CMS Energy Corporation

2024 CDP Corporate Questionnaire 2024

Word version

Important: this export excludes unanswered questions
This document is an export of your organization's CDP questionnaire response. It contains all data points for questions that are answered or in progress. There may be questions or data points that you have been requested to provide, which are missing from this document because they are currently unanswered. Please note that it is your responsibility to verify that your questionnaire response is complete prior to submission. CDP will not be liable for any failure to do so.
Terms of disclosure for corporate questionnaire 2024 - CDP

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10/16/2024, 05:22 pm

Contents

C1. Introduction

(1.3) Provide an overview and introduction to your organization.

(1.3.2) Organization type

Select from:

☑ Publicly traded organization

(1.3.3) Description of 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 CMS Energy report includes information, unless specifically noted, for Consumers Energy and NorthStar (the "Company"). CMS 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 cutting carbon emissions from its owned generation by 80 percent from a 2005 baseline and eliminate the use of coal for generating electricity by 2040. That same year, Consumers Energy also submitted its original Integrated Resource Plan (IRP) to the Michigan Public Service Commission (MPSC) that detailed its plan to exceed our goal by reducing its carbon emissions from owned generation by 90 percent by 2040. At the beginning of 2020, Consumers Energy announced a new and even more ambitious goal to achieve net zero carbon emissions by 2040. Unlike the prior goals, the net-zero goal includes both owned and purchased generation, including both power purchase agreements and energy market purchases. In June 2021, Consumers Energy announced a proposal to stop using coal as a fuel source for generating electricity in 2025 and submitted an updated IRP to the MPSC. The proposal would make Consumers Energy one of the first in the nation to go coal-free and provide a 20-year blueprint to meet Michigan's energy needs while protecting the environment for future generations. In April 2022, Consumers Energy and key stakeholders throughout Michigan agreed on a settlement related to the updated IRP. This agreement was then approved by the MPSC in June 2022. Consumers Energy also has a goal to achieve net zero methane emissions for our natural gas delivery systems by 2030. Additionally, CE has a goal for our entire natural gas system, including customer and supplier emissions, to reach net zero carbon by 2050, with an interim goal of 20% reduction by 2030. 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.
[Fixed row]

(1.4) State the end date of the year for which you are reporting data. For emissions data, indicate whether you will be providing emissions data for past reporting years.

(1.4.1) End date of reporting year

12/31/2023

(1.4.2) Alignment of this reporting period with your financial reporting period

Select from:
☑ Yes

(1.4.3) Indicate if you are providing emissions data for past reporting years

Select from:
☑ Yes

(1.4.4) Number of past reporting years you will be providing Scope 1 emissions data for

Select from:
☑ 3 years

(1.4.5) Number of past reporting years you will be providing Scope 2 emissions data for

Select from:
☑ 2 years

(1.4.6) Number of past reporting years you will be providing Scope 3 emissions data for

Select from:

☑ 1 year
[Fixed row]

(1.5) Provide details on your reporting boundary.

	Is your reporting boundary for your CDP disclosure the same as that used in your financial statements?
	Select from: ☑ Yes

[Fixed row]

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

ISIN code - bond

(1.6.1) Does your organization use this unique identifier?

Select from:
☑ No

ISIN code - equity

(1.6.1) Does your organization use this unique identifier?

Select from:
☑ No

CUSIP number

(1.6.1) Does your organization use this unique identifier?

Select from:

☑ No

Ticker symbol

(1.6.1) Does your organization use this unique identifier?

Select from:

☑ Yes

(1.6.2) Provide your unique identifier

CMS

SEDOL code

(1.6.1) Does your organization use this unique identifier?

Select from:

☑ No

LEI number

(1.6.1) Does your organization use this unique identifier?

Select from:

☑ No

Other unique identifier

(1.6.1) Does your organization use this unique identifier?

Select from:

☑ No

[Add row]

(1.16.1) For your electricity generation activities, provide details of your nameplate capacity and electricity generation specifics for each technology employed.

Coal - Hard

(1.16.1.1) Own or control operations which use this power generation source

Select from:

☑ Yes

(1.16.1.2) Nameplate capacity (MW)

1535

(1.16.1.4) Net electricity generation (GWh)

7043

(1.16.1.5) Comment

Nameplate capacity and Net electricity generation data is reflective of CMS Energy's equity-ownership percentages.

Lignite

(1.16.1.1) Own or control operations which use this power generation source

Select from:

☑ No

Oil

(1.16.1.1) Own or control operations which use this power generation source

Select from:

☑ Yes

(1.16.1.2) Nameplate capacity (MW)

682

(1.16.1.4) Net electricity generation (GWh)

2

(1.16.1.5) Comment

Nameplate capacity and Net electricity generation data is reflective of CMS Energy's equity-ownership percentages. Capacity data reported is apportioned for two co-fired natural gas and oil-fired EGUs.

Gas

(1.16.1.1) Own or control operations which use this power generation source

Select from:

☑ Yes

(1.16.1.2) Nameplate capacity (MW)

4610

(1.16.1.4) Net electricity generation (GWh)

16598

(1.16.1.5) Comment

Nameplate capacity and Net electricity generation data is reflective of CMS Energy's equity-ownership percentages. Capacity data reported also includes apportionment for two co-fired natural gas and oil-fired EGUs.

Sustainable biomass

(1.16.1.1) Own or control operations which use this power generation source

Select from:

☑ No

Other biomass

(1.16.1.1) Own or control operations which use this power generation source

Select from:

☑ Yes

(1.16.1.2) Nameplate capacity (MW)

64

(1.16.1.4) Net electricity generation (GWh)

279

(1.16.1.5) Comment

Nameplate capacity and Net electricity generation data is reflective of CMS Energy's equity-ownership percentages.

Waste (non-biomass)

(1.16.1.1) Own or control operations which use this power generation source

Select from:

☑ No

(1.16.1.5) Comment

Tire-derived fuel (TDF) is co-fired at two EGU sites, however is not reported separately for purposes of capacity or net generation data in this section.

Nuclear

(1.16.1.1) Own or control operations which use this power generation source

Select from:
☑ No

Fossil-fuel plants fitted with carbon capture and storage

(1.16.1.1) Own or control operations which use this power generation source

Select from:
☑ No

Geothermal

(1.16.1.1) Own or control operations which use this power generation source

Select from:
☑ No

Hydropower

(1.16.1.1) Own or control operations which use this power generation source

Select from:
☑ Yes

(1.16.1.2) Nameplate capacity (MW)

132

(1.16.1.4) Net electricity generation (GWh)

376

(1.16.1.5) Comment

Nameplate capacity and Net electricity generation data is reflective of CMS Energy's equity-ownership percentages.

Wind

(1.16.1.1) Own or control operations which use this power generation source

Select from:
☑ Yes

(1.16.1.2) Nameplate capacity (MW)

1217

(1.16.1.4) Net electricity generation (GWh)

2819

(1.16.1.5) Comment

Nameplate capacity and Net electricity generation data is reflective of CMS Energy's equity-ownership percentages.

Solar

(1.16.1.1) Own or control operations which use this power generation source

Select from:
☑ Yes

(1.16.1.2) Nameplate capacity (MW)

215

(1.16.1.4) Net electricity generation (GWh)

113

(1.16.1.5) Comment

Nameplate capacity and Net electricity generation data is reflective of CMS Energy's equity-ownership percentages.

Marine

(1.16.1.1) Own or control operations which use this power generation source

Select from:

☑ No

Other renewable

(1.16.1.1) Own or control operations which use this power generation source

Select from:

☑ Yes

(1.16.1.2) Nameplate capacity (MW)

1183

(1.16.1.5) Comment

Nameplate capacity is reflective of CMS Energy's equity-ownership percentages. This category represents a pumped-storage facility that consumes electricity to pump water during off-peak hours for storage to generate electricity later during peak-demand hours. In 2023, this facility used more electricity than it generated (-349 GWh), however the total net generation field will not accept a negative value.

Other non-renewable

(1.16.1.1) Own or control operations which use this power generation source

Select from:

☑ No

Total

(1.16.1.1) Own or control operations which use this power generation source

Select from:

☑ Yes

(1.16.1.2) Nameplate capacity (MW)

9638

(1.16.1.4) Net electricity generation (GWh)

26881

(1.16.1.5) Comment

Nameplate capacity and Net electricity generation data is reflective of CMS Energy's equity-ownership percentages and includes the pumped storage facility net negative generation.
[Fixed row]

C2. Identification, assessment, and management of dependencies, impacts, risks, and opportunities

(2.1) How does your organization define short-, medium-, and long-term time horizons in relation to the identification, assessment, and management of your environmental dependencies, impacts, risks, and opportunities?

	From (years)	Is your long-term time horizon open ended?	To (years)
Short-term	*1*	*Select from:*	*5*
Medium-term	*5*	*Select from:*	*10*
Long-term	*10*	*Select from:* ☑ No	*30*

[Fixed row]

(2.2) Does your organization have a process for identifying, assessing, and managing environmental dependencies and/or impacts?

	Process in place	Dependencies and/or impacts evaluated in this process
	Select from: ☑ Yes	*Select from:* ☑ Both dependencies and impacts

[Fixed row]

(2.2.1) Does your organization have a process for identifying, assessing, and managing environmental risks and/or opportunities?

	Process in place	Risks and/or opportunities evaluated in this process	Is this process informed by the dependencies and/or impacts process?
	Select from: ☑ Yes	*Select from:* ☑ Both risks and opportunities	*Select from:* ☑ Yes

[Fixed row]

(2.2.2) Provide details of your organization's process for identifying, assessing, and managing environmental dependencies, impacts, risks, and/or opportunities.

Row 1

(2.2.2.1) Environmental issue

Select all that apply

☑ Climate change

☑ Water

(2.2.2.2) Indicate which of dependencies, impacts, risks, and opportunities are covered by the process for this environmental issue

Select all that apply

☑ Impacts

☑ Risks

☑ Opportunities

(2.2.2.3) Value chain stages covered

Select all that apply

☑ Direct operations

☑ Upstream value chain

☑ Downstream value chain

(2.2.2.4) Coverage

Select from:

☑ Full

(2.2.2.7) Type of assessment

Select from:

☑ Qualitative and quantitative

(2.2.2.8) Frequency of assessment

Select from:

☑ Annually

(2.2.2.9) Time horizons covered

Select all that apply

☑ Short-term

☑ Medium-term

☑ Long-term

(2.2.2.10) Integration of risk management process

Select from:

☑ Integrated into multi-disciplinary organization-wide risk management process

(2.2.2.11) Location-specificity used

Select all that apply

☑ Local

(2.2.2.12) Tools and methods used

Enterprise Risk Management

☑ COSO Enterprise Risk Management Framework

☑ Enterprise Risk Management

International methodologies and standards

☑ IPCC Climate Change Projections

☑ ISO 14001 Environmental Management Standard

Other

☑ Materiality assessment

☑ Scenario analysis

(2.2.2.13) Risk types and criteria considered

Acute physical

☑ Drought

☑ Wildfires

☑ Heat waves

☑ Heavy precipitation (rain, hail, snow/ice)

☑ Flood (coastal, fluvial, pluvial, ground water)

☑ Storm (including blizzards, dust, and sandstorms)

Chronic physical

☑ Changing wind patterns

☑ Temperature variability

☑ Precipitation or hydrological variability

☑ Changing precipitation patterns and types (rain, hail, snow/ice)

☑ Increased severity of extreme weather events
☑ Changing temperature (air, freshwater, marine water)

Policy
☑ Changes to national legislation

Technology
☑ Transition to lower emissions technology and products
☑ Other technology, please specify :transition to increasing renewable content

(2.2.2.14) Partners and stakeholders considered

Select all that apply
☑ NGOs
☑ Customers
☑ Employees
☑ Investors
☑ Suppliers
☑ Regulators
☑ Local communities
☑ Indigenous peoples

(2.2.2.15) Has this process changed since the previous reporting year?

Select from:
☑ No

(2.2.2.16) Further details of process

CMS Energy actively manages the potential risks and vulnerabilities presented by climate change. These management processes are built into our governance structure, plans and regulatory and voluntary disclosures. These include asset-specific risk identification and response planning. Management of climate risks is embedded across our organization and included in ongoing processes and includes consulting with experts, actively working with industry trade organizations, evaluating research, performing resiliency planning and communicating our climate risks and resiliency plans with stakeholder groups. Our governance process for identifying, assessing, and responding to climate-related risks and opportunities is a circular undertaking that starts with feedback from stakeholder interactions (customers, energy responders, community members, investors and, business partners). The next step is data analysis which includes consulting with experts, scientific research, and internal data analysis. The last step in this process is resiliency planning and implementation. This includes Enterprise Risk Management Reviews, and our Climate Adaptation and Resiliency Team (CART) reviews which looks at vulnerability and mitigation options. Oversight occurs at the leadership

level through our CART reviews, our Environmental and Sustainability Council and numerous steering committees on strategic roadmaps. Board oversight of our climate risk management and opportunities occurs at least annually or more frequently depending on the strategic topic being covered. This process identifies short, medium and long term risks and opportunities as well as risks and opportunities that occur in our direct operations as well as upstream and downstream. This process is also documented externally in our Climate Change Risk, Vulnerability and Resiliency Report located on CMS Energy's external facing website.
[Add row]

(2.5) 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?

