

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 Michigan. It is the parent holding company of several subsidiaries, including its principal subsidiary, Consumers Energy Company (Consumers Energy or Company), an electric and natural gas utility and CMS Enterprises Company (CMS Enterprises), 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 6.8 million of Michigan's 10 million residents. CMS Enterprises, through its subsidiaries and equity investments, is engaged in domestic independent power production, including the development and operation of renewable generation and marketing of independent power production. CMS Energy was also the parent holding company of EnerBank USA® (EnerBank) until October 1, 2021 when EnerBank was acquired by Regions Bank. 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.

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.

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	40.9	10861
Lignite	0	0	0
Oil	701	14	0
Gas	2318	46.4	5562
Biomass	0	0	0
Waste (non-biomass)	0	0	0
Nuclear	0	0	0
Fossil-fuel plants fitted with carbon capture and storage	0	0	0
Geothermal	0	0	0
Hydropower	0	0	0
Wind	632	12.6	1570
Solar	4	0.08	6
Marine	0	0	0
Other renewable	0	0	0
Other non-renewable	0	0	0
Total	5698	100	17999

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.

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
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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 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	Please explain
Water withdrawals – total volumes	100%	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%	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 sector activities - total volumes [only metals and mining sector]	<Not Applicable>	<Not Applicable>
Produced water associated with your oil & gas sector activities - total volumes [only oil and gas sector]	<Not Applicable>	<Not Applicable>
Water withdrawals quality	100%	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%	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%	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%	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.
Water discharge quality – by standard effluent parameters	100%	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 – temperature	100%	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%	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	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%	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, and how do these volumes compare to the previous reporting year?

	Volume (megaliters/year)	Comparison with previous reporting year	Please explain
Total withdrawals	1303922	Higher	Total water withdrawals in 2021 for the Consumers Energy steam electric generating fleet were 13% higher than the withdrawals for 2020.
Total discharges	1298180	Higher	Total water discharges in 2021 for the Consumers Energy steam electric generating fleet were 13% higher than the withdrawals for 2020.
Total consumption	5742	Higher	Total water consumption in 2021 for the Consumers Energy steam electric generating fleet was approximately 19% higher than the total consumption for 2020.

W1.2d

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

	Withdrawals are from areas with water stress	% withdrawn from areas with water stress	Comparison with previous reporting year	Identification tool	Please explain
Row 1	Yes	Less than 1%	About the same	WRI Aqueduct	According to the WRI Aqueduct tool, the baseline water stress near Consumers Energy generating facilities are low.

W1.2h

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

	Relevance	Volume (megaliters/year)	Comparison with previous reporting year	Please explain
Fresh surface water, including rainwater, water from wetlands, rivers, and lakes	Relevant	1296996	Higher	Surface Water was withdrawn for cooling water purposes. Consumers Energy withdrew 13% more than 2020.
Brackish surface water/Seawater	Not relevant	<Not Applicable>	<Not Applicable>	Consumers Energy electric generation operations are not near brackish surface/seawater.
Groundwater – renewable	Relevant	2611	Higher	Process groundwater usage was 42% higher than 2020.
Groundwater – non-renewable	Not relevant	<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>	Consumers Energy electric generation operations do not produce well production water
Third party sources	Relevant	4316	About the same	Municipal water was withdrawn for cooling water purposes. Consumers Energy withdrew 3% less than 2020.

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	1297428	Higher	The electric generating plants which discharge water from surface water sources discharged 13% more in 2021.
Brackish surface water/seawater	Not relevant	<Not Applicable>	<Not Applicable>	Consumers Energy electric generation operations are not near brackish surface/seawater.
Groundwater	Relevant	234	Higher	The electric generating plants which discharge water from groundwater sources discharged 22% more in 2021.
Third-party destinations	Relevant	518	Higher	The electric generating plants which discharge water from municipal sources discharged 31% more in 2020.

W1.2j

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

	Relevance of treatment level to discharge	Volume (megaliters/year)	Comparison of treated volume with previous reporting year	% of your sites/facilities/operations this volume applies to	Please explain
Tertiary treatment	Not relevant	<Not Applicable>	<Not Applicable>	<Not Applicable>	Consumers Energy does not use tertiary treatment on discharge water.
Secondary treatment	Not relevant	<Not Applicable>	<Not Applicable>	<Not Applicable>	Consumers Energy does not use secondary treatment on discharge water.
Primary treatment only	Relevant	1297662	Higher	11-20	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>	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	518	Higher	21-30	Consumers Energy uses municipal wastewater treatment plants for third party treatment of discharge water.
Other	Not relevant	<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	732900000	1303922	5620.73498261399	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)	Numerator: water aspect	Denominator	Comparison with previous reporting year	Please explain
79*	Total water withdrawals	MWh	About the same	Water intensity remained the same between 2020 and 2021.

