluent parameters	100%	Other, please specify (Measurements are taken at intervals determined by their respective NPDES permits issued by the State of Michigan and reported on a Monthly basis.)	Water quality is measured using analytical laboratory methods and reported monthly to the State of Michigan in our NPDES permit discharge monitoring reports (DMR).	Water discharge quality is monitored at 100% of sites (steam electric generating facilities) for compliance with National Pollutant Discharge Elimination System (NPDES) surface water discharge permits as well as state-issued groundwater permits.
Water discharge quality – emissions to water (nitrates, phosphates, pesticides, and/or other priority substances)	Please select	<Not Applicable>	<Not Applicable>	
Water discharge quality – temperature	100%	Other, please specify (Measurements are taken at intervals determined by their respective NPDES permits issued by the State of Michigan and reported on a Monthly basis.)	Discharge water temperature is measured by temperature probes.	Water discharge quality, including temperature, is monitored at 100% of sites (steam electric generating facilities) for compliance with National Pollutant Discharge Elimination System (NPDES) surface water discharge permits as well as state-issued groundwater permits.
Water consumption – total volume	100%	Other, please specify (Measurements are taken at intervals determined by their respective NPDES permits issued by the State of Michigan and reported on a Monthly basis.)	Flow meter and/or calculated flow are used as methods for measurement, depending on the location.	Water consumption is tracked at 100% of sites (steam electric generating facilities) in order to track consumptive losses through once-through cooling and cooling tower systems and makeup water needs to those systems. Consumptive losses are typically through evaporative losses or discharges to underground injection wells.
Water recycled/reused	26-50	Quarterly	Flow meter and/or calculated flow are used as methods for measurement, depending on the location.	Water recycled/reused is tracked at approximately 50% of sites (steam electric generating facilities) as part of the company-wide water savings goal. Water reuse at our coal fired generating plants include reusing once through cooling water for makeup water needs in the air quality control systems and routing stormwater runoff from coal pile storage to be reused as condenser cooling water onsite.
The provision of fully-functioning, safely managed WASH services to all workers	100%	Continuously	Flow meter and/or calculated flow are used as methods for measurement, depending on the location.	Fully-functioning WASH services are provided for workers at 100% of sites (steam electric generating facilities) and are monitored for usage. Potable sources include groundwater wells and municipal sources, and usage from these sources is required to be reported through municipal water utility discharge permits, annual reporting of water usage to the Michigan Department of Environment, Great Lakes, and Energy (EGLE), and annual reporting for the United States Department of Energy, Energy Information Administration Form 923 Supplemental.

W1.2b

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

	Volume (megaliters/year)	Comparison with previous reporting year	Primary reason for comparison with previous reporting year	Five-year forecast	Primary reason for forecast	Please explain
Total withdrawals	1340952	About the same	Increase/decrease in business activity	Much lower	Facility closure	Total water withdrawals in 2022 for the Consumers Energy steam electric generating fleet were 3% higher than the withdrawals for 2021. Over the next 3 years Consumers Energy is retiring all coal-fired generation, which will greatly reduce total water withdrawals and discharges through significant reduction in once-through cooling water use.
Total discharges	1334586	About the same	Increase/decrease in business activity	Much lower	Facility closure	Total water discharges in 2022 for the Consumers Energy steam electric generating fleet were 3% higher than the discharges for 2021. Over the next 3 years Consumers Energy is retiring all coal-fired generation, which will greatly reduce total water withdrawals and discharges through significant reduction in once-through cooling water use.
Total consumption	6366	About the same	Increase/decrease in business activity	About the same	Facility closure	Total water consumption in 2022 for the Consumers Energy steam electric generating fleet was approximately 10% higher than the total consumption for 2021. Over the next 3 years Consumers Energy is retiring all coal-fired generation, which will greatly reduce total water withdrawals and discharges, we anticipate a corresponding reduction in consumption.

W1.2d

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

	Withdrawals are from areas with water stress	% withdrawn from areas with water stress	Comparison with previous reporting year	Primary reason for comparison with previous reporting year	Five-year forecast	Primary reason for forecast	Identification tool	Please explain
Row 1	Yes	Less than 1%	About the same	Other, please specify (Water withdrawal areas remained unchanged from 2021 reporting year.)	Much lower	Facility closure	WRI Aqueduct	Over the next 3 years Consumers Energy is retiring all coal-fired generation, which will greatly reduce total water withdrawals and discharges through significant reduction in once-through cooling water use.