(2.5.1) Identification and classification of potential water pollutants

Select from:

☑ Yes, we identify and classify our potential water pollutants

(2.5.2) How potential water pollutants are identified and classified

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.
[Fixed row]

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

Row 1

(2.5.1.1) Water pollutant category

Select from:

☑ Oil

(2.5.1.2) 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.

(2.5.1.3) Value chain stage

Select all that apply

☑ Direct operations

(2.5.1.4) Actions and procedures to minimize adverse impacts

Select all that apply

☑ Assessment of critical infrastructure and storage condition (leakages, spillages, pipe erosion etc.) and their resilience

☑ Industrial and chemical accidents prevention, preparedness, and response

☑ Water recycling

(2.5.1.5) Please explain

Consumers Energy has Spill Prevention, Control, and Countermeasures (SPCC) plans in place at all steam electric generating facilities, substations, gas compressions and storage and service centers where appropriate, 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.

Row 2

(2.5.1.1) Water pollutant category

Select from:

☑ Inorganic pollutants

(2.5.1.2) Description of water pollutant and potential impacts

Coal Combustion Residuals (CCRs) can contain metals which can leach into transport or groundwater if not properly contained or managed. Metals at sufficient concentrations can be harmful to human health and the environment.

(2.5.1.3) Value chain stage

Select all that apply

☑ Direct operations

(2.5.1.4) Actions and procedures to minimize adverse impacts

Select all that apply

☑ Water recycling

☑ Upgrading of process equipment/methods

☑ Reduction or phase out of hazardous substances

☑ Implementation of integrated solid waste management systems

☑ Requirement for suppliers to comply with regulatory requirements

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

☑ Assessment of critical infrastructure and storage condition (leakages, spillages, pipe erosion etc.) and their resilience

(2.5.1.5) 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.
[Add row]

C3. Disclosure of risks and opportunities

(3.1) Have you identified any environmental risks which have had a substantive effect on your organization in the reporting year, or are anticipated to have a substantive effect on your organization in the future?

Climate change

(3.1.1) Environmental risks identified

Select from:

☑ Yes, both in direct operations and upstream/downstream value chain

Water

(3.1.1) Environmental risks identified

Select from:

☑ No

(3.1.2) Primary reason why your organization does not consider itself to have environmental risks in your direct operations and/or upstream/downstream value chain

Select from:

☑ Environmental risks exist, but none with the potential to have a substantive effect on our organization

(3.1.3) Please explain

Our fossil-fueled power plants use water for cooling, condensing and reusing steam to spin our turbines and generate electricity. By closing our remaining coal-fired plants as part of our Clean Energy Plan, we'll have reduced our 2026 water withdrawals 98% compared to 2012 levels.
[Fixed row]

(3.1.1) Provide details of the environmental risks identified which have had a substantive effect on your organization in the reporting year, or are anticipated to have a substantive effect on your organization in the future.

Climate change

(3.1.1.1) Risk identifier

Select from:

☑ Risk1

(3.1.1.3) Risk types and primary environmental risk driver

Acute physical

☑ Storm (including blizzards, dust and sandstorm)

(3.1.1.4) Value chain stage where the risk occurs

Select from:

☑ Direct operations

(3.1.1.6) Country/area where the risk occurs

Select all that apply

☑ United States of America

(3.1.1.9) Organization-specific description of risk

Acute risks that are event-driven can increase operational and maintenance costs and are therefore included when assessing Company risks. For example, snow, freezing rain, ice accumulation, fire, and strong winds from more frequent or severe storms, may compromise infrastructure by damaging distribution system equipment. CMS Energy in partnership with the Great Lakes Integrated Sciences and Assessments (GLISA) identified one of Michigan's primary climate risks as changes in average precipitation. In addition to water level rising from increased precipitation, there may be a greater frequency of freezing rain, increasing the potential for electric outages. Our third-party analysis indicated the region may experience a four-fold increase in days favorable to freezing rain by 2050 as compared to the period between 1986-2005. Note that not all days will produce freezing rain. Data already shows that the rain-snow boundary is migrating north in Lower Michigan. Because of this change, areas that traditionally experience snowfall are now experiencing more rain and freezing rain. Because freezing rain can

significantly damage our electric distribution system, we intend to further evaluate this climate impact. GLISA's climate projections factor in 6 models that consider a future of low income, high population growth and high energy demand. GLISA also predicts that the frequency and intensity of severe storms may continue as the effects of climate change become more pronounced.

Climate change

(3.1.1.1) Risk identifier

Select from:

☑ Risk2

(3.1.1.3) Risk types and primary environmental risk driver

Chronic physical

☑ Changing precipitation patterns and types (rain, hail, snow/ice)

(3.1.1.4) Value chain stage where the risk occurs

Select from:

☑ Direct operations

(3.1.1.6) Country/area where the risk occurs

Select all that apply

☑ United States of America

(3.1.1.9) Organization-specific description of risk

This risk considers rain, hail, snow/ice and the increased variability of precipitation patterns, types, and intensity. CMS Energy in partnership with the Great Lakes Integrated Sciences and Assessments (GLISA) identified changes in precipitation as one of Michigan's climate risks. GLISA's models project relatively modest increases in the average annual total amount of precipitation for Michigan by mid-century. However, models suggest changes in timing, frequency and intensity of precipitation. For example, heavy precipitation events are projected to increase by mid-century, and models vary on whether they project increases or decreases across the seasons. Beyond GLISA's seasonal and annual rainfall projections, a 2021, third-party climate analysis conducted for CMS Energy suggests the amount of rain falling during storms may increase up to 25% by 2050, using the preindustrial baseline, 1850-1900. Acute risks that are event-driven and changes in chronic patterns can increase operational and maintenance costs and are therefore included when assessing Company risks. For example, snow, freezing rain, and ice

accumulation, from more frequent or severe storms, may compromise infrastructure by damaging distribution system equipment. Ice accumulation on wind turbine blades may also impact electricity generation. Heavy rainfall that causes flooding poses an unlikely but potential threat to hydroelectric facilities and their surrounding communities.

Climate change

(3.1.1.1) Risk identifier

Select from:

☑ Risk3

(3.1.1.3) Risk types and primary environmental risk driver

Chronic physical

☑ Heat stress

(3.1.1.4) Value chain stage where the risk occurs

Select from:

☑ Direct operations

(3.1.1.6) Country/area where the risk occurs

Select all that apply

☑ United States of America

(3.1.1.9) Organization-specific description of risk

CMS Energy in partnership with the Great Lakes Integrated Sciences and Assessments (GLISA) identified high temperatures and frequency of extremes as one of Michigan's primary climate risks. Depending on future emission levels and other factors, the Intergovernmental Panel on Climate Change (IPCC), in its 2021 Sixth Assessment Report, projects global temperatures will rise between 2.9F to 4.3F by mid-century compared to the 1850-1900 preindustrial period. Those same climate models project a global average temperature increase of 2.5F to 7.9F by 2100. GLISA relies on a set of climate model projections designed specifically for the Great Lakes region. These projections offer more reliable information for regional planning since they incorporate climate data associated with the Great Lakes and lake-land atmosphere feedbacks, which are missing from many global climate models. GLISA's temperature projections for Michigan are consistent with the global trend. They suggest Lower Michigan's average temperature may increase up to 4F by mid-century compared to the 1850 to 1900 period. In addition, the number of days in

Lower Michigan reaching more than 90F by mid-century is projected to increase by 19 days. GLISA also projects six more days reaching more than 100F by mid-century, with more occurring in the southern half of Michigan's Lower Peninsula. This trend could increase electricity demand, including air conditioning.

Climate change

(3.1.1.1) Risk identifier

Select from:

☑ Risk4

(3.1.1.3) Risk types and primary environmental risk driver

Market

☑ Changing customer behavior

(3.1.1.4) Value chain stage where the risk occurs

Select from:

☑ Downstream value chain

(3.1.1.6) Country/area where the risk occurs

Select all that apply

☑ United States of America

(3.1.1.9) Organization-specific description of risk

Changing customer behavior, including increasing preference or requirement for renewable-based generation and the adoption of electric vehicles, shifts existing grid and generation demands. This will necessitate investment in increased grid reliability through system hardening, automation, and quicker storm response and restoration. In addition, this has driven our shift away from coal-fired generation and increased reliance on renewables as part of our balanced energy generation strategy.

Climate change

(3.1.1.1) Risk identifier

Select from:

☑ Risk5

(3.1.1.3) Risk types and primary environmental risk driver

Policy

☑ Changes to regulation of existing products and services

(3.1.1.4) Value chain stage where the risk occurs

Select from:

☑ Downstream value chain

(3.1.1.6) Country/area where the risk occurs

Select all that apply

☑ United States of America

(3.1.1.9) Organization-specific description of risk

Current and future regulation to reduce GHG emissions may result in increased compliance costs. Policies could include direct regulation, a clean energy standard, cap-and-trade scheme, carbon fee or tax with an aggressive schedule, requirement to install new control technologies, or a ban or restrictions on natural gas usage in residential, commercial and or industrial applications.
[Add row]

(3.3) 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	Comment
	Select from: ☑ No	

[Fixed row]

C4. Governance

(4.1) Does your organization have a board of directors or an equivalent governing body?

(4.1.1) Board of directors or equivalent governing body

Select from:

☑ Yes

(4.1.2) Frequency with which the board or equivalent meets

Select from:

☑ More frequently than quarterly

(4.1.3) Types of directors your board or equivalent is comprised of

Select all that apply

☑ Executive directors or equivalent

☑ Independent non-executive directors or equivalent

(4.1.4) Board diversity and inclusion policy

Select from:

☑ Yes, and it is publicly available

(4.1.5) Briefly describe what the policy covers

The Corporate Governance Principles states: When members are added to the Board, the Board seeks potential Board members with a broad spectrum of diverse business, political, academic, demographic and social interests. The Board considers potential candidates whose particular background, experiences and qualities meet the needs of the Board, as determined by the Board from time to time. The Board also values high standards of integrity, business ethics and mature judgment, which add value, perspective and expertise to Board deliberations.

(4.1.6) Attach the policy (optional)

Governance-Principles-Final-2021.pdf
[Fixed row]

(4.1.1) Is there board-level oversight of environmental issues within your organization?

	Board-level oversight of this environmental issue
Climate change	*Select from:* ☑ Yes
Water	*Select from:* ☑ Yes
Biodiversity	*Select from:* ☑ Yes

[Fixed row]

(4.1.2) Identify the positions (do not include any names) of the individuals or committees on the board with accountability for environmental issues and provide details of the board's oversight of environmental issues.