*Data reported in W-EU1.3a was updated after submission of the report in the CDP system. This data reflects a correction as intensity was incorrectly reported as m3/USD Million sales as opposed to m3/MWh. The water intensity value above reflects a change to correct the denominator for this measure.

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

Unknown

% of total procurement spend

Unknown

Rationale for this coverage

The Company is developing procedures to request and document information from its largest suppliers, on a cost basis, to discern if the supplier has the potential to negatively impact the environment, if an environmental management system has been implemented and whether cost effective measures to avoid pollution have been implemented. In addition, the Company tracks environmental regulations and rulemakings to ensure compliance with emerging contaminants.

Impact of the engagement and measures of success

Supplier surveys on environmental management and water-related metrics allow the Company to evaluate supplier performance in key sustainability areas and provides context for pursuing further engagement with suppliers in these areas.

Comment

W1.4b

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

Type of engagement

Onboarding & compliance

Details of engagement

Inclusion of water stewardship and risk management in supplier selection mechanism
Requirement to adhere to our code of conduct regarding water stewardship and management

% of suppliers by number

Unknown

% of total procurement spend

Unknown

Rationale for the coverage of your engagement

Consumers Energy operates in a manner that conserves and protects natural resources and the environment and as such has a third party code of conduct requiring third parties comply with environmental laws and regulations and conduct operations on behalf of Consumers Energy in an environmentally friendly manner. When selecting suppliers, the Company has a process for evaluating bids on environmentally friendly approaches or alternatives which include water usage. In addition, the Company has a supplier pre-qualification process which includes questions on suppliers' environmental policies to ensure third party employees have environmental plans in place and in turn train their employees on these plans.

Impact of the engagement and measures of success

Supplier evaluation in the bid process and during pre-qualification allows the Company to evaluate supplier performance in key sustainability areas and provides context for pursuing further engagement with suppliers in these areas.

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?

Consumers Energy believes the basis of our sustainability efforts should be founded on what both we and our stakeholders deem to be most important. In 2021, Consumers Energy and CMS Enterprises jointly pursued an ESG (environmental, social and governance) materiality assessment. This assessment relied heavily on survey results that captured the importance of ESG issues from the perspective of a variety of Company stakeholders including customers. The results of this assessment will serve as a prioritization tool within our ESG/sustainability efforts and strategy. Additionally, in 2018 Consumers Energy announced new corporate wide planet goals. The Company met with stakeholders including key customers to engage them collaboratively and get input and feedback on what environmental issues we should be focusing on. The results of these meetings were compiled and became the basis for the goals set for all media, including water, for the next five years.

W2. Business impacts

W2.1

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

Yes

W2.1a

(W2.1a) Describe the water-related detrimental impacts experienced by your organization, your response, and the total financial impact.

Country/Area & River basin

United States of America	St. Lawrence
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Type of impact driver & Primary impact driver

Regulatory	Higher water prices
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Primary impact

Increased operating costs

Description of impact

The increased cost of water purchased from 3rd party sources.

Primary response

Secure alternative water supply

Total financial impact

20000000

Description of response

The increased cost of municipal water in Jackson necessitated the installation of a new well and RO pretreatment system at the Jackson Generating Station. The cost of that installation was \$20,000,000.

W2.2

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

No

W3. Procedures

W-EU3.1

(W-EU3.1) How does your organization identify and classify potential water pollutants associated with your business activities in the electric utilities sector that could have a detrimental impact on water ecosystems or human health?

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.

W-EU3.1a

(W-EU3.1a) Describe how your organization minimizes the adverse impacts of potential water pollutants associated with your activities in the electric utilities sector on water ecosystems or human health.