W1.2h

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

	Relevance	Volume (megaliters/year)	Comparison with previous reporting year	Primary reason for comparison with previous reporting year	Please explain
Fresh surface water, including rainwater, water from wetlands, rivers, and lakes	Relevant	1333360	About the same	Increase/decrease in business activity	Surface Water was withdrawn for cooling water purposes. Consumers Energy withdrew 3% more than 2021.
Brackish surface water/Seawater	Not relevant	<Not Applicable>	<Not Applicable>	<Not Applicable>	Consumers Energy electric generation operations are not near brackish water/seawater.
Groundwater – renewable	Relevant	2880	About the same	Increase/decrease in business activity	Process groundwater usage was 9% higher than 2021.
Groundwater – non-renewable	Not relevant	<Not Applicable>	<Not Applicable>	<Not Applicable>	Consumers Energy electric generation operations do not withdraw groundwater from non-renewable aquifers.
Produced/Entrained water	Not relevant	<Not Applicable>	<Not Applicable>	<Not Applicable>	Consumers Energy electric generation operations do not produce well production water.
Third party sources	Relevant	4712	About the same	Increase/decrease in business activity	Municipal water was withdrawn for cooling water purposes. Consumers Energy withdrew 8% more than 2021.

W1.2i

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

	Relevance	Volume (megaliters/year)	Comparison with previous reporting year	Primary reason for comparison with previous reporting year	Please explain
Fresh surface water	Relevant	1333819	About the same	Increase/decrease in business activity	The electric generating plants which discharge water from surface water sources discharged 3% more in 2022.
Brackish surface water/seawater	Not relevant	<Not Applicable>	<Not Applicable>	<Not Applicable>	Consumers Energy electric generation operations are not near brackish surface/seawater.
Groundwater	Relevant	218	About the same	Increase/decrease in business activity	The electric generating plants which discharge water from groundwater sources discharged 8% less in 2022.
Third-party destinations	Relevant	550	About the same	Increase/decrease in business activity	The electric generating plants which discharge water from municipal sources discharged 6% more in 2022.

W1.2j

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

	Relevance of treatment level to discharge	Volume (megaliters/year)	Comparison of treated volume with previous reporting year	Primary reason for comparison with previous reporting year	% of your sites/facilities/operations this volume applies to	Please explain
Tertiary treatment	Not relevant	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>	Consumers Energy does not use tertiary treatment on discharge water.
Secondary treatment	Not relevant	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>	Consumers Energy does not use secondary treatment on discharge water.
Primary treatment only	Relevant	1334037	Higher	Increase/decrease in business activity	91-99	Consumers Energy uses settling basins, tanks and ditches for primary treatment on discharge water.
Discharge to the natural environment without treatment	Not relevant	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>	Consumers Energy does not use discharges to the natural environment without treatment in the electrical generation process
Discharge to a third party without treatment	Relevant	550	Higher	Increase/decrease in business activity	Less than 1%	Consumers Energy uses municipal wastewater treatment plants for third party treatment of discharge water.
Other	Not relevant	<Not Applicable>	<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	8200000000	1340952	6115.05855541436	Consumers Energy expects to see a substantial decrease in water use over the next 5 years as we retire our coal generation sites. This will contribute to an increase in water withdrawal efficiency.

W-EU1.3

(W-EU1.3) Do you calculate water intensity for your electricity generation activities?

Yes

W-EU1.3a

(W-EU1.3a) Provide the following intensity information associated with your electricity generation activities.

Water intensity value (m3/denominator)	Numerator: water aspect	Denominator	Comparison with previous reporting year	Please explain
71	Total water withdrawals	MWh	About the same	Water intensity decreased by 10% from 2021-2022.

W1.4

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

	Products contain hazardous substances	Comment
Row 1	No	

W1.5

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

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

W1.5a

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

Row 1

Assessment of supplier impact

Yes, we assess the impact of our suppliers

Considered in assessment

Other, please specify (In Development)

Number of suppliers identified as having a substantive impact

0

% of total suppliers identified as having a substantive impact

Unknown

Please explain

We are currently undertaking this assessment and are gathering data from our largest suppliers to assess our suppliers' environmental performance. This information is being gathered but no results are yet available to be disclosed.

W1.5b

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

	Suppliers have to meet specific water-related requirements	Comment
Row 1	No, and we do not plan to introduce water-related requirements within the next two years	

W1.5d

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

W1.5e

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

Type of stakeholder
Customers

Type of engagement
Other

Details of engagement
Other, please specify (Installation of water saving, high-efficiency plumbing fittings in customer homes and businesses.)

Rationale for your engagement
The Company's Energy Waste Reduction (EWR) program reduces the amount of energy that households and businesses use, in part, through the installation of water-saving direct install measures and clothes washers. This program is responsible for the installation of tens of thousands of high-efficiency appliances, showerheads, and aerators.

Impact of the engagement and measures of success
The residential and business Energy Waste Reduction program was responsible for saving 704.1 million gallons of water in 2022.