Climate change

(4.1.2.1) Positions of individuals or committees with accountability for this environmental issue

Select all that apply

☑ President

☑ Other, please specify **:Senior Vice President of Strategy, Sustainability and External Affairs**

☑ Board chair

☑ Director on board

☑ Board-level committee

☑ Chief Executive Officer (CEO)

(4.1.2.2) Positions' accountability for this environmental issue is outlined in policies applicable to the board

Select from:

☑ Yes

(4.1.2.3) Policies which outline the positions' accountability for this environmental issue

Select all that apply

☑ Other policy applicable to the board, please specify :Governance, Sustainability, and Public Responsibility (GS&PR) Committee Charter, Corporate Governance Principles

(4.1.2.4) Frequency with which this environmental issue is a scheduled agenda item

Select from:

☑ Scheduled agenda item in some board meetings – at least annually

(4.1.2.5) Governance mechanisms into which this environmental issue is integrated

Select all that apply

☑ Reviewing and guiding annual budgets
☑ Overseeing and guiding scenario analysis
☑ Overseeing the setting of corporate targets
☑ Monitoring progress towards corporate targets
☑ Approving corporate policies and/or commitments
☑ Monitoring the implementation of the business strategy
☑ Overseeing reporting, audit, and verification processes
☑ Monitoring the implementation of a climate transition plan
☑ Overseeing and guiding the development of a business strategy
☑ Overseeing and guiding acquisitions, mergers, and divestitures
☑ Monitoring supplier compliance with organizational requirements
☑ Monitoring compliance with corporate policies and/or commitments
☑ Overseeing and guiding public policy engagement
☑ Overseeing and guiding public policy engagement
☑ Reviewing and guiding innovation/R&D priorities
☑ Approving and/or overseeing employee incentives
☑ Overseeing and guiding major capital expenditures

☑ Overseeing and guiding the development of a climate transition plan

☑ Reviewing and guiding the assessment process for dependencies, impacts, risks, and opportunities

(4.1.2.7) Please explain

The GS&PR Committee or Board reviews sustainability issues and reporting on a regular basis. Management and our Board also consider sustainability regularly in their decision making. Our GS&PR Committee reviews the Company's sustainability programs, practices and strategies, including our reporting as it relates to engagement with shareholders and makes recommendations to the Board with respect to sustainability matters as appropriate. In addition to Board oversight, we also have the Environment and Sustainability Council (E&SC). Our risk committee also works with our Environmental Quality & Sustainability Department to assess risks associated with climate-related issues. Additionally, the Company has personnel responsible for sustainability matters that work across the Company to identify and address climate-related issues. Additional information can be found here: https://d18rn0p25nwr6d.cloudfront.net/CIK-0000811156/f5964cf7-6451-4df1-ad83-bcff9d0ff9f9.pdf (pp. 22-24) https://s26.q4cdn.com/888045447/files/doc_downloads/how_we_are_doing/2023/CMS-Energy-Sustainability-Report_2023_FINAL.pdf https://s26.q4cdn.com/888045447/files/doc_downloads/2020/01/GS-PR-Committee-Charter-effective-01-16-2020.pdf

Water

(4.1.2.1) Positions of individuals or committees with accountability for this environmental issue

Select all that apply

☑ President

☑ Other, please specify **:Senior Vice President of Strategy, Sustainability and External Affairs**

☑ Board chair

☑ Director on board

☑ Board-level committee

☑ Chief Executive Officer (CEO)

(4.1.2.2) Positions' accountability for this environmental issue is outlined in policies applicable to the board

Select from:

☑ Yes

(4.1.2.3) Policies which outline the positions' accountability for this environmental issue

Select all that apply

☑ Other policy applicable to the board, please specify :Governance, Sustainability, and Public Responsibility (GS&PR) Committee Charter, Corporate Governance Principles

(4.1.2.4) Frequency with which this environmental issue is a scheduled agenda item

Select from:

☑ Scheduled agenda item in some board meetings – at least annually

(4.1.2.5) Governance mechanisms into which this environmental issue is integrated

Select all that apply

☑ Approving corporate policies and/or commitments

☑ Overseeing the setting of corporate targets

☑ Monitoring progress towards corporate targets

☑ Monitoring the implementation of the business strategy

☑ Overseeing and guiding major capital expenditures

(4.1.2.7) Please explain

See 4.1.2.7. Reducing the volume of water used to generate electricity is part of the Company's Strategic and Clean Energy Plan – both reviewed and approved by the Board. f5964cf7-6451-4df1-ad83-bcff9d0ff9f9.pdf (d18rn0p25nwr6d.cloudfront.net) pgs 22-24 CMS-Energy-Sustainability-Report_2023_FINAL.pdf (q4cdn.com) GS-PR-Committee-Charter-effective-01-16-2020.pdf (q4cdn.com)

Biodiversity

(4.1.2.1) Positions of individuals or committees with accountability for this environmental issue

Select all that apply

☑ President

☑ Other, please specify :**Senior Vice President of Strategy, Sustainability and External Affairs**

☑ Board chair

☑ Director on board

☑ Board-level committee

☑ Chief Executive Officer (CEO)

(4.1.2.2) Positions' accountability for this environmental issue is outlined in policies applicable to the board

Select from:

☑ Yes

(4.1.2.3) Policies which outline the positions' accountability for this environmental issue

Select all that apply

☑ Other policy applicable to the board, please specify :Governance, Sustainability, and Public Responsibility (GS&PR) Committee Charter, Corporate Governance Principles

(4.1.2.4) Frequency with which this environmental issue is a scheduled agenda item

Select from:

☑ Sporadic – agenda item as important matters arise

(4.1.2.5) Governance mechanisms into which this environmental issue is integrated

Select all that apply

☑ Overseeing the setting of corporate targets

☑ Approving corporate policies and/or commitments

☑ Overseeing and guiding major capital expenditures

☑ Monitoring the implementation of the business strategy

☑ Monitoring the implementation of a climate transition plan

☑ Monitoring supplier compliance with organizational requirements

☑ Monitoring compliance with corporate policies and/or commitments

[Fixed row]

(4.2) Does your organization's board have competency on environmental issues?

Climate change

(4.2.1) Board-level competency on this environmental issue

Select from:

☑ Yes

(4.2.2) Mechanisms to maintain an environmentally competent board

Select all that apply

☑ Integrating knowledge of environmental issues into board nominating process

☑ Regular training for directors on environmental issues, industry best practice, and standards (e.g., TCFD, SBTi)

☑ Having at least one board member with expertise on this environmental issue

Water

(4.2.1) Board-level competency on this environmental issue

Select from:

☑ Yes

(4.2.2) Mechanisms to maintain an environmentally competent board

Select all that apply

☑ Regular training for directors on environmental issues, industry best practice, and standards (e.g., TCFD, SBTi)

[Fixed row]

(4.3) Is there management-level responsibility for environmental issues within your organization?

	Management-level responsibility for this environmental issue
Climate change	*Select from:* ☑ Yes

	Management-level responsibility for this environmental issue
Water	*Select from:* ☑ Yes
Biodiversity	*Select from:* ☑ Yes

[Fixed row]

(4.3.1) Provide the highest senior management-level positions or committees with responsibility for environmental issues (do not include the names of individuals).

Climate change

(4.3.1.1) Position of individual or committee with responsibility

Executive level

☑ Chief Executive Officer (CEO)

(4.3.1.2) Environmental responsibilities of this position

Dependencies, impacts, risks and opportunities

☑ Assessing environmental dependencies, impacts, risks, and opportunities

☑ Assessing future trends in environmental dependencies, impacts, risks, and opportunities

☑ Managing environmental dependencies, impacts, risks, and opportunities

Engagement

☑ Managing public policy engagement related to environmental issues

Policies, commitments, and targets

☑ Monitoring compliance with corporate environmental policies and/or commitments

☑ Measuring progress towards environmental corporate targets

☑ Setting corporate environmental policies and/or commitments

☑ Setting corporate environmental targets

Strategy and financial planning

☑ Developing a business strategy which considers environmental issues

(4.3.1.4) Reporting line

Select from:

☑ Reports to the board directly

(4.3.1.5) Frequency of reporting to the board on environmental issues

Select from:

☑ Annually

(4.3.1.6) Please explain

For further information, please see our 2023 CMS Energy Sustainability Report.
https://s26.q4cdn.com/888045447/files/doc_downloads/how_we_are_doing/2023/CMS-Energy-Sustainability-Report_2023_FINAL.pdf

Water

(4.3.1.1) Position of individual or committee with responsibility

Executive level

☑ Other C-Suite Officer, please specify **:**Senior Vice President of Strategy, Sustainability, and External Affairs

(4.3.1.2) Environmental responsibilities of this position

Dependencies, impacts, risks and opportunities

☑ Assessing environmental dependencies, impacts, risks, and opportunities

Engagement

☑ Managing public policy engagement related to environmental issues

Policies, commitments, and targets

☑ Monitoring compliance with corporate environmental policies and/or commitments

☑ Measuring progress towards environmental corporate targets

☑ Setting corporate environmental policies and/or commitments

☑ Setting corporate environmental targets

(4.3.1.4) Reporting line

Select from:

☑ Reports to the Chief Executive Officer (CEO)

(4.3.1.5) Frequency of reporting to the board on environmental issues

Select from:

☑ Annually

Biodiversity

(4.3.1.1) Position of individual or committee with responsibility

Executive level

☑ Other C-Suite Officer, please specify **:**Senior Vice President of Strategy, Sustainability, and External Affairs

(4.3.1.2) Environmental responsibilities of this position

Dependencies, impacts, risks and opportunities

☑ Assessing environmental dependencies, impacts, risks, and opportunities

Engagement

☑ Managing public policy engagement related to environmental issues

(4.3.1.4) Reporting line

Select from:

☑ Reports to the Chief Executive Officer (CEO)

(4.3.1.5) Frequency of reporting to the board on environmental issues

Select from:

☑ Annually

[Add row]

(4.5) Do you provide monetary incentives for the management of environmental issues, including the attainment of targets?

	Provision of monetary incentives related to this environmental issue	Please explain
Climate change	*Select from:* ☑ Yes	*Methane Emission Reduction is part of the Employee Incentive Compensation Plan Goals*
Water	*Select from:* ☑ No, and we do not plan to introduce them in the next two years	*Rich text input [must be under 1000 characters]*

[Fixed row]

(4.5.1) Provide further details on the monetary incentives provided for the management of environmental issues (do not include the names of individuals).

Climate change

(4.5.1.1) Position entitled to monetary incentive

Senior-mid management

☑ Other senior-mid manager, please specify **:**All employees

(4.5.1.2) Incentives

Select all that apply

☑ Bonus – set figure

(4.5.1.3) Performance metrics

Targets

☑ Reduction in absolute emissions in line with net-zero target

(4.5.1.4) Incentive plan the incentives are linked to

Select from:

☑ Short-Term Incentive Plan, or equivalent, only (e.g. contractual annual bonus)

(4.5.1.5) Further details of incentives

Each year goals are established for the Employee Incentive Compensation Plan (EICP). These goals help us improve our service and make it more affordable for our customers; they challenge us to keep each other safe; make our company a better place to work; and they reduce our impact on the environment. As part of the EICP, which covers all employees, we set a Methane Emission reduction goal of 459 metric tons across our distribution system in 2023, which supports the Company's goal to have net-zero methane emissions by 2030.

(4.5.1.6) How the position's incentives contribute to the achievement of your environmental commitments and/or climate transition plan

As part of the EICP, which covers all employees, we set a Methane Emission reduction goal of 459 metric tons across our distribution system in 2023, which supports the Company's goal to have net-zero methane emissions by 2030.
[Add row]

(4.6) Does your organization have an environmental policy that addresses environmental issues?

	Does your organization have any environmental policies?
	Select from: ☑ Yes

[Fixed row]

(4.6.1) Provide details of your environmental policies.

Row 1

(4.6.1.1) Environmental issues covered

Select all that apply
☑ Climate change
☑ Water
☑ Biodiversity

(4.6.1.2) Level of coverage

Select from:

☑ Organization-wide

(4.6.1.3) Value chain stages covered

Select all that apply

☑ Direct operations

☑ Upstream value chain

(4.6.1.4) Explain the coverage

Environmental policies apply to the entire organization's operations. We embed consideration for the environment and compliance with these policies in our Environmental Policy.

(4.6.1.5) Environmental policy content

Environmental commitments

☑ Commitment to comply with regulations and mandatory standards

☑ Commitment to stakeholder engagement and capacity building on environmental issues

Climate-specific commitments

☑ Commitment to net-zero emissions

(4.6.1.7) Public availability

Select from:

☑ Publicly available

(4.6.1.8) Attach the policy

CMS-Energy-Environmental-Policy.pdf

Row 4

(4.6.1.1) Environmental issues covered

Select all that apply

☑ Climate change

☑ Water

☑ Biodiversity

(4.6.1.2) Level of coverage

Select from:

☑ Organization-wide

(4.6.1.3) Value chain stages covered

Select all that apply

☑ Direct operations

☑ Upstream value chain

(4.6.1.4) Explain the coverage

We embed consideration for the environment and compliance with these policies in our Labor Rights Workforce Policy.

(4.6.1.5) Environmental policy content

Social commitments

☑ Other social commitment, please specify **:**We acknowledge certain standards, such as those found in the International Labor Organization (ILO) 87 and 98, which help inform our approach to our workforce and labor policies.

(4.6.1.7) Public availability

Select from:

☑ Publicly available

(4.6.1.8) Attach the policy

CMS-Energy-Labor-Rights-Policy-2021.pdf

Row 5

(4.6.1.1) Environmental issues covered

Select all that apply

☑ Climate change

☑ Water

☑ Biodiversity

(4.6.1.2) Level of coverage

Select from:

☑ Organization-wide

(4.6.1.3) Value chain stages covered

Select all that apply

☑ Direct operations

☑ Upstream value chain

(4.6.1.4) Explain the coverage

We embed consideration for the environment and compliance with these policies in our Human Rights Policy.