Potential water pollutant	Description of water pollutant and potential impacts	Management procedures	Please explain
Coal combustion residuals	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	Compliance with effluent quality standards Measures to prevent spillage, leaching, and leakages Community/stakeholder engagement Emergency preparedness Other, please specify (Engineering controls)	CE does not wet-slurice 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.
Hydrocarbons	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.	Compliance with effluent quality standards Measures to prevent spillage, leaching, and leakages Community/stakeholder engagement Emergency preparedness	CE 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 water daily. SPCC plans outline the necessary notifications that need to be made should a hydrocarbon spill leave the site.
Radiation	Radium isotopes in water may cause cancer, kidney issues, or birth defects.	Other, please specify (Radium isotope testing in groundwater)	Radium isotopes are analyzed in monitoring wells surrounding coal combustion residuals disposal units per the federal Resource Conservation and Recovery Act.
Thermal pollution	Thermal pollution caused by releasing warm water used for cooling can cause organisms to go into temperature shock.	Compliance with effluent quality standards	The Company commissioned studies of thermal plumes in 2016 and complies with NPDES temperature limits.

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.

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.

The water risk at each steam electric generation facility is considered on an individual basis. These generating facilities use large amounts of water which require water related risks to be evaluated frequently through NPDES, groundwater and water withdrawal permit requirements. Risk assessments are built into the environmental regulations that we operate under. We operate in a regulatory environment that is mature with regards to water risk assessment and we rely on this 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 it exceeds the current permit capacity, and in some cases, the resource capacity established by the State of Michigan. This assessment addresses any water issues that may occur during project inception. Additionally, the Company is developing procedures to request and document information from its largest suppliers, on a cost basis, to discern if the supplier has the potential to negatively impact the environment, if an environmental management system has been implemented and whether cost effective measures to avoid pollution have been implemented. In addition, the Company 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. 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
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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
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Type of risk & Primary risk driver

Acute physical	Drought
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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 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. Additionally, changing water levels could affect the ability of one facility to receive fuel (coal) deliveries via container ship, although rail transport is also available through its scheduled retirement in 2023. The gas units, Jackson Generating Station and Zeeland Generating Station, use municipal water or a private well 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 2025. To accomplish this retirement by 2025, the company plans to purchase one natural gas plant which will have a reduced dependence on water availability and will continue to invest in renewable sources that do not have a dependence on water availability. As the Company shifts away from its coal 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

0

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
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Type of risk & Primary risk driver

Regulatory	Regulation of discharge quality/volumes
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Primary potential impact

Increased compliance costs

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) published in 2020. 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

Unlikely

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure - minimum (currency)

1900000

Potential financial impact figure - maximum (currency)

23500000

Explanation of financial impact

Financial impact is an estimate of the potential cost of compliance with the ELG 2020 Reconsideration Rule. Due to the flexibility of the rule, which includes an early retirement option, the minimum potential financial impact is included in the event early retirement can be achieved. In the event early unit retirement cannot be achieved the maximum potential financial impact includes cost for installing a high recycle rate system in order to comply with wastewater effluent limits.

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

70710.32

Explanation of cost of response

Cost of memberships and participation.

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 and deliveries 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 2025. To accomplish this retirement by 2025, the company plans to purchase one natural gas plant which will have a reduced dependence on water availability and will continue to invest in renewable sources that do not have a dependence on water availability.

Cost of response

0

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

Without such a high historically available water supply that allows for once-through cooling, additional infrastructure such as cooling towers or air-cooled systems would be required to be installed to reuse water. The capital and operating costs of this additional infrastructure are substantial. At Consumers Jackson Generating Station (JGS), municipal water costs were \$4.5 million per year, and continued to increase. If we were unable to drill a private well at this location, the cost of municipal water was estimated to be \$35 million over a 7 year period.

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)

911483

Comparison of total withdrawals with previous reporting year

Higher

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

909993

Withdrawals from brackish surface water/seawater

0

Withdrawals from groundwater - renewable

1491

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)

911187

Comparison of total discharges with previous reporting year

Higher

Discharges to fresh surface water

910953

Discharges to brackish surface water/seawater

0

Discharges to groundwater

234

Discharges to third party destinations

0

Total water consumption at this facility (megaliters/year)

297

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 11% increase in withdrawals and discharges and a 8% increase in consumption due to an increase in operating hours from 2020.

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)

387333

Comparison of total withdrawals with previous reporting year

Higher

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

387004

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

329

Total water discharges at this facility (megaliters/year)

386476

Comparison of total discharges with previous reporting year

Higher

Discharges to fresh surface water

386476

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)

857

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 and was higher than last year with roughly a 18% increase in withdrawals and discharges and a 37% 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)

2703

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

2703

Total water discharges at this facility (megaliters/year)

50

Comparison of total discharges with previous reporting year

Higher

Discharges to fresh surface water

0

Discharges to brackish surface water/seawater

0

Discharges to groundwater

0

Discharges to third party destinations

50

Total water consumption at this facility (megaliters/year)

2653

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 resulted in an overall increase in water use compared to 2020.