Type of stakeholder
Customers

Type of engagement
Education / information sharing

Details of engagement
Please select

Rationale for your engagement
In 2022, Consumers Energy held community engagement meetings to help determine the future of its hydroelectric dams.

Impact of the engagement and measures of success

W2. Business impacts

W2.1

(W2.1) Has your organization experienced any detrimental water-related impacts?
No

W2.2

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

	Water-related regulatory violations	Fines, enforcement orders, and/or other penalties	Comment
Row 1	No	<Not Applicable>	

W3. Procedures

W3.1

(W3.1) Does your organization identify and classify potential water pollutants associated with its activities that could have a detrimental impact on water ecosystems or human health?

	Identification and classification of potential water pollutants	How potential water pollutants are identified and classified	Please explain
Row 1	Yes, we identify and classify our potential water pollutants	Consumers Energy complies with all federal, state, and local regulations for steam electric generating facilities which discharge water. Potential pollutants to surface water are identified through the Effluent Limitation Guidelines set forth by EPA and regulated through National Pollutant Discharge Elimination System (NPDES) permits. Laboratory analysis, visual observations, flow measurements, and temperature are used as metrics and indicators. Potential pollutants to groundwater from coal combustion residuals (CCR) are identified and monitored per the Resource Conservation and Recovery Act CCR rule and state solid waste permitting rules. In general, CCR pollutants are categorized into detection and assessment monitoring parameters. Potential impacts are assessed by comparison to state and federal limits and mitigated through compliance with those limits. NPDES permits include daily maximum and weekly or monthly limits to account for chronic and acute toxicity to surface water populations such as benthic organisms. Groundwater limitations are set by federal and state rules to be protective of human health and the environment.	<Not Applicable>

W3.1a

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

Water pollutant category
Other, please specify (Coal Combustion Residuals)

Description of water pollutant and potential impacts
Coal Combustion Residuals (CCRs) can contain metals which leach into transport or groundwater. Metals at sufficient concentrations can be harmful to human health and the environment

Value chain stage
Direct operations

Actions and procedures to minimize adverse impacts
Assessment of critical infrastructure and storage condition (leakages, spillages, pipe erosion etc.) and their resilience
Implementation of integrated solid waste management systems
Water recycling
Reduction or phase out of hazardous substances
Requirement for suppliers to comply with regulatory requirements
Discharge treatment using sector-specific processes to ensure compliance with regulatory requirements
Upgrading of process equipment/methods

Please explain
Consumers Energy does not wet-sluice fly ash at any currently generating steam-electric generating site, which significantly reduces potential water contamination from fly ash. All fly ash is handled dry and placed in licensed landfills which are subject to closure and post-closure requirements under state and federal rules. Spill and fugitive dust emergency management procedures and training are implemented at each site.

Bottom ash transport water complies with effluent limit guidelines set by EPA and limits within the NPDES permit at all steam electric generating sites. Unlined bottom ash impoundments have been closed and replaced by lined impoundments or concrete tanks to prevent the spillage, leaching, and leakage of bottom ash transport water. All surface impoundments have been evaluated for structural stability. Annual meetings are held with local emergency planners and responders.

By the end of 2025, coal will no longer be used as a fuel at any Consumers Energy generation site, making Consumers Energy one of the first utilities in the nation to exit the coal-fired generation business. This shift toward renewable forms of generation will eliminate the creation of any new coal combustion residuals in the Consumers Energy fleet.

Water pollutant category
Other, please specify (Hydrocarbons)

Description of water pollutant and potential impacts
Hydrocarbons released to surface water can have toxic physical and chemical effects on human health and the environment. Hydrocarbon sheens can also be unsightly and cause nuisances to surrounding communities.

Value chain stage
Direct operations

Actions and procedures to minimize adverse impacts
Industrial and chemical accidents prevention, preparedness, and response

Please explain
Consumers Energy has Spill Prevention, Control, and Countermeasures (SPCC) plans in place at all steam electric generating facilities, which include procedures and training requirements to prevent and mitigate spills. Emergencies are managed using an Incident Command System which can be scaled up or down as needed. Community groups and first responders are engaged during the formation and updating of these plans. All steam electric generating facilities are required to check for oil sheen on surface water daily. SPCC plans outline the necessary notifications that need to be made should a hydrocarbon spill leave the site.

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 in an environmental risk assessment

Frequency of assessment
Not defined

How far into the future are risks considered?
Unknown

Type of tools and methods used
Databases

Tools and methods used
Regional government databases

Contextual issues considered
Water regulatory frameworks
Status of ecosystems and habitats

Stakeholders considered
Customers
Local communities
Regulators
Suppliers

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.