(4.6.1.5) Environmental policy content

Social commitments

☑ Commitment to respect internationally recognized human rights

Additional references/Descriptions

☑ Acknowledgement of the human right to water and sanitation

(4.6.1.7) Public availability

Select from:

☑ Publicly available

(4.6.1.8) Attach the policy

CMS-Energy-Human-Rights-Policy.pdf

Row 6

(4.6.1.1) Environmental issues covered

Select all that apply

☑ Biodiversity

(4.6.1.2) Level of coverage

Select from:

☑ Organization-wide

(4.6.1.3) Value chain stages covered

Select all that apply

☑ Direct operations

☑ Upstream value chain

(4.6.1.4) Explain the coverage

We embed consideration for the environment and compliance with these policies in our Biodiversity Policy.

(4.6.1.5) Environmental policy content

Environmental commitments

☑ Commitment to avoidance of negative impacts on threatened and protected species

☑ Commitment to comply with regulations and mandatory standards

☑ Commitment to stakeholder engagement and capacity building on environmental issues

(4.6.1.7) Public availability

Select from:

☑ Publicly available

(4.6.1.8) Attach the policy

biodiversity-policy.pdf

Row 7

(4.6.1.1) Environmental issues covered

Select all that apply

☑ Water

(4.6.1.2) Level of coverage

Select from:

☑ Organization-wide

(4.6.1.3) Value chain stages covered

Select all that apply

☑ Direct operations

☑ Upstream value chain

(4.6.1.4) Explain the coverage

We embed consideration for the environment and compliance with these policies in our Water Policy.

(4.6.1.5) Environmental policy content

Environmental commitments

☑ Commitment to comply with regulations and mandatory standards

☑ Commitment to stakeholder engagement and capacity building on environmental issues

Water-specific commitments

☑ Commitment to reduce water consumption volumes

(4.6.1.7) Public availability

Select from:

☑ Publicly available

(4.6.1.8) Attach the policy

water-use-policy.pdf

Row 8

(4.6.1.1) Environmental issues covered

Select all that apply

☑ Climate change

☑ Water

☑ Biodiversity

(4.6.1.2) Level of coverage

Select from:

☑ Organization-wide

(4.6.1.3) Value chain stages covered

Select all that apply

☑ Direct operations

(4.6.1.4) Explain the coverage

We embed consideration for the environment and compliance with these policies in our Code of Conduct. The Code of Conduct can be found here: https://indd.adobe.com/view/c9b8523e-6d98-400c-9961-f40ee8a8051d

(4.6.1.5) Environmental policy content

Environmental commitments

☑ Commitment to comply with regulations and mandatory standards

(4.6.1.7) Public availability

Select from:

☑ Publicly available

Row 9

(4.6.1.1) Environmental issues covered

Select all that apply

☑ Climate change

☑ Water

☑ Biodiversity

(4.6.1.2) Level of coverage

Select from:

☑ Organization-wide

(4.6.1.3) Value chain stages covered

Select all that apply

☑ Direct operations

☑ Upstream value chain

(4.6.1.4) Explain the coverage

We embed consideration for the environment and compliance with these policies in our Third Party Code of Conduct. The Third Party Code of Conduct can be found here: https://indd.adobe.com/view/bbdd3015-a902-41f0-ac0e-59c3b6460bb0

(4.6.1.5) Environmental policy content

Environmental commitments

☑ Commitment to comply with regulations and mandatory standards

(4.6.1.7) Public availability

Select from:

☑ Publicly available

[Add row]

(4.11) In the reporting year, did your organization engage in activities that could directly or indirectly influence policy, law, or regulation that may (positively or negatively) impact the environment?

(4.11.1) External engagement activities that could directly or indirectly influence policy, law, or regulation that may impact the environment

Select all that apply

☑ Yes, we engaged directly with policy makers

☑ Yes, we engaged indirectly through, and/or provided financial or in-kind support to a trade association or other intermediary organization or individual whose activities could influence policy, law, or regulation

(4.11.2) Indicate whether your organization has a public commitment or position statement to conduct your engagement activities in line with global environmental treaties or policy goals

Select from:

☑ Yes, we have a public commitment or position statement in line with global environmental treaties or policy goals

(4.11.3) Global environmental treaties or policy goals in line with public commitment or position statement

Select all that apply

☑ Paris Agreement

(4.11.5) Indicate whether your organization is registered on a transparency register

Select from:

☑ Yes

(4.11.6) Types of transparency register your organization is registered on

Select all that apply

☑ Mandatory government register

☑ Non-government register

(4.11.7) Disclose the transparency registers on which your organization is registered & the relevant ID numbers for your organization

Mandatory: CMS Energy Employees for Better Government PAC – Federal Election Commission ID: C00075473, Michigan Bureau of Elections Committee ID #: 000011 Non-government: Zicklin Index/ Center for Political Accountability

(4.11.8) Describe the process your organization has in place to ensure that your external engagement activities are consistent with your environmental commitments and/or transition plan

Robust corporate strategy, including internal legislative, legal, environmental and regulatory coordination, with strong regulatory oversight from the Michigan Public Service Commission. CMS Energy strictly adheres to all federal reporting, disclosing, and registering requirements under the Honest Leadership and Open Government Act and the Lobbying Disclosure Act of 1995 and all state reporting, disclosing and registering requirements under PA 472 of 1978.
[Fixed row]

(4.11.1) On what policies, laws, or regulations that may (positively or negatively) impact the environment has your organization been engaging directly with policy makers in the reporting year?

Row 1

(4.11.1.1) Specify the policy, law, or regulation on which your organization is engaging with policy makers

Our advocacy efforts include a broad range of issues on various topics that are important to the company at both the state and federal level. For a list of issues at the federal level please see CMS Energy's quarterly federal lobbying disclosure reports published by the Secretary of the United States Senate at www.lda.senate.gov. https://www.cmsenergy.com/corporate-governance/Political-Engagement/default.aspx

(4.11.1.4) Geographic coverage of policy, law, or regulation

Select from:

☑ Unknown

[Add row]

(4.11.2) Provide details of your indirect engagement on policy, law, or regulation that may (positively or negatively) impact the environment through trade associations or other intermediary organizations or individuals in the reporting year.

Row 1

(4.11.2.1) Type of indirect engagement

Select from:

☑ Indirect engagement via a trade association

(4.11.2.4) Trade association

North America

☑ American Gas Association

(4.11.2.6) Indicate whether your organization’s position is consistent with the organization or individual you engage with

Select from:
☑ Mixed

Row 2

(4.11.2.1) Type of indirect engagement

Select from:
☑ Indirect engagement via a trade association

(4.11.2.4) Trade association

North America
☑ Edison Electric Institute (EII)

(4.11.2.6) Indicate whether your organization’s position is consistent with the organization or individual you engage with

Select from:
☑ Mixed
[Add row]

(4.12.1) Provide details on the information published about your organization’s response to environmental issues for this reporting year in places other than your CDP response. Please attach the publication.

Row 1

(4.12.1.1) Publication

Select from:
☑ In mainstream reports, in line with environmental disclosure standards or frameworks

(4.12.1.2) Standard or framework the report is in line with

Select all that apply

☑ GRI

(4.12.1.3) Environmental issues covered in publication

Select all that apply

☑ Climate change

☑ Biodiversity

(4.12.1.4) Status of the publication

Select from:

☑ Underway - previous year attached

(4.12.1.5) Content elements

Select all that apply

☑ Content of environmental policies

☑ Governance

☑ Strategy

☑ Biodiversity indicators

☑ Emissions figures

(4.12.1.8) Comment

GRI Index is publicly available and can be accessed here: https://www.cmsenergy.com/sustainability/gri/default.aspx

Row 2

(4.12.1.1) Publication

Select from:

☑ In mainstream reports, in line with environmental disclosure standards or frameworks

(4.12.1.2) Standard or framework the report is in line with

Select all that apply

☑ TCFD

(4.12.1.3) Environmental issues covered in publication

Select all that apply

☑ Climate change

(4.12.1.4) Status of the publication

Select from:

☑ Underway - previous year attached

(4.12.1.5) Content elements

Select all that apply

☑ Strategy

☑ Governance

☑ Emission targets

☑ Emissions figures

☑ Risks & Opportunities

☑ Dependencies & Impacts

☑ Content of environmental policies

(4.12.1.8) Comment

TCFD Index is publicly available and can be accessed here: https://www.cmsenergy.com/sustainability/tcfd/default.aspx

Row 3

(4.12.1.1) Publication

Select from:

☑ In mainstream reports, in line with environmental disclosure standards or frameworks

(4.12.1.2) Standard or framework the report is in line with

Select all that apply

☑ Other, please specify **:**SASB Electric

(4.12.1.3) Environmental issues covered in publication

Select all that apply

☑ Climate change

☑ Water

(4.12.1.4) Status of the publication

Select from:

☑ Complete

(4.12.1.5) Content elements

Select all that apply

☑ Risks & Opportunities

☑ Strategy

☑ Emissions figures

☑ Emission targets

☑ Water accounting figures

(4.12.1.8) Comment

SASB Electric Index is publicly available and can be accessed here: https://www.cmsenergy.com/sustainability/sasb-index-for-consumers-energy-electric-utilities-and-power-generation/default.aspx

Row 4

(4.12.1.1) Publication

Select from:

☑ In mainstream reports, in line with environmental disclosure standards or frameworks

(4.12.1.2) Standard or framework the report is in line with

Select all that apply

☑ Other, please specify :SASB Gas

(4.12.1.3) Environmental issues covered in publication

Select all that apply

☑ Climate change

(4.12.1.4) Status of the publication

Select from:

☑ Complete

(4.12.1.5) Content elements

Select all that apply

☑ Strategy

☑ Emissions figures

(4.12.1.8) Comment

SASB Gas Index is publicly available and can be accessed here: https://www.cmsenergy.com/sustainability/sasb-index-for-consumers-energy-gas-utilities-and-distributors/default.aspx

Row 5

(4.12.1.1) Publication

Select from:

☑ In other regulatory filings

(4.12.1.3) Environmental issues covered in publication

Select all that apply

☑ Climate change

☑ Water

(4.12.1.4) Status of the publication

Select from:

☑ Complete

(4.12.1.5) Content elements

Select all that apply

☑ Strategy

☑ Governance

☑ Emission targets

☑ Emissions figures

☑ Risks & Opportunities

☑ Dependencies & Impacts

☑ Content of environmental policies

(4.12.1.6) Page/section reference

pp. 17-63

(4.12.1.8) Comment

2023 10-K Filing is publicly available and can be accessed here: https://s26.q4cdn.com/888045447/files/doc_financials/2023/ar/AnnualReport2023-WEB-READY.pdf

Row 6

(4.12.1.1) Publication

Select from:

☑ In other regulatory filings

(4.12.1.3) Environmental issues covered in publication

Select all that apply

☑ Climate change

☑ Water

(4.12.1.4) Status of the publication

Select from:

☑ Complete

(4.12.1.5) Content elements

Select all that apply

☑ Governance

☑ Strategy

☑ Emission targets

(4.12.1.6) Page/section reference

pp. 3-8

(4.12.1.8) Comment

2024 Combined Proxy Statement is publicly available and can be accessed here: https://s26.q4cdn.com/888045447/files/doc_financials/2024/sr/2024-Final-Proxy-WEB-READY.pdf

Row 7

(4.12.1.1) Publication

Select from:

☑ In voluntary sustainability reports

(4.12.1.3) Environmental issues covered in publication

Select all that apply

☑ Climate change

☑ Water

☑ Biodiversity

(4.12.1.4) Status of the publication

Select from:

☑ Underway - previous year attached

(4.12.1.5) Content elements

Select all that apply

☑ Strategy

☑ Governance

☑ Emission targets

☑ Emissions figures

☑ Biodiversity indicators

☑ Water accounting figures

(4.12.1.6) Page/section reference

pp. 1-41

(4.12.1.8) Comment

2023 Sustainability Report is publicly available and can be accessed here: https://s26.q4cdn.com/888045447/files/doc_downloads/how_we_are_doing/2023/CMS-Energy-Sustainability-Report_2023_FINAL.pdf

Row 8

(4.12.1.3) Environmental issues covered in publication

Select all that apply

☑ Climate change

☑ Water

(4.12.1.4) Status of the publication

Select from:

☑ Complete

(4.12.1.5) Content elements

Select all that apply

☑ Governance

☑ Risks & Opportunities

☑ Strategy

☑ Emissions figures

☑ Emission targets

(4.12.1.6) Page/section reference

pp. 1-64

(4.12.1.8) Comment

May 2023 ESG Presentation is publicly available and can be accessed here: https://s26.q4cdn.com/888045447/files/doc_presentations/2023/06/2023-ESG-Presentation.pdf

Row 9

(4.12.1.1) Publication

Select from:

☑ In voluntary sustainability reports

(4.12.1.3) Environmental issues covered in publication

Select all that apply

☑ Biodiversity

(4.12.1.4) Status of the publication

Select from:

☑ Complete

(4.12.1.5) Content elements

Select all that apply

☑ Content of environmental policies

☑ Strategy

☑ Biodiversity indicators

(4.12.1.6) Page/section reference

pp. 1-15

(4.12.1.8) Comment

2024 Biodiversity Report is publicly available and can be accessed here: https://s26.q4cdn.com/888045447/files/doc_downloads/2024/08/Biodiversity-Report-2024_FINAL.pdf
[Add row]

C5. Business strategy

(5.1) Does your organization use scenario analysis to identify environmental outcomes?