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)

2405

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

1121

Withdrawals from groundwater - non-renewable

0

Withdrawals from produced/entrained water

0

Withdrawals from third party sources

1285

Total water discharges at this facility (megaliters/year)

468

Comparison of total discharges with previous reporting year

Higher

Discharges to fresh surface water

0

Discharges to brackish surface water/seawater

0

Discharges to groundwater

0

Discharges to third party destinations

468

Total water consumption at this facility (megaliters/year)

1937

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. Overall water use was 15% higher than in 2020.

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, but 3rd party verification of water accounting data is being considered in the next 1-2 years. 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, but 3rd party verification of water accounting data is being considered in the next 1-2 years. 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, but 3rd party verification of water accounting data is being considered in the next 1-2 years. 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, but 3rd party verification of water accounting data is being considered in the next 1-2 years. 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, but 3rd party verification of water accounting data is being considered in the next 1-2 years. 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, but 3rd party verification of water accounting data is being considered in the next 1-2 years. 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, but 3rd party verification of water accounting data is being considered in the next 1-2 years. 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, but 3rd party verification of water accounting data is being considered in the next 1-2 years. 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	Description of water-related performance standards for direct operations Company water targets and goals Commitments beyond regulatory compliance Commitment to water-related innovation Commitment to stakeholder awareness and education Commitment to water stewardship and/or collective action Recognition of environmental linkages, for example, due to climate change	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	Please explain
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 risk management policies Reviewing and guiding corporate responsibility strategy 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)

Responsibility

Managing water-related risks and opportunities

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)
- 10K 2021.pdf

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, filed in June 2021 with the Michigan Public Service Commission, 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)

35

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

-58

Water-related OPEX (+/- % change)

1

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

27

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. Looking forward, water-related capital spending is expected to decrease in 2022 due to the completion of aggressive CCR landfill and surface impoundment closure work conducted in 2019-2021 related to the CCR Rule. Looking forward, water-related operational expenditures are expected to increase primarily as a result of increased cost of water, chemicals, and cooling tower repairs at the Jackson Generating Station.

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.	The Consumers Clean Energy Plan includes ending coal use by 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 Clean Energy Plan (IRP) proposed decommissioning the Consumers Energy Coal generation units. Consumers Energy Coal units will be retired by 2025. This includes all 3 units at the Campbell coal plant and 2 units at the D.E. Karn coal 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) 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 Site/facility specific targets and/or goals	Targets are monitored at the corporate level Goals are monitored at the corporate level	Water intensity reduction target set in 2012 to reduce gallons of water withdrawn per MWh generated by 17% by 2017 and 20% by 2020, through water intensive generating unit retirements and increased efficiency at remaining units. The 2020 target was achieved two years early, by end of 2017, so in 2017 a new five-year target to save 1 billion gallons in 5 years was set for 2018-2022. This was set to drive progress towards efficiency and process improvements throughout the Company, to achieve the goal of a culture change towards water stewardship.

W8.1a

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

Target reference number

Target 1

Category of target

Water withdrawals

Level

Company-wide

Primary motivation

Water stewardship

Description of target

Reduce Company water use by saving 1 billion gallons over the next five years. The goal is to reduce water withdrawals and consumption and increase water recycling and reuse at Company facilities. The intent is to drive a culture change throughout the company towards water stewardship. The previous target focused on generating facilities only with unit retirements contributing significantly. The Company chose a target that allows anyone in the Company to count their contributions towards saving water and drives further scrutiny of existing and new processes and equipment and water efficiency.

Quantitative metric

Absolute reduction in total water withdrawals

Baseline year

2017

Start year

2018

Target year

2022

% of target achieved

100

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 1.3 billion gallons of water between 2017 and 2021.

Target reference number

Target 1

Category of target

Water withdrawals

Level

Company-wide

Primary motivation

Water stewardship

Description of target

Retiring our remaining coal-fired plants by 2025 will significantly impact our water conservation. We anticipate an overall reduction in water use of 98% by 2026.

Quantitative metric

% reduction in total water withdrawals

Baseline year

2012

Start year

2022

Target year

2025

% of target achieved

0

Please explain

Retirement of DE Karn Generation Facility units 1 & 2 in 2023 and JH Campbell units 1, 2 & 3 will reduce our total water withdrawals by 98%.