	Rationale for approach to risk assessment	Explanation of contextual issues considered	Explanation of stakeholders considered	Decision-making process for risk response
Row 1	The water risk is considered on an individual bases at each steam electric generation facility. These facilities use large amounts of water which require related risks to be evaluated frequently through NPDES, groundwater, and water withdrawal permit requirements.	We operate in a regulatory environment that is mature with regards to water risk assessment and we rely on that framework as a risk assessment tool. Consumers Energy also utilizes a system that assesses the water risk of new projects. This assessment takes into account the water withdrawal and discharge capacities allowed in current permits and does not allow the project to proceed if the current permit capacity is exceeded.	In some cases, as is true with NPDES permitting and project specific water withdrawal/discharge the resource capacity and restrictions are established by the State of Michigan. In other cases, as is true with Consumers Energy dredging activities, changes in operations are sometimes brought before local communities that may be impacted.	Our tools and established regulatory framework allow for clear decision-making and projects are not allowed to proceed if current regulatory conditions are not met. In addition, Consumers Energy tracks environmental regulations and rulemakings to ensure compliance with emerging contaminants.

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, both in direct operations and the rest of our value chain

W4.1a

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

Consumers Energy defines a substantive impact in our business, operations, revenue or expenditure for water risk as any change that would dramatically affect our operation reliability, costs or reputation. The definition applies to direct operations. Specific levels of change or numeric metrics of change in business, operations, revenue or expenditure for water are not established. In the Company's financial report, specific risks associated with the Company's substantial capital investment program include governmental approvals and permitting, and changes in environmental, legislative, and regulatory requirements. These risks could produce a substantive impact to our business.

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	100	A facility is a steam electric generating facility. This represents 100% of in-scope facilities defined within the boundary of this report.

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	St. Lawrence

Number of facilities exposed to water risk
4

% company-wide facilities this represents
100%

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
100%

% 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
100%

Comment
A facility is a steam electric generating facility.

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	St. Lawrence

Type of risk & Primary risk driver

Acute physical	Drought

Primary potential impact
Increased operating costs

Company-specific description
Changing water levels could result in the restructuring of cooling water intake and discharge structures for the coal and natural gas/oil-fired facilities, JH Campbell and DE Karn. Higher or lower water levels could result in an impaired ability to withdraw water for cooling using the existing systems. This is relevant for the Company's coal-fired generating units that use water from the Great Lakes primarily for once-through cooling. The exclusively natural gas-fired units, Jackson Generating Station and Zeeland Generating Station, use municipal water or private wells which are less susceptible to short-term drought impacts.

Timeframe
More than 6 years

Magnitude of potential impact
Medium-high

Likelihood
Unlikely

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
The financial impact of the risk is the cost per day of an unplanned plant outage due to the inability to withdraw sufficient water for cooling and other systems.

Primary response to risk
Increase investment in new technology

Description of response
The Company plans to retire all coal-fired generating units using once-through cooling by the end of 2025. To accomplish this retirement, the Company has purchased one natural gas-fired plant in 2023 which has a reduced dependence on water availability and will continue to invest in renewable sources that do not have a dependence on water availability. Additional sources of renewable energy such as wind and solar are being sited and commissioned within the next two years. As the Company shifts away from its coal-fired units, the risk is lowered. Until that time, the lake levels are monitored to ensure current infrastructure is able to function appropriately. If levels reached points where impacts were beginning to be seen on existing systems, the Company would evaluate whether or not capital investment in infrastructure was appropriate to extend the life of the plant.

Cost of response

Explanation of cost of response
No cost included as the shift to renewable sources of generation has multiple drivers.

Country/Area & River basin

United States of America	St. Lawrence

Type of risk & Primary risk driver

Regulatory	Regulation of discharge quality/volumes

Primary potential impact
Increased cost of capital

Company-specific description
More stringent water use and/or discharge regulations could affect cost to customers as a result of increased capital spending and operation and maintenance costs. One example of risk is with regards to the effluent limitation guidelines for steam electric generating units (ELGs) proposed rule, published in 2023. Significant changes to the management of wastewater will include capital spending and operation and maintenance costs.

Timeframe
1-3 years

Magnitude of potential impact
Medium-high

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 is an estimate of the potential cost of compliance with the proposed ELG 2023 Rule. While the rule is not final, it is anticipated that compliance with this rule will require capital spending and operation and maintenance costs.

Primary response to risk
Engage with regulators/policymakers

Description of response
Consumers Energy participates in various policy-related groups to engage with regulators and understand and influence policy outcomes. Additionally, the Company has made an effort to work closely with state environmental agencies through permit renewal processes to stay aligned on interpretations and understand how current and upcoming rulemakings may be applied.

Cost of response

Explanation of cost of response
It is anticipated that compliance with this rule will require capital spending and operation and maintenance costs.