Climate change

(5.1.1) Use of scenario analysis

Select from:
☑ Yes

(5.1.2) Frequency of analysis

Select from:
☑ Every three years or less frequently

Water

(5.1.1) Use of scenario analysis

Select from:
☑ Yes

(5.1.2) Frequency of analysis

Select from:
☑ Every three years or less frequently
[Fixed row]

(5.1.1) Provide details of the scenarios used in your organization’s scenario analysis.

Climate change

(5.1.1.1) Scenario used

Climate transition scenarios

☑ Customized publicly available climate transition scenario, please specify :Integrated Resource Plan

(5.1.1.3) Approach to scenario

Select from:

☑ Qualitative and quantitative

(5.1.1.4) Scenario coverage

Select from:

☑ Business division

(5.1.1.5) Risk types considered in scenario

Select all that apply

☑ Policy

☑ Market

☑ Liability

☑ Reputation

☑ Technology

☑ Acute physical

☑ Chronic physical

(5.1.1.6) Temperature alignment of scenario

Select from:

☑ 1.5°C or lower

(5.1.1.8) Timeframes covered

Select all that apply

☑ 2040

(5.1.1.10) Assumptions, uncertainties and constraints in scenario

Consumers Energy seeks to address a safe, reliable, and affordable plan that will achieve net-zero carbon emissions by 2040 for the electric side of the business and develop and execute on an electric supply plan that supports the execution of state, federal, and worldwide carbon reduction targets. Consumers Energy also has a goal to achieve net-zero carbon emissions from the natural gas side of the business by 2050. Analysis of different resource mixes, including the retirement of existing fossil resources and acquisition and construction of new resources, under a climate-related scenario analysis, allows Consumers Energy to understand the cost and carbon impacts of different resource mixes in a scenario that restricts carbon production by certain target years of the 20-year outlook. The Consumers Energy analyses options under multiple scenario and sensitivities, including evaluation of different levels of electric demand to ensure that the Integrated Resource Plan (IRP) provides reliable levels of capacity and energy over the study period while building new resources in a flexible, modular manner (such as our annual solar solicitation process) to ensure that new resources will be constructed to meet demand but will not be over-developed or over-built and result in increased costs to customers and stranded assets.

(5.1.1.11) Rationale for choice of scenario

Under the climate-related scenario analysis of the Environmental Policy and Carbon Reduction scenarios in Consumers Energy's most recent Integrated Resource Plan, which was approved by the Michigan Public Service Commission in 2022, the base case retirement resource mix achieved both the scenario and sensitivity targets in initial modelling. No resource changes were required to the base retirement plan to meet the increased 50% carbon reduction targets as defined in the climate-related sensitivities, and only when electric demand increased 1.5% year over year in the demand sensitivity for the Carbon Reduction scenario were additional resources required to be built. Consumers Energy's IRP addresses both the climate-related scenarios as defined by the Michigan Public Service Commission, as well as the focal questions the Consumers Energy was targeted to address such as a plan that represents progress towards Consumers Energy's 2040 net zero carbon decarbonization target as well as support and exceedance of state and federal climate targets. The IRP achieves all of this through retirement of large fossil, centralized resource and a focus on building modular, flexible resources such as solar and storage with which to address changing demand in future years without resulting in large, stranded assets or increased cost to customers. This resource plan was tested under multiple levels of demand, both within the climate related scenarios as well as non-climate related scenarios, including evaluation of potential increases in demand through electrification but also decreased electric demand through adoption of customer-based resources that would reduce energy need from the utility.

Water

(5.1.1.1) Scenario used

Climate transition scenarios

☑ Customized publicly available climate transition scenario, please specify **:**Integrated Resource Plan

(5.1.1.3) Approach to scenario

Select from:

☑ Qualitative and quantitative

(5.1.1.4) Scenario coverage

Select from:
☑ Business division

(5.1.1.5) Risk types considered in scenario

Select all that apply
☑ Policy
☑ Market
☑ Technology

(5.1.1.8) Timeframes covered

Select all that apply
☑ 2040
[Add row]

(5.1.2) Provide details of the outcomes of your organization's scenario analysis.

Climate change

(5.1.2.1) Business processes influenced by your analysis of the reported scenarios

Select all that apply
☑ Strategy and financial planning
☑ Resilience of business model and strategy
☑ Capacity building
☑ Target setting and transition planning

(5.1.2.2) Coverage of analysis

Select from:

☑ Business division

[Fixed row]

(5.2) Does your organization’s strategy include a climate transition plan?

(5.2.1) Transition plan

Select from:

☑ Yes, we have a climate transition plan which aligns with a 1.5°C world

(5.2.3) Publicly available climate transition plan

Select from:

☑ Yes

(5.2.4) Plan explicitly commits to cease all spending on, and revenue generation from, activities that contribute to fossil fuel expansion

Select from:

☑ No, and we do not plan to add an explicit commitment within the next two years

(5.2.7) Mechanism by which feedback is collected from shareholders on your climate transition plan

Select from:

☑ We have a different feedback mechanism in place

(5.2.8) Description of feedback mechanism

The Treasurer and Vice President of Finance and Investor Relations of CMS Energy Corporation and Consumers Energy Company is involved in the integrated resource planning process. This role is responsible for managing corporate liquidity and financing and maintaining relationships with investors, banks and rating

agencies. Consumers Energy's Integrated Resource Plan, which guides the future of our electric generation business, also goes through a rigorous public review process before the Michigan Public Service Commission, which includes required stakeholder engagement throughout the process.

(5.2.9) Frequency of feedback collection

Select from:

☑ Less frequently than annually

(5.2.11) Description of progress against transition plan disclosed in current or previous reporting period

We disclose our greenhouse gas emissions publicly both in filings with state and federal agencies, as well as in our annual Sustainability Report.

(5.2.12) Attach any relevant documents which detail your climate transition plan (optional)

IRP-2021.pdf

(5.2.13) Other environmental issues that your climate transition plan considers

Select all that apply

☑ Water

(5.2.14) Explain how the other environmental issues are considered in your climate transition plan

Our plan analyzes the impacts of changing our electric generation mix on our corporate water use for power generation.
[Fixed row]

(5.3) Have environmental risks and opportunities affected your strategy and/or financial planning?

(5.3.1) Environmental risks and/or opportunities have affected your strategy and/or financial planning

Select from:

☑ Yes, both strategy and financial planning

(5.3.2) Business areas where environmental risks and/or opportunities have affected your strategy

Select all that apply

☑ Products and services

☑ Upstream/downstream value chain

☑ Investment in R&D

☑ Operations

[Fixed row]

(5.3.1) Describe where and how environmental risks and opportunities have affected your strategy.

Products and services

(5.3.1.1) Effect type

Select all that apply

☑ Risks

☑ Opportunities

(5.3.1.2) Environmental issues relevant to the risks and/or opportunities that have affected your strategy in this area

Select all that apply

☑ Climate change

☑ Water

(5.3.1.3) Describe how environmental risks and/or opportunities have affected your strategy in this area

Climate-related risks and opportunities have a strong influence on Consumers Energy's products and services strategy. For example, customers demanding new lower carbon products and services presents both a risk, by not providing these products adequately and having customers' needs be met elsewhere, and an opportunity, by addressing these demands with new products and services. Time Horizons Covered by Strategy: Consumers Energy's low carbon products and service offerings are key components of Consumers Energy's clean energy transition and are key elements of our product portfolio. Offerings are managed by our Customer Experience organization and are reviewed as a part of our IRP. Our Voluntary Green Pricing programs remain a backbone of our clean energy journey and a key mechanism for our customers to join us in the fight against climate change. Our offerings include renewable options for both electric and natural gas customers. An example of such a service is the Solar Gardens program. This program allows customers interested in solar energy but do not want to pursue their own solar panels to subscribe to a share of the energy associated with one of the Consumers Energy's solar installations. Customers subscribe to the desired amount of 1/2kW solar blocks and Consumers Energy owned facilities generate the solar energy. This program enables customers to support clean energy going onto the electric grid

by paying a monthly fee on their energy bill and they receive a credit for the solar energy actually produced. This is just one example of the many programs that exist to provide low carbon solutions to customers. In addition to renewable energy customer programs, other programs are related to energy efficiency, demand response, net metering, special rates for electric vehicles, and programs to reduce peak demand, and it is continuously looked into to expand and develop new offerings. Additionally, in 2022 Consumers Energy announced an agreement with Swisslane Farms to build a biodigester facility that will convert agricultural waste into clean, renewable natural gas, or RNG. Produced from organic wastes and other renewable sources, it can help heat Michigan homes, power stoves and dry grain for farmers. RNG is a key technology available to reduce methane emissions, a greenhouse gas more potent than carbon dioxide.

Upstream/downstream value chain

(5.3.1.1) Effect type

Select all that apply

☑ Risks

☑ Opportunities

(5.3.1.2) Environmental issues relevant to the risks and/or opportunities that have affected your strategy in this area

Select all that apply

☑ Climate change

☑ Water

(5.3.1.3) Describe how environmental risks and/or opportunities have affected your strategy in this area

Consumers Energy acknowledges and understands the risks and opportunities presented by supply chain management. As an energy company with many suppliers, there is a risk to not understanding the environmental performance of its suppliers. To manage this risk Consumers Energy has sent out questionnaires to its largest suppliers to understand how they are managing their environmental footprint. Consumers Energy has also begun having discussions with suppliers of solar panels that have lower lifecycle emissions associated with their production. Similarly, Consumers Energy is participating in the Natural Gas Sustainability Initiative, which focuses on reducing emissions in the natural gas value chain. While great strides have been made to positively influence the supply chain, Consumers Energy is currently developing a concrete strategy to implement sustainability best practices into our supply chain management. There are a lot of opportunities to pursue developing such a strategy and plan and it will allow Consumers Energy to be a leader among peers in sustainability.

Investment in R&D

(5.3.1.1) Effect type

Select all that apply

☑ Risks

☑ Opportunities

(5.3.1.2) Environmental issues relevant to the risks and/or opportunities that have affected your strategy in this area

Select all that apply

☑ Climate change

☑ Water

(5.3.1.3) Describe how environmental risks and/or opportunities have affected your strategy in this area

Consumers Energy acknowledges that the future of the energy industry is dependent on solid research and development (R&D) of innovative technology. To not pursue internal R&D or support external R&D would put Consumers Energy at risk of not adapting new technology in a timely manner which could cost Consumers Energy from both a reputational and monetary standpoint. However, pursuing R&D also presents the Consumers Energy with an opportunity to position itself to perform well in an ever-evolving environment. Our low carbon R&D efforts are managed strategically through our involvement in the Low Carbon Research Initiative (LCRI) lead by both EPRI and GTI Energy. The LCRI is a collaborative effort focused on accelerating the development, demonstration, and deployment of hydrogen and other low-carbon energy technologies and fuels at scale. Consumers Energy also participates in EPRI's Climate READI (REsilience and ADaptation Initiative) research in order to identify and mitigate physical climate risks to our system.

Operations

(5.3.1.1) Effect type

Select all that apply

☑ Risks

☑ Opportunities

(5.3.1.2) Environmental issues relevant to the risks and/or opportunities that have affected your strategy in this area

Select all that apply

☑ Climate change

☑ Water

(5.3.1.3) Describe how environmental risks and/or opportunities have affected your strategy in this area

Physical risks of climate change such as more frequent and severe storms as well as changes in water levels present a risk to generating assets. Understanding these risks also presents us with an opportunity to strengthen our systems. Consumers Energy has a program to harden its system against increased storm and precipitation effects over the coming years as outlined in our Reliability Roadmap. To date we have completed hardening our shoreline at numerous sites by adding needed rip rap to protect against storm surges. In addition, we are upgrading our hydroelectric dam infrastructure and evaluating our dams to confirm that they can handle projected future high rain events, and associated flooding.
[Add row]

(5.3.2) Describe where and how environmental risks and opportunities have affected your financial planning.