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 (Improve CE water stewardship culture)

Level

Company-wide

Motivation

Water stewardship

Description of goal

In conjunction with the water intensity reduction target, the Company pursued a goal of improving water stewardship practices, particularly at generating facilities. Efforts to improve water stewardship in 2019 included 1) increased scrutiny through environmental review process for projects requiring new water withdrawals, 2) inclusion of reuse or recycle options for projects with water requirements, and 3) management of water-intensive systems with efforts to reduce run time of such equipment where possible. These efforts were wrapped into the new water reduction target set at the end of 2017. This target is intended to drive progress towards a company-wide culture change around water stewardship. The target enables the entire Company to get involved to reduce the environmental impact of operations and see opportunities and benefits of analyzing water risk of activities. The water reduction target is part of an overall sustainability effort of the Company to focus on the triple bottom line of people, planet and profit. The Company is also driving the culture change through information and education, including environmental awareness training developed in 2017 which was rolled out to all employees in 2018 and continues today.

Baseline year

2017

Start year

2018

End year

2022

Progress

Item 1 - Continued use of the environmental review process for projects requiring new water withdrawals Item 2 - Projects were initiated in 2018 including reuse of runoff water for condenser cooling and onsite dust suppression. Item 3 - Operational changes were introduced at one generating plant in 2018 to reduce the run time of specific water-intensive pumps. This practice has been implemented, resulting in large water savings and is being evaluated at the remaining generating plants. Company environmental awareness training was rolled out in 2018 and will continue annually for all employees.

W9. Verification

W9.1

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

No, but we are actively considering verifying within the next two years

W10. Sign off

W-FI

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

W10.1

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

	Job title	Corresponding job category
Row 1	Executive Director of Environmental Quality and Sustainability	Environment/Sustainability 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)].

Yes

SW. Supply chain module

SW0.1

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

	Annual revenue
Row 1	7329000000

SW1.1

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

Yes, CDP supply chain members buy goods or services from facilities listed in W5.1

SW1.1a

(SW1.1a) Indicate which of the facilities referenced in W5.1 could impact a requesting CDP supply chain member.

Facility reference number

Facility 1

Facility name

JH Campbell

Requesting member

General Motors Company

Description of potential impact on member

There will be no potential impact on the member as Consumers Energy is a part of the Midcontinent Independent System Operator (MISO), Zone 7. MISO ensures reliable electric delivery across the system. In the event one of our facilities went down, electricity will still be delivered to our customers with no impact to the requesting member.

Comment

This also applies to Facility 2.

SW1.2

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

	Are you able to provide geolocation data for your facilities?	Comment
Row 1	Yes, for all facilities	

SW1.2a

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

Identifier	Latitude	Longitude	Comment
Facility 1 - JHC	42.91	-86.2	
Facility 2 - DEK	43.64	-83.84	
Facility 3 - ZGS	42.82	-85.99	
Facility 4 - JGS	42.24	-84.37	

SW2.1

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

SW2.2

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

Yes

SW2.2a

(SW2.2a) Please select the requesting CDP supply chain member(s) that have driven collaborative water projects.

Requesting member

General Motors Company

Category of project

Other

Type of project

Other, please specify (Renewable Energy Pilot Program)

Description of project

The Consumers Energy Voluntary Large Customer Renewable Energy Pilot Program has been implemented in partnership with General Motors. This program allows Consumers Energy to decrease water intensity fleet-wide by accelerating the development of and bringing to scale more water efficient energy production such as wind and solar.

Progress

General Motors has committed to matching 90% of electric energy use at three facilities with wind power and committed to doing so for 20 years.

Requesting member

General Motors Company

Category of project

Other

Type of project

Other, please specify (Other, please specify (Experimental Advanced Renewable Program (EARP)))

Description of project

The Consumers Energy Experimental Advanced Renewable Program (EARP) is a program to develop and test programs to enable the development of Michigan's renewable energy resources. Customers participating in the EARP must be capable of generating electricity from natural sunlight through a photovoltaic solar electricity generating system. This program allows Consumers Energy to decrease water intensity fleet-wide by accelerating the development of and bringing to scale more water efficient energy production by means of solar.

Progress

General Motors has two facilities participating in the EARP with Consumers Energy committed to purchasing the output of General Motors 150 kW DC solar arrays for up to a 15-year period, but no later than August 31, 2019.

SW3.1

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

Product name

Electric power generated from steam electric generating facilities

Water intensity value

200603

Numerator: Water aspect

Water withdrawn

Denominator

Megawatt-hours

Comment

The increase in water intensity can be accounted for by the increased surface water and groundwater withdrawals in 2021 compared with 2020.

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