W4.2a

(W4.2a) Provide details of risks identified within your value chain (beyond 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	St. Lawrence

Stage of value chain
Supply chain

Type of risk & Primary risk driver

Chronic physical	Seasonal supply variability/inter annual variability

Primary potential impact
Increased production costs due to changing input prices from supplier

Company-specific description
The largest supplier cost is the cost of fuel (i.e. coal and natural gas). Impact might include water regulations specific to the coal and natural gas industries. Coal availability could be impacted by lake levels, and in turn require the Company to dredge intake locations to support continued operation. Natural gas supply could be impacted by water availability as fracking is a water intensive process. The majority of natural gas wells are located in sections of the US experiencing drought conditions.

Timeframe
1-3 years

Magnitude of potential impact
Unknown

Likelihood
Unlikely

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
Costs could vary widely depending on magnitude of potential impacts.

Primary response to risk
Please select

Description of response
The Company plans to retire all coal-fired generating units using once-through cooling by the end of 2025. To accomplish this retirement , the Company has purchased one natural gas-fired plant which will have a reduced dependence on water availability and will continue to invest in renewable sources, such as wind and solar, that do not have a dependence on water availability.

Cost of response

Explanation of cost of response
No cost included as the shift to renewable sources of generation has multiple drivers.

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
Increased sales of existing products/services

Company-specific description & strategy to realize opportunity
Water has been and will continue to be an important resource in electric generation. It is used to generate steam to turn a turbine. Additionally, water is used for condenser cooling at our gas and coal-fired generating units. Consumers Energy understands the significance of the Great Lakes to the public and wildlife and their impact on our business. Having these abundant water resources available to our operations allows the Company to efficiently operate. Consumers Energy supports the continued protection and preservation of the Great Lakes water resources through compliance with water withdrawal and discharge regulatory requirements, engagement in the larger community discussion water resource protection, and achievement of established company-wide water savings goals. Wise management of this resource and disclosure of management efforts aligns with shareholder interests.

Estimated timeframe for realization
1 to 3 years

Magnitude of potential financial impact
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

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.

Facility reference number
Facility 1

Facility name (optional)
JH Campbell

Country/Area & River basin

United States of America	St. Lawrence

Latitude
42.91

Longitude
-86.2

Located in area with water stress
No

Primary power generation source for your electricity generation at this facility
Coal - hard

Oil & gas sector business division
<Not Applicable>

Total water withdrawals at this facility (megaliters/year)
960582

Comparison of total withdrawals with previous reporting year
About the same

Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes
959112

Withdrawals from brackish surface water/seawater
0

Withdrawals from groundwater - renewable
1470

Withdrawals from groundwater - non-renewable

0

Withdrawals from produced/entrained water
0

Withdrawals from third party sources
0

Total water discharges at this facility (megaliters/year)
960269

Comparison of total discharges with previous reporting year
About the same

Discharges to fresh surface water
960052

Discharges to brackish surface water/seawater
0

Discharges to groundwater
218

Discharges to third party destinations
0

Total water consumption at this facility (megaliters/year)
313

Comparison of total consumption with previous reporting year
About the same

Please explain
Withdrawal, discharges, and consumption are based on actual pump operating hours and the estimated flow rate of each operating pump and was about the same as last year with roughly a 5% increase in withdrawals and discharges and a 5% increase in consumption.

Facility reference number
Facility 2

Facility name (optional)
DE Karn

Country/Area & River basin

United States of America	St. Lawrence

Latitude
43.64

Longitude
-83.84

Located in area with water stress
No

Primary power generation source for your electricity generation at this facility
Coal - hard

Oil & gas sector business division
<Not Applicable>

Total water withdrawals at this facility (megaliters/year)
374649

Comparison of total withdrawals with previous reporting year
About the same

Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes
374249

Withdrawals from brackish surface water/seawater
0

Withdrawals from groundwater - renewable
0

Withdrawals from groundwater - non-renewable
0

Withdrawals from produced/entrained water
0

Withdrawals from third party sources
400

Total water discharges at this facility (megaliters/year)
373768

Comparison of total discharges with previous reporting year
About the same

Discharges to fresh surface water
373768

Discharges to brackish surface water/seawater
0

Discharges to groundwater
0

Discharges to third party destinations
0

Total water consumption at this facility (megaliters/year)
881

Comparison of total consumption with previous reporting year
About the same

Please explain
Withdrawal, discharges, and consumption are based on actual pump operating hours and the estimated flow rate of each operating pump and was lower than last year with roughly a 3% decrease in withdrawals and discharges and a 3% increase in consumption.