Row 1

(5.3.2.1) Financial planning elements that have been affected

Select all that apply
☑ Capital allocation

(5.3.2.2) Effect type

Select all that apply
☑ Risks
☑ Opportunities

(5.3.2.3) Environmental issues relevant to the risks and/or opportunities that have affected these financial planning elements

Select all that apply
☑ Climate change
☑ Water

(5.3.2.4) Describe how environmental risks and/or opportunities have affected these financial planning elements

Consumers Energy's Integrated Resource Plan (IRP) is specifically designed to reduce climate risks posed by Consumers Energy. The IRP calls for a large build out of solar energy – over 8,000 MW – and retires all Consumers Energy coal-fired facilities by the end of 2025. Our low carbon products and service offerings are reviewed as a part of the IRP which was approved by the Michigan Public Service Commission (MPSC) in 2022 and our Renewable Energy Plan (REP). Consumes

Energy is required under state law to file a Renewable Energy Plan every two years annually and produce an IRP at least every five years. This is similar to Consumers Energy's long-term financial plan, which is a 5- year plan, though not necessarily the same 5-year period. Under Consumers Energy's renewable energy plan, the MPSC has approved the acquisition of up to 525 MW of new wind generation projects and authorized Consumers Energy to earn a 10.7 percent return on equity on any projects approved by the MPSC. Specifically, the MPSC has approved the following: • purchase and construction of a 150 MW wind generation project in Gratiot County, Michigan; the project became operational and Consumers Energy took full ownership in 2020 • purchase of a 166 MW wind generation project in Hillsdale, Michigan; the project became operational and Consumers Energy took full ownership in 2021 • purchase of a wind generation project, with capacity of up to 201 MW, in Gratiot County, Michigan; Consumers Energy took full ownership and begin commercial operation of the project in the fourth quarter of 2023 MPSC also approved the execution of a 20-year PPA under which Consumers Energy will purchase 100 MW of renewable capacity, energy, and RECs from a 149 MW solar generating facility to be constructed in Calhoun County, Michigan; the facility is targeted to be operational in 2024. Voluntary Large Customer Renewable Energy Program: Consumers Energy provides service under a program that provides large full-service electric customers with the opportunity to advance the development of renewable energy beyond the requirements of the 2016 Energy Law. In 2021, the MPSC approved Consumers Energy's request to amend its renewable energy plan to remove the annual subscription limit associated with this program. The MPSC also approved up to 1,000 MW of new wind and solar generation projects between 2024 and 22027 to meet customer demand for the program.
[Add row]

(5.5) Does your organization invest in research and development (R&D) of low-carbon products or services related to your sector activities?

(5.5.1) Investment in low-carbon R&D

Select from:
☑ Yes

(5.5.2) Comment

Consumers Energy's low carbon R&D efforts are managed strategically through our involvement in the Low Carbon Research Initiative at EPRI and implemented through the Integrated Resource Plan. The LCRI is a collaborative effort focused on accelerating the development, demonstration, and deployment of hydrogen and other low-carbon energy technologies and fuels at scale.
[Fixed row]

(5.7) Break down, by source, your organization's CAPEX in the reporting year and CAPEX planned over the next 5 years.

Coal – hard

(5.7.1) CAPEX in the reporting year for power generation from this source (unit currency as selected in 1.2)

19500000

(5.7.2) CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

1.5

(5.7.3) CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

0

(5.7.5) Explain your CAPEX calculations, including any assumptions

CAPEX provided reflects Consumers Energy (our regulated utility) only. 2024-2028 CAPEX is based on 2024 budget.

Lignite

(5.7.1) CAPEX in the reporting year for power generation from this source (unit currency as selected in 1.2)

0

(5.7.2) CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

0

(5.7.3) CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

0

(5.7.5) Explain your CAPEX calculations, including any assumptions

CAPEX provided reflects Consumers Energy (our regulated utility) only. 2024-2028 CAPEX is based on 2024 budget.

Oil

(5.7.1) CAPEX in the reporting year for power generation from this source (unit currency as selected in 1.2)

0

(5.7.2) CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

0

(5.7.3) CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

0

(5.7.5) Explain your CAPEX calculations, including any assumptions

CAPEX provided reflects Consumers Energy (our regulated utility) only. 2024-2028 CAPEX is based on 2024 budget.

Gas

(5.7.1) CAPEX in the reporting year for power generation from this source (unit currency as selected in 1.2)

892200000

(5.7.2) CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

68

(5.7.3) CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

10.3

(5.7.5) Explain your CAPEX calculations, including any assumptions

CAPEX provided reflects Consumers Energy (our regulated utility) only. 2024-2028 CAPEX is based on 2024 budget.

Sustainable biomass

(5.7.1) CAPEX in the reporting year for power generation from this source (unit currency as selected in 1.2)

0

(5.7.2) CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

0

(5.7.3) CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

0

(5.7.5) Explain your CAPEX calculations, including any assumptions

CAPEX provided reflects Consumers Energy (our regulated utility) only. 2024-2028 CAPEX is based on 2024 budget.

Other biomass

(5.7.1) CAPEX in the reporting year for power generation from this source (unit currency as selected in 1.2)

0

(5.7.2) CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

0

(5.7.3) CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

0

(5.7.5) Explain your CAPEX calculations, including any assumptions

CAPEX provided reflects Consumers Energy (our regulated utility) only. 2024-2028 CAPEX is based on 2024 budget.

Waste (non-biomass)

(5.7.1) CAPEX in the reporting year for power generation from this source (unit currency as selected in 1.2)

0

(5.7.2) CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

0

(5.7.3) CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

0

(5.7.5) Explain your CAPEX calculations, including any assumptions

CAPEX provided reflects Consumers Energy (our regulated utility) only. 2024-2028 CAPEX is based on 2024 budget.

Nuclear

(5.7.1) CAPEX in the reporting year for power generation from this source (unit currency as selected in 1.2)

0

(5.7.2) CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

0

(5.7.3) CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

0

(5.7.5) Explain your CAPEX calculations, including any assumptions

CAPEX provided reflects Consumers Energy (our regulated utility) only. 2024-2028 CAPEX is based on 2024 budget.

Geothermal

(5.7.1) CAPEX in the reporting year for power generation from this source (unit currency as selected in 1.2)

0

(5.7.2) CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

0

(5.7.3) CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

0

(5.7.5) Explain your CAPEX calculations, including any assumptions

CAPEX provided reflects Consumers Energy (our regulated utility) only. 2024-2028 CAPEX is based on 2024 budget.

Hydropower

(5.7.1) CAPEX in the reporting year for power generation from this source (unit currency as selected in 1.2)

52100000

(5.7.2) CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

4

(5.7.3) CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

16.4

(5.7.5) Explain your CAPEX calculations, including any assumptions

CAPEX provided reflects Consumers Energy (our regulated utility) only. 2024-2028 CAPEX is based on 2024 budget.

Wind

(5.7.1) CAPEX in the reporting year for power generation from this source (unit currency as selected in 1.2)

186000000

(5.7.2) CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

14.4

(5.7.3) CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

1.6

(5.7.5) Explain your CAPEX calculations, including any assumptions

CAPEX provided reflects Consumers Energy (our regulated utility) only. 2024-2028 CAPEX is based on 2024 budget.

Solar

(5.7.1) CAPEX in the reporting year for power generation from this source (unit currency as selected in 1.2)

89000000

(5.7.2) CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

6.9

(5.7.3) CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

57.1

(5.7.5) Explain your CAPEX calculations, including any assumptions

CAPEX provided reflects Consumers Energy (our regulated utility) only. 2024-2028 CAPEX is based on 2024 budget.

Marine

(5.7.1) CAPEX in the reporting year for power generation from this source (unit currency as selected in 1.2)

0

(5.7.2) CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

0

(5.7.3) CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

0

(5.7.5) Explain your CAPEX calculations, including any assumptions

CAPEX provided reflects Consumers Energy (our regulated utility) only. 2024-2028 CAPEX is based on 2024 budget.

Fossil-fuel plants fitted with CCS

(5.7.1) CAPEX in the reporting year for power generation from this source (unit currency as selected in 1.2)

0

(5.7.2) CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

0

(5.7.3) CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

0

(5.7.5) Explain your CAPEX calculations, including any assumptions

CAPEX provided reflects Consumers Energy (our regulated utility) only. 2024-2028 CAPEX is based on 2024 budget.

Other renewable (e.g. renewable hydrogen)

(5.7.1) CAPEX in the reporting year for power generation from this source (unit currency as selected in 1.2)

0

(5.7.2) CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

0

(5.7.3) CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

0

(5.7.5) Explain your CAPEX calculations, including any assumptions

CAPEX provided reflects Consumers Energy (our regulated utility) only. 2024-2028 CAPEX is based on 2024 budget.
[Fixed row]

(5.9) 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?

(5.9.1) Water-related CAPEX (+/- % change)

14

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

160

(5.9.3) Water-related OPEX (+/- % change)

0

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

38

(5.9.5) 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 2024 due to the cost of chemicals and water treatment at the gas generating stations and coal cessation-related activities.
[Fixed row]

(5.10) Does your organization use an internal price on environmental externalities?

	Use of internal pricing of environmental externalities	Environmental externality priced
	Select from: ☑ Yes	*Select all that apply* ☑ Carbon

[Fixed row]

(5.10.1) Provide details of your organization's internal price on carbon.

Row 1

(5.10.1.1) Type of pricing scheme

Select from:

☑ Implicit price

(5.10.1.4) Calculation methodology and assumptions made in determining the price

Carbon is something that has been on the Company's radar for quite a while, but currently there is no regulatory framework which includes any price on carbon or restrictions in emissions and for those reasons, our base assumption is that there is no price on carbon. That said, from a prudency and stakeholder input perspective, the Company felt carbon couldn't be ignored and for those reasons it was decided to perform a risk analysis on carbon in the IRP. In order to set a price on carbon, several different data sources for carbon pricing were evaluated. Carbon price curves used in other IRP filings and carbon prices determined and/or evaluated by the Energy Information Administration (EIA), the Regional Greenhouse Gas Initiative (RGGI) and IHS Markit were evaluated. Several congressional carbon pricing proposals were also considered. Ultimately, the Company opted to utilize an IHS Markit forecast for the base or low scenario, a Consumers Energy adjusted forecast for the moderate pricing (which was the IHS pricing accelerated to begin in 2025) and the EIA high forecast was used for our high scenario.

(5.10.1.5) Scopes covered

Select all that apply

☑ Scope 1

(5.10.1.6) Pricing approach used – spatial variance

Select from:

☑ Other, please specify **:**

(5.10.1.8) Pricing approach used – temporal variance

Select from:

☑ Other, please specify **:**

(5.10.1.10) Minimum actual price used (currency per metric ton CO2e)

9.92

(5.10.1.11) Maximum actual price used (currency per metric ton CO2e)

36.26

[Add row]

(5.11) Do you engage with your value chain on environmental issues?

	Engaging with this stakeholder on environmental issues	Environmental issues covered
Suppliers	*Select from:* ☑ Yes	*Select all that apply* ☑ Climate change ☑ Water
Customers	*Select from:* ☑ Yes	*Select all that apply* ☑ Climate change ☑ Water
Investors and shareholders	*Select from:* ☑ Yes	*Select all that apply* ☑ Climate change ☑ Water

[Fixed row]

(5.11.2) Does your organization prioritize which suppliers to engage with on environmental issues?

Climate change

(5.11.2.1) Supplier engagement prioritization on this environmental issue

Select from:

☑ Yes, we prioritize which suppliers to engage with on this environmental issue

(5.11.2.2) Criteria informing which suppliers are prioritized for engagement on this environmental issue

Select all that apply

☑ Other, please specify :Supplier data availability and survey participation

(5.11.2.4) Please explain

We are a member of the Sustainable Supply Chain Alliance (SSCA) and utilize survey responses from our suppliers that participate in the SSCA's annual supplier assessment tool.

Water

(5.11.2.1) Supplier engagement prioritization on this environmental issue

Select from:

☑ Yes, we prioritize which suppliers to engage with on this environmental issue

(5.11.2.2) Criteria informing which suppliers are prioritized for engagement on this environmental issue

Select all that apply

☑ Other, please specify :Supplier data availability and survey participation

(5.11.2.4) Please explain

We are a member of the Sustainable Supply Chain Alliance (SSCA) and utilize survey responses from our suppliers that participate in the SSCA's annual supplier assessment tool.
[Fixed row]

(5.11.5) Do your suppliers have to meet environmental requirements as part of your organization's purchasing process?

Climate change

(5.11.5.1) Suppliers have to meet specific environmental requirements related to this environmental issue as part of the purchasing process

Select from:

☑ No, and we do not plan to introduce environmental requirements related to this environmental issue within the next two years

(5.11.5.2) Policy in place for addressing supplier non-compliance

Select from:

☑ No, we do not have a policy in place for addressing non-compliance

(5.11.5.3) Comment

Please note there are requirements contractually to comply with Consumers Energy Third Party Code of Conduct (2024) and for Construction Contracts CE's Contractor, Safety, Health, and Environmental Standards which are general requirements in reporting.