Facility reference number
Facility 3

Facility name (optional)
Zeeland Generating Station

Country/Area & River basin

United States of America	St. Lawrence

Latitude
42.82

Longitude
-85.99

Located in area with water stress
No

Primary power generation source for your electricity generation at this facility
Gas

Oil & gas sector business division
<Not Applicable>

Total water withdrawals at this facility (megaliters/year)
3226

Comparison of total withdrawals with previous reporting year
Higher

Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes
0

Withdrawals from brackish surface water/seawater
0

Withdrawals from groundwater - renewable
0

Withdrawals from groundwater - non-renewable
0

Withdrawals from produced/entrained water
0

Withdrawals from third party sources
3226

Total water discharges at this facility (megaliters/year)
38

Comparison of total discharges with previous reporting year
Lower

Discharges to fresh surface water
0

Discharges to brackish surface water/seawater
0

Discharges to groundwater
0

Discharges to third party destinations
38

Total water consumption at this facility (megaliters/year)
3188

Comparison of total consumption with previous reporting year
Higher

Please explain
Withdrawal, discharges, and consumption are based on actual pump operating hours and the estimated flow rate of each operating pump. Discharges are based on flow meters to the municipal wastewater treatment works. Increased dispatch at this location leads to an overall increase in water use. Zeeland Generating Station saw a 16% increase in withdrawals, 32% reduction in discharges, and 17% increase in consumption.

Facility reference number
Facility 4

Facility name (optional)
Jackson Generating Station

Country/Area & River basin

United States of America	St. Lawrence

Latitude
42.24

Longitude
-84.37

Located in area with water stress
No

Primary power generation source for your electricity generation at this facility
Gas

Oil & gas sector business division
<Not Applicable>

Total water withdrawals at this facility (megaliters/year)
2497

Comparison of total withdrawals with previous reporting year
About the same

Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes
0

Withdrawals from brackish surface water/seawater
0

Withdrawals from groundwater - renewable
1410

Withdrawals from groundwater - non-renewable
0

Withdrawals from produced/entrained water
0

Withdrawals from third party sources
1087

Total water discharges at this facility (megaliters/year)
512

Comparison of total discharges with previous reporting year
About the same

Discharges to fresh surface water
0

Discharges to brackish surface water/seawater
0

Discharges to groundwater
0

Discharges to third party destinations
512

Total water consumption at this facility (megaliters/year)
1985

Comparison of total consumption with previous reporting year
About the same

Please explain
Withdrawal, discharges, and consumption are based on actual pump operating hours and the estimated flow rate of each operating pump. Discharges are based on flow meters to the municipal wastewater treatment works. Withdrawals increased 4%, discharges increased 9%, and consumption increased 2%.

W5.1a

(W5.1a) For the facilities referenced in W5.1, what proportion of water accounting data has been third party verified?

Water withdrawals – total volumes

% verified
Not verified

Verification standard used
<Not Applicable>

Please explain
The Company's focus has been on greenhouse gas data verification. Water accounting data is currently reviewed internally and reported to state regulators.

Water withdrawals – volume by source

% verified
Not verified

Verification standard used
<Not Applicable>

Please explain
The Company's focus has been on greenhouse gas data verification. Water accounting data is currently reviewed internally and reported to state regulators.

Water withdrawals – quality by standard water quality parameters

% verified
Not verified

Verification standard used
<Not Applicable>

Please explain
The Company's focus has been on greenhouse gas data verification. Water accounting data is currently reviewed internally and reported to state regulators.

Water discharges – total volumes

% verified
Not verified

Verification standard used
<Not Applicable>

Please explain
The Company's focus has been on greenhouse gas data verification. Water accounting data is currently reviewed internally and reported to state regulators.

Water discharges – volume by destination

% verified
Not verified

Verification standard used
<Not Applicable>

Please explain
The Company's focus has been on greenhouse gas data verification. Water accounting data is currently reviewed internally and reported to state regulators.

Water discharges – volume by final treatment level

% verified
Not verified

Verification standard used
<Not Applicable>

Please explain
The Company's focus has been on greenhouse gas data verification. Water accounting data is currently reviewed internally and reported to state regulators.

Water discharges – quality by standard water quality parameters

% verified
Not verified

Verification standard used
<Not Applicable>

Please explain
The Company's focus has been on greenhouse gas data verification. Water accounting data is currently reviewed internally and reported to state regulators.

Water consumption – total volume

% verified
Not verified

Verification standard used
<Not Applicable>

Please explain
The Company's focus has been on greenhouse gas data verification. Water accounting data is currently reviewed internally and reported to state regulators.

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	Commitment to reduce water withdrawal and/or consumption volumes in direct operations Commitment to water stewardship and/or collective action Commitments beyond regulatory compliance Reference to company water-related targets Acknowledgement of the human right to water and sanitation	Consumers Energy's water goal is accessible on our Corporate website as a stakeholder outreach tool https://www.consumersenergy.com/-/media/CE/Documents/sustainability/water-use-policy.ashx This goal encompasses all of our operations with a heightened focus on our direct generation operations. Consumers Energy also produces an annual Environmental, Social, Governance and Sustainability Report which aims to educate our stakeholders on our most material environmental, social and governance issues including water.

W6.2

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

Yes

W6.2a

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

Position of individual or committee	Responsibilities for water-related issues
Chief Executive Officer (CEO)	At least annually, the President/Chief Executive Officer and the Board of Directors are briefed on water related issues, including progress toward meeting water stewardship goals and impacts of existing and proposed regulations on operations and long-term financial plans. The Boards of Directors (“Board”) of CMS Energy and Consumers Energy, made up of a number of directors with experience and knowledge of environmental issues, have the highest level of oversight of our public responsibility and sustainability practices. Review of these practices occur at the Board level with the Governance, Sustainability and Public Responsibility Committee (“GS&PR Committee”) also being responsible for advising and assisting the Board with respect to our public responsibility and sustainability matters. This committee consist of three board members. In addition to Board oversight, management of CMS Energy and Consumers Energy has implemented an Environmental and Sustainability Council (“E&SC”) in order to create a group of critical internal leaders who will work together to ensure our actions meet our environmental goals. The E&SC reports to the GS&PR Committee.

W6.2b

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

	Frequency that water-related issues are a scheduled agenda item	Governance mechanisms into which water-related issues are integrated	Please explain
Row 1	Scheduled - some meetings	Monitoring implementation and performance Overseeing major capital expenditures Reviewing and guiding annual budgets Reviewing and guiding corporate responsibility strategy Reviewing and guiding risk management policies Setting performance objectives	On a quarterly basis, the Board and/or GS&PR Committee review sustainability items which would include water-related issues, as appropriate. Consumers Energy management consider sustainability regularly in their decision making, including committee reviews of the sustainability programs, practices and strategies. This review includes our reporting as it relates to engagement with shareholders and makes recommendations to the Board with respect to sustainability matters, as appropriate.

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	Yes	Three or more years in a supervisory capacity, oversight role, consultation role or operating responsibility within the last ten years in the Sustainability and Environmental field.	<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)
Other C-Suite Officer, please specify (Senior Vice President)

Water-related responsibilities of this position
Assessing water-related risks and opportunities
Monitoring progress against water-related corporate targets
Managing public policy engagement that may impact water security

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

Please explain
Senior Vice Presidents are responsible for managing progress on water related targets and ensuring the Company meets commitments that have been laid out in the water policy. At least annually, the President/Chief Executive Officer and the Board of Directors are briefed on water related issues, including progress toward meeting water stewardship goals and impacts of existing and proposed regulations on operations and long-term financial plans.

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 water commitment is a voluntary goal to reduce water use and is not typically affected directly by federal and state policy. That said, Consumers Energy is a triple bottom line company, which means we consider the impact of our decisions on people, planet and prosperity. The triple bottom line balances the interests of all stakeholders, including co-workers, customers, suppliers, regulators, Michigan residents and the investment community. Input on association priorities and direction is given with consideration to ensure it is consistent with the triple bottom line. If an inconsistency is found, the Company will provide comments to influence the association's position, and if necessary, vote against the action. Moreover, the Company re-evaluates its participation in trade associations annually to validate that Company water-related priorities are maintained and/or enhanced with its involvement. The Company also evaluates any comments it submits directly on a policy question are consistent with the triple bottom line.

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	16-20	Water-related issues were considered in the Company's long term strategic plan for electric generation. The Company's integrated resource plan (IRP) takes into account environmental impacts from the types of generation the Company will pursue to replace its aging coal fleet, including water impacts. The plan includes an increase in renewables, primarily solar, and purchasing 1 existing natural gas-fired plant, due in part to low impacts to both air and water.
Strategy for achieving long-term objectives	Yes, water-related issues are integrated	5-10	When a new operations facility is being evaluated, the impacts on water needs are evaluated to verify that there is available water capacity with no adverse impact. This evaluation takes into account the criteria needed to obtain permits. The outcome of this evaluation would impact locations being considered, generating unit type, plant design, and cost.
Financial planning	Yes, water-related issues are integrated	5-10	Long term financial plan considers projected costs of compliance with current and proposed water-related regulatory requirements. Projects impacting water are evaluated in the design stage and costs of water related impacts or issues are integrated into long term financial plan overall cost for the project.