Water

(5.11.5.1) Suppliers have to meet specific environmental requirements related to this environmental issue as part of the purchasing process

Select from:

☑ No, and we do not plan to introduce environmental requirements related to this environmental issue within the next two years

(5.11.5.2) Policy in place for addressing supplier non-compliance

Select from:

☑ No, we do not have a policy in place for addressing non-compliance

(5.11.5.3) Comment

Please note there are requirements contractually to comply with Consumers Energy Third Party Code of Conduct (2024) and for Construction Contracts CE's Contractor, Safety, Health, and Environmental Standards which are general requirements in reporting.
[Fixed row]

(5.11.9) Provide details of any environmental engagement activity with other stakeholders in the value chain.

Climate change

(5.11.9.1) Type of stakeholder

Select from:

☑ Customers

(5.11.9.2) Type and details of engagement

Education/Information sharing

☑ Run an engagement campaign to educate stakeholders about the environmental impacts about your products, goods and/or services

☑ Share information on environmental initiatives, progress and achievements

(5.11.9.5) Rationale for engaging these stakeholders and scope of engagement

As a national leader in the energy industry transformation, Consumers Energy is committed to accelerating a clean energy future by supporting our customers and communities in reaching their carbon footprint reduction goals. As such, a focus of our Customer Experience team is to promote our clean energy product portfolio in a variety of ways to increase awareness and engagement with our customers. We take a consultative approach with large businesses leveraging a team of Energy Solutions Managers to help companies understand their unique energy goals and how our offerings can help achieve them. Consultative services span the topics of energy management practices, energy efficiency, demand response, renewable energy, and electric vehicle solutions. It is our goal to meet businesses where they are at in their clean energy journey, deliver value and accelerate the adoption of clean energy best practices. Consumers Energy uses an integrated marketing approach to engage customers in its Energy Efficiency Programs. Customer engagement is prioritized due to its inherent business and societal value. This engagement reduces carbon emissions while creating business value through new products and services. Additionally, energy efficiency programs save customers money.

(5.11.9.6) Effect of engagement and measures of success

Ultimately, engagement efforts are evaluated by the achievement of savings goals for both electricity and natural gas. By improving the energy efficiency of Michigan homes and businesses, Consumers Energy cost-effectively exceeded electric and gas statutory energy saving targets. In 2023, our energy waste reduction programs helped customers save over 650 GWh and nearly 3.8 Bcf in energy consumption resulting in a boost to total customer savings of 6.3 billion since 2009. The programs also prevented nearly 28 million tons of carbon dioxide emissions. Cumulative savings from 2009 to 2023 are equivalent to supplying electricity to about 4.3 million homes and natural gas to about 1.9 million homes for a year. Exceeding our statutory energy savings requirements, we've set a target to achieve an average of 2 percent and 1 percent incremental electric and natural gas savings respectively over the course of our 2024-2025 energy waste reduction plan.

Water

(5.11.9.1) Type of stakeholder

Select from:

☑ Customers

(5.11.9.2) Type and details of engagement

Education/Information sharing

☑ Share information on environmental initiatives, progress and achievements

Other

☑ Other, please specify **:**Identify stakeholder concerns and priorities in advance of decisions related to future hydroelectric investment and operations.

(5.11.9.5) Rationale for engaging these stakeholders and scope of 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. Additionally, Consumers Energy began stakeholder engagement activities well in advance of reaching the design life of the hydro facilities we operate to better understand community concerns. Our future plans will comply with regulations, laws, and our own internal policies to ensure our communities are protected and supported as we continue to make infrastructure decisions to meet the energy needs of our customers.

(5.11.9.6) Effect of engagement and measures of success

The residential and business Energy Waste Reduction program was responsible for saving 497 million gallons of water in 2023.

Climate change

(5.11.9.1) Type of stakeholder

Select from:

☑ Investors and shareholders

(5.11.9.2) Type and details of engagement

Education/Information sharing

☑ Share information on environmental initiatives, progress and achievements

Water

(5.11.9.1) Type of stakeholder

Select from:

☑ Investors and shareholders

(5.11.9.2) Type and details of engagement

Education/Information sharing

☑ Share information on environmental initiatives, progress and achievements

[Add row]

C6. Environmental Performance - Consolidation Approach

(6.1) Provide details on your chosen consolidation approach for the calculation of environmental performance data.

Climate change

(6.1.1) Consolidation approach used

Select from:

☑ Equity share

(6.1.2) Provide the rationale for the choice of consolidation approach

The Company accounts for GHG emissions from operations according to its share of equity in the operation. The equity share reflects the economic interest, which is the extent of rights the Company has to the risks and rewards flowing from a particular operation.

Water

(6.1.1) Consolidation approach used

Select from:

☑ Equity share

(6.1.2) Provide the rationale for the choice of consolidation approach

The Company accounts for water from operations according to its share of equity in the operation. The equity share reflects the economic interest, which is the extent of rights the Company has to the risks and rewards flowing from a particular operation.

Plastics

(6.1.1) Consolidation approach used

Select from:

☑ Other, please specify :N/A

(6.1.2) Provide the rationale for the choice of consolidation approach

N/A

Biodiversity

(6.1.1) Consolidation approach used

Select from:

☑ Equity share

(6.1.2) Provide the rationale for the choice of consolidation approach

The Company accounts for biodiversity activities and impacts from operations according to its share of equity in the operation. The equity share reflects the economic interest, which is the extent of rights the Company has to the risks and rewards flowing from a particular operation.
[Fixed row]

C7. Environmental performance - Climate Change

(7.1.1) Has your organization undergone any structural changes in the reporting year, or are any previous structural changes being accounted for in this disclosure of emissions data?

	Has there been a structural change?	Name of organization(s) acquired, divested from, or merged with	Details of structural change(s), including completion dates
	Select all that apply ☑ Yes, an acquisition	*Covert Generating Station*	*Consumers Energy acquired the natural gas-fired Covert Generation Station and began operating it on 6/1/2023.*

[Fixed row]

(7.1.2) Has your emissions accounting methodology, boundary, and/or reporting year definition changed in the reporting year?

(7.1.2.1) Change(s) in methodology, boundary, and/or reporting year definition?

Select all that apply

☑ Yes, a change in boundary

(7.1.2.2) Details of methodology, boundary, and/or reporting year definition change(s)

Retail Open Access (i.e., customer choice of another electric supplier) electric deliveries, specifically the associated line losses on our distribution system, are included in Scope 2 as wheeled power. Previously ROA was not considered in our reporting boundary. ROA is not included in Scope 3 emissions.
[Fixed row]

(7.1.3) Have your organization’s base year emissions and past years’ emissions been recalculated as a result of any changes or errors reported in 7.1.1 and/or 7.1.2?

(7.1.3.1) Base year recalculation

Select from:

☑ Yes

(7.1.3.2) Scope(s) recalculated

Select all that apply

☑ Scope 2, location-based

☑ Scope 2, market-based

(7.1.3.3) Base year emissions recalculation policy, including significance threshold

CMS Energy will not recalculate the GHG inventory base year emissions for acquisition of new assets, mergers, or divestments of currently operating sources, nor will the baseline years identified for the corporate targets be revised for these circumstances as they are not germane to tracking progress to our current net-zero goals. Under any of these scenarios, GHG emissions shall be prorated in the first applicable reporting year based on the date of ownership and the entities’ equity-ownership percentage. Established by the GHG Reporting Team, CMS Energy’s policy on restating previously reported GHG emissions in voluntary sustainability reports, as well as the timing for republishing revised / corrected data, is based on a significance threshold of emissions data errors. The significance threshold is compared to each scope’s total reported emissions and is considered significant if the variance is 1% or greater. If the variance is 5% or greater of the cumulative total of Scopes 1, 2 and 3, the revised data shall be corrected publicly. This percentage aligns with financial reporting significance criteria. If recalculation of emissions results in an emissions data variance greater than 1% but less than 5%, CMS Energy shall correct that error in the next year’s version of the applicable sustainability disclosure. For consistency, CMS Energy may elect to recalculate and restate previously reported scope data upon discovery of non-significant changes, less than 1%. GHG emissions will be evaluated and/or recalculated (if appropriate) if the difference between the actual and the previous year’s reported emissions exceed the significance threshold (i.e., 5% or greater of the cumulative total of Scope 1, 2 and 3) under either of the following circumstances: - Changes in calculation methodology, emission factors or activity data that result in significant emission impacts; - Discovery of significant errors or numerous cumulative errors that are collectively significant. Any data revisions will be transparently disclosed in the current year’s sustainability report(s), as appropriate.

(7.1.3.4) Past years’ recalculation

Select from:

☑ Yes

[Fixed row]

(7.3) Describe your organization’s approach to reporting Scope 2 emissions.

(7.3.1) Scope 2, location-based

Select from:

☑ We are reporting a Scope 2, location-based figure

(7.3.2) Scope 2, market-based

Select from:

☑ We are reporting a Scope 2, market-based figure

(7.3.3) Comment

GHG emissions are calculated for Scope 2 using EPA's eGRID2022 default regional emission factors for location-based figures, and using a combination of supplier-specific data, including utility-specific residual mix emission rates when available, U.S. Green-e Residual Mix Emissions Rates, or eGRID emission rates (by eGRID Subregion) when other data is unavailable. In RY2023, line losses associated with our retail open access program were included in Scope 2 emissions and historic years' emissions were revised for consistency. T&D line losses for Consumers Energy electric customers (based on electric supply) are not reflected in Scope 2 as CMS Energy is not a "wires only" utility and any emissions associated with line losses are considered and reported in the generation emissions reported in Scope 1 or Scope 3.
[Fixed row]

(7.4.1) Provide details of the sources of Scope 1, Scope 2, or Scope 3 emissions that are within your selected reporting boundary which are not included in your disclosure.

Row 1

(7.4.1.1) Source of excluded emissions

HFC emissions; Emergency Operations; Fire extinguishers & miscellaneous cylinders

(7.4.1.2) Scope(s) or Scope 3 category(ies)

Select all that apply

☑ Scope 1

(7.4.1.3) Relevance of Scope 1 emissions from this source

Select from:

☑ Emissions are not evaluated

(7.4.1.10) Explain why this source is excluded

HFCs: Emissions are not considered material for Scope 1 based on size criteria and not evaluated based on difficulty of complete and accurate data acquisition. GHGs associated with refrigerant usage are contained in closed loop applications (appliances). Any emissions associated with these refrigerant systems would be fugitive leakage and minimal in nature. While HFCs have a high GWP, total HFCs releases would not contribute significantly to Scope 1 emissions and thus would be considered de minimis (i.e., anticipated as less than 1% of Scope 1 emissions). Emergency Operations, Fire extinguishers, miscellaneous cylinders: Emissions are not relevant for Scope 1 based on size criteria and not fully evaluated based on difficulty of complete and accurate data acquisition. Emergency generator emissions are included in Scope 1 for known data sources. De minimis emissions associated with emergency operations, i.e., emergency generators, fire extinguishers or miscellaneous cylinder emissions do not contribute significantly to Scope 1.

Row 2

(7.4.1.1) Source of excluded emissions

AJD Forest Products Limited Partnership

(7.4.1.2) Scope(s) or Scope 3 category(ies)

Select all that apply

☑ Scope 1

(7.4.1.3) Relevance of Scope 1 emissions from this source

Select from:

☑ Emissions are not evaluated

(7.4.1.10) Explain why this source is excluded

CMS Energy has a 50% equity-ownership of AJD Forest Products, however this facility's emissions has not historically been included in the corporate GHG emission inventory. Due to an anticipated sale in 2023, data from the entity was not collected. The sale did not execute and thus CMS Energy will look at evaluating it in the future. CMS Energy does not anticipate that the emissions will be significant for Scope 1 based on size criteria. It is anticipated that AJD's Scope 1 emissions are similar in nature to another partially-owned entity (i.e., Mid-Michigan Recycling L.C.) based on similar operations and may be approximately 0.003% of Scope 1&2 total.
[Add row]

(7.5) Provide your base year and base year emissions.

Scope 1

(7.5.1) Base year end

12/31/2014

(7.5.2) Base year emissions (metric tons CO2e)

20132836.0

(7.5.3) Methodological details

This was re-baselined in reporting year 2020 due to a change in reporting boundary from Consumers Energy to CMS Energy. Emissions were primarily calculated in accordance with US EPA's 40 CFR Part 98 Subparts C, D, DD, and W requirements (methodologies, equations and emission factors). AR4 GWPs were utilized to be consistent with reported emissions.