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)

-58

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

94

Water-related OPEX (+/- % change)

-73

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

4

Please explain

The numbers provided are estimates based on projected expenditures for major projects to comply with water-related environmental regulations. They may not be inclusive of all water-related expenditures and are based on spending estimates, not actual spend. Water-related capital and operational expenditures at the steam-electric generating facilities were dominated by spending to comply with the Resource Conservation and Recovery Act Coal Combustion Residuals (CCR) Rule for both coal ash landfills and surface impoundments. Water-related operating expenditures are expected to increase in 2023 due to the cost of chemicals and water treatment at the new Covert Plant and coal cessation-related activities.

W7.3

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

	Use of scenario analysis	Comment
Row 1	Yes	Consumers Energy utilizes a capacity expansion model called “Aurora” to determine the most economic resources necessary to meet long-term (0-20 years) customer energy and demand needs.

W7.3a

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

	Type of scenario analysis used	Parameters, assumptions, analytical choices	Description of possible water-related outcomes	Influence on business strategy
Row 1	Climate-related	Many inputs/variables and assumptions were used to perform these analyses, including but not limited to natural gas price forecast (assumption: fuel price forecasts remain at similar levels to BAU AEO), demand and energy forecast (assumption: Modelled at a level equivalent to a 50/50 forecast and consistent with BAU AEO), technological advancement (assumption: Technological advancement and economies of scale result in a greater potential for demand response, energy efficiency, and distributed generation as well as lower capital cost for renewables). This this scenario analysis was applicable to all electric supply for the Company’s service territory.	Consumers Energy’s Integrated Resource Plan (IRP) includes ending coal use by the end of 2025 which is 15 years faster than anticipated. The analysis showed an avoidance of more than 220 billion gallons of water usage from our systems each year.	The IRP proposed decommissioning the Consumers Energy coal=fired generation units. Consumers Energy coal-fired units will be retired by the end of 2025. This includes all 3 units at the Campbell coal-fired plant and 2 units at the D.E. Karn coal=fired plant two years sooner, in 2023. Consumers Energy will among the first utilities in the nation to go coal-free.

W7.4

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

Row 1

Does your company use an internal price on water?

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

Please explain

The Company does not plan to use an internal price on water and will instead integrate water stewardship into our practices through our water policy and sustainability programs.

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	Yes	Water withdrawals	<Not Applicable>	Consumers Energy's clean energy plan will eliminate all coal use by 2025, thus enabling the Company to utilize other generation technologies that have a lower water impact.

W8. Targets

W8.1

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

Yes

W8.1a

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

	Target set in this category	Please explain
Water pollution	No, and we do not plan to within the next two years	Consumers Energy closely monitors the effluent water quality at each of the designated generation sites. The effluent is sampled on a regular basis and reported on a regular basis as part of our compliance activities. The constituents we monitor for, as well as the frequency of monitoring are determined by the potential environmental hazards unique to each location.
Water withdrawals	Yes	<Not Applicable>
Water, Sanitation, and Hygiene (WASH) services	No, and we do not plan to within the next two years	
Other	No, and we do not plan to within the next two years	

W8.1b

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

Target reference number
Target 1

Category of target
Water withdrawals

Target coverage
Company-wide (direct operations only)

Quantitative metric
Reduction in total water withdrawals

Year target was set
2017

Base year
2017

Base year figure
0

Target year
2022

Target year figure
1000000000

Reporting year figure
1897000000

% of target achieved relative to base year
189.7

Target status in reporting year
Achieved

Please explain
Target was set at the end of 2017 with the first full year of data collected in 2018. We have achieved over 100% of the 5-year goal and the Company had saved over 1.8 billion gallons of water between 2017 and 2022.

W9. Verification

W9.1

(W9.1) Do you verify any other water information reported in your CDP disclosure (not already covered by W5.1a)?
No, we do not currently verify any other water information reported in our CDP disclosure

W10. Plastics

W10.1

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

	Plastics mapping	Value chain stage	Please explain
Row 1	Not mapped – and we do not plan to within the next two years	<Not Applicable>	

W10.2

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

	Impact assessment	Value chain stage	Please explain
Row 1	Not assessed – and we do not plan to within the next two years	<Not Applicable>	

W10.3

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

	Risk exposure	Value chain stage	Type of risk	Please explain
Row 1	Not assessed – and we do not plan to within the next two years	<Not Applicable>	<Not Applicable>	

W10.4

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

	Targets in place	Target type	Target metric	Please explain
Row 1	No – and we do not plan to within the next two years	<Not Applicable>	<Not Applicable>	

W10.5

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

	Activity applies	Comment
Production of plastic polymers	No	
Production of durable plastic components	No	
Production / commercialization of durable plastic goods (including mixed materials)	No	
Production / commercialization of plastic packaging	No	
Production of goods packaged in plastics	No	
Provision / commercialization of services or goods that use plastic packaging (e.g., retail and food services)	No	

W11. Sign off

W-FI

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

W11.1

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

	Job title	Corresponding job category
Row 1		Please select