Scope 2 (location-based)

(7.5.1) Base year end

12/31/2014

(7.5.2) Base year emissions (metric tons CO2e)

103953

(7.5.3) Methodological details

In reporting year 2020 there was a change in reporting boundary from Consumers Energy to CMS Energy. Emissions were primarily calculated based on purchased electricity from third-party electric suppliers based on eGRID subregional emission factors; this data has not revised. However in reporting year 2023, Scope 2 was re-baselined and emissions were calculated based on a change in reporting boundary to include our line loss emissions attributed to our Retail Open Access program (i.e., customer choice program).

Scope 2 (market-based)

(7.5.1) Base year end

12/31/2014

(7.5.2) Base year emissions (metric tons CO2e)

100596

(7.5.3) Methodological details

Market-based emissions were not previously calculated for reporting year 2014. Location-based emissions for purchased electricity were used in conjunction with market-based emissions calculated based on U.S. Green-e Energy's 2016 Residual Mix Emission Rate data for 2014 line losses associated with our Retail Open Access program.
[Fixed row]

(7.6) What were your organization's gross global Scope 1 emissions in metric tons CO2e?

Reporting year

(7.6.1) Gross global Scope 1 emissions (metric tons CO2e)

16083829

(7.6.3) Methodological details

Emissions were primarily calculated in accordance with US EPA's 40 CFR Part 98 Subparts C, D, DD, and W requirements (methodologies, equations and emission factors). AR4 GWPs were utilized to be consistent with reported emissions.

Past year 1

(7.6.1) Gross global Scope 1 emissions (metric tons CO2e)

17674826

(7.6.2) End date

12/31/2022

Past year 2

(7.6.1) Gross global Scope 1 emissions (metric tons CO2e)

17558176

(7.6.2) End date

12/31/2021

Past year 3

(7.6.1) Gross global Scope 1 emissions (metric tons CO2e)

14834761

(7.6.2) End date

12/31/2020
[Fixed row]

(7.7) What were your organization's gross global Scope 2 emissions in metric tons CO2e?

Reporting year

(7.7.1) Gross global Scope 2, location-based emissions (metric tons CO2e)

55383

(7.7.2) Gross global Scope 2, market-based emissions (metric tons CO2e) (if applicable)

54795

(7.7.4) Methodological details

Scope 2 location-based emissions utilize eGRID subregion output emission rates times the MWh of purchased electricity from other utilities. Scope 2 market-based reporting reflects a hybrid approach using utility-specific residual mix emission rates when available and U.S. Green-e Residual Mix Emissions Rates by eGRID subregion when unavailable, multiplied by the MWh of purchased electricity from other utilities. In RY2023, line losses associated with our retail open access program were included in Scope 2 emissions, and historic years (2022-2021) emissions were revised for consistency. Line loss emissions associated with Consumers Energy's distribution system are included in Scope 1 with net generation.

Past year 1

(7.7.1) Gross global Scope 2, location-based emissions (metric tons CO2e)

65283

(7.7.2) Gross global Scope 2, market-based emissions (metric tons CO2e) (if applicable)

63376

(7.7.3) End date

12/31/2022

(7.7.4) Methodological details

Scope 2 location-based emissions utilize eGRID subregion output emission rates times the MWh of purchased electricity from other utilities. Scope 2 market-based reporting reflects a hybrid approach using utility-specific residual mix emission rates when available, and location-based eGRID subregional emission rates when

unavailable, multiplied by the MWh of purchased electricity from other utilities. Line losses associated with our retail open access program were included in Scope 2 emissions, and historic years (2022-2021) emissions are revised for consistency.

Past year 2

(7.7.1) Gross global Scope 2, location-based emissions (metric tons CO2e)

62125

(7.7.2) Gross global Scope 2, market-based emissions (metric tons CO2e) (if applicable)

65076

(7.7.3) End date

12/31/2021

(7.7.4) Methodological details

Scope 2 location-based emissions utilize eGRID subregion output emission rates times the MWh of purchased electricity from other utilities. Scope 2 market-based reporting reflects a hybrid approach using utility-specific residual mix emission rates when available, and location-based eGRID subregional emission rates when unavailable, multiplied by the MWh of purchased electricity from other utilities. Line losses associated with our retail open access program were included in Scope 2 emissions, and historic years (2022-2021) emissions are revised for consistency.
[Fixed row]

(7.8) Account for your organization’s gross global Scope 3 emissions, disclosing and explaining any exclusions.

Purchased goods and services

(7.8.1) Evaluation status

Select from:
☑ Relevant, calculated

(7.8.2) Emissions in reporting year (metric tons CO2e)

2888438

(7.8.3) Emissions calculation methodology

Select all that apply

☑ Spend-based method

☑ Average spend-based method

☑ Fuel-based method

(7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

(7.8.5) Please explain

Emissions were calculated for CMS Energy's Consumers Energy subsidiary only for the reporting year. This category includes upstream emissions (not included in Scope 1 or Scope 2) of purchased fuel (i.e., natural gas) sold for retail to customers, as well as emissions based on expenditures made by Consumers Energy's supply chain for goods and services. There may be some double counting of employee travel emissions within this category, as reported expenses are included within supply chain spend data and not easy to segregate.

Capital goods

(7.8.1) Evaluation status

Select from:

☑ Relevant, calculated

(7.8.2) Emissions in reporting year (metric tons CO2e)

276899

(7.8.3) Emissions calculation methodology

Select all that apply

☑ Spend-based method

(7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

(7.8.5) Please explain

Emissions were calculated for CMS Energy's Consumers Energy subsidiary only for the reporting year. This category includes emissions based on expenditures made by Consumers Energy's supply chain for categories considered capital goods.

Fuel-and-energy-related activities (not included in Scope 1 or 2)

(7.8.1) Evaluation status

Select from:

☑ Relevant, calculated

(7.8.2) Emissions in reporting year (metric tons CO2e)

8459740

(7.8.3) Emissions calculation methodology

Select all that apply

☑ Supplier-specific method

☑ Fuel-based method

(7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

38

(7.8.5) Please explain

This category includes upstream emissions (not included in Scope 1 or Scope 2) of purchased fuels and purchased electricity consumed by CMS Energy facilities, T&D losses associated with purchased electricity, as well as upstream and generation emissions of purchased electricity that is sold to customers. Emissions from the combustion of fuels or electricity consumed by CMS Energy are included in Scopes 1 and 2 and are thus excluded from this Scope 3 category. Biogenic CO2

emissions are excluded. EPA's eGRID2022 data or reputable emission factors are used when supplier specific data was not available. Actual CO2 (generation) emissions from specific power purchase agreements are utilized and comprise 38% of reported CO2e emissions for this category.

Upstream transportation and distribution

(7.8.1) Evaluation status

Select from:

☑ Not relevant, explanation provided

(7.8.5) Please explain

Upstream transportation and distribution emissions associated with purchased fuels are included in the emissions factors used in Scope 3 Category 3, Activity A, and T&D losses for purchased electricity used by Consumers Energy are included in Category 3, Activity C.

Waste generated in operations

(7.8.1) Evaluation status

Select from:

☑ Relevant, calculated

(7.8.2) Emissions in reporting year (metric tons CO2e)

19643

(7.8.3) Emissions calculation methodology

Select all that apply

☑ Waste-type-specific method

(7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

(7.8.5) Please explain

This represents emissions from waste generated at CMS Energy facilities (i.e., Consumers Energy and NorthStar). Waste is landfilled, recycled, combusted or composted. This category is relevant based on the size and influence categories. Consumers Energy has a planet goal to reduce waste sent to landfills and thus may influence emission reductions in this category. We utilize the quantities of waste dispositioned in conjunction with the appropriate emission factors per type of waste and disposal method. Emission factors are from US EPA Waste Reduction Model (WARM) or the United Kingdom Department for Environment, Food & Rural Affairs (DEFRA) factors when no WARM factors exist. Emissions are not reported for Consumers Energy's ash that is sold and reported in Category 9, nor for the recycling of appliances as these are outside of Consumers Energy's operational boundary appliances (i.e., refrigerators and freezers recycling on the behalf of customers).

Business travel

(7.8.1) Evaluation status

Select from:

☑ Not relevant, calculated

(7.8.2) Emissions in reporting year (metric tons CO2e)

4510

(7.8.3) Emissions calculation methodology

Select all that apply

☑ Supplier-specific method

☑ Distance-based method

(7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

23

(7.8.5) Please explain

This category is not relevant based on the size criteria, the emissions are insignificant relative to total Scope 3 but are reported as they have been previously part of our Scope 3 boundary. Business travel, including air travel, hotel stays, rental cars, and employee expensed mileage, was reported for all CMS Energy employees. Emissions associated with contractor-owned vehicle mileage was not included.

Employee commuting

(7.8.1) Evaluation status

Select from:

☑ Not relevant, calculated

(7.8.2) Emissions in reporting year (metric tons CO2e)

14205

(7.8.3) Emissions calculation methodology

Select all that apply

☑ Average data method

(7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

(7.8.5) Please explain

This category is not relevant based on the size criteria, the emissions are insignificant relative to total Scope 3 but are reported as they have been previously part of our Scope 3 boundary. Incomplete information was available to calculate emissions for employees. To calculate emissions, CMS Energy employee headcount was multiplied by a U.S. DOT (2014) assumption that the average employee commute emits 1,700 kgCO2-eq/employee/year.

Upstream leased assets

(7.8.1) Evaluation status

Select from:

☑ Not relevant, calculated

(7.8.2) Emissions in reporting year (metric tons CO2e)

127

(7.8.3) Emissions calculation methodology

Select all that apply

☑ Average data method

(7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

(7.8.5) Please explain

This category is not relevant based on the size criteria, the emissions are insignificant relative to total Scope 3 but are reported as they were calculated for Consumers Energy (CE) only. Emissions from leased assets (operating leases) in which Consumers Energy paid the actual electricity and natural gas invoices are included in Scope 1 or 2 emissions and not included in Scope 3. CE calculated the estimated emissions from operating leases where the lessor paid utility bills for energy use based on square footage and intensity factors from the EIA (from U.S. Energy Information Administration, Office of Energy Consumption and Efficiency Statistics, 2018 Commercial Buildings Energy Consumption Survey).

Downstream transportation and distribution

(7.8.1) Evaluation status

Select from:

☑ Not relevant, calculated

(7.8.2) Emissions in reporting year (metric tons CO2e)

6735

(7.8.3) Emissions calculation methodology

Select all that apply

☑ Distance-based method

(7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

(7.8.5) Please explain

This category is not relevant based on the size criteria, the emissions are insignificant relative to total Scope 3 but are reported as they were calculated for Consumers Energy (CE) only. Emissions resulting from the transportation of sold products (i.e., fly ash) are included in this category for Consumers Energy only. Emissions from downstream transportation and distribution are calculated using value chain partner supplied transportation data including tons of material per number of truck/barge loads, and loaded miles via truck/barge.

Processing of sold products

(7.8.1) Evaluation status

Select from:

☑ Not relevant, explanation provided

(7.8.5) Please explain

No additional processing of sold products (electricity, natural gas or fly ash) takes place.

Use of sold products

(7.8.1) Evaluation status

Select from:

☑ Relevant, calculated

(7.8.2) Emissions in reporting year (metric tons CO2e)

10817380

(7.8.3) Emissions calculation methodology

Select all that apply

☑ Fuel-based method

(7.8.4) Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

(7.8.5) Please explain

Consumers Energy reports emissions from natural gas sales to customers. Emissions associated with natural gas that is purchased/owned by the customer and only transported by Consumers Energy (i.e. Gas Transport Customers) are not included within this category (fugitive emissions associated with transportation through our natural gas distribution system are included in Scope 1).

End of life treatment of sold products

(7.8.1) Evaluation status

Select from:

☑ Not relevant, explanation provided

(7.8.5) Please explain

Not applicable to electric or natural gas sales (reported in Category 11). Resale of miscellaneous items through investment recovery is not relevant, emissions would be accounted for in Scope 3, Category 1 or 2.

Downstream leased assets

(7.8.1) Evaluation status

Select from:

☑ Not evaluated

(7.8.5) Please explain

Leased land, typically to farmers, has not been evaluated.

Franchises

(7.8.1) Evaluation status

Select from:

☑ Not relevant, explanation provided

(7.8.5) Please explain

CMS Energy does not have any franchises.

Investments

(7.8.1) Evaluation status

Select from:

☑ Not relevant, explanation provided

(7.8.5) Please explain

CMS Energy has investment funds for pension and retirement benefits, however these are optional under category 15 are not included in this inventory.

Other (upstream)

(7.8.1) Evaluation status

Select from:

☑ Not relevant, explanation provided

(7.8.5) Please explain

No other upstream emissions known.

Other (downstream)

(7.8.1) Evaluation status

Select from:

☑ Not relevant, explanation provided

(7.8.5) Please explain

No other downstream emissions known.
[Fixed row]

(7.8.1) Disclose or restate your Scope 3 emissions data for previous years.

Past year 1

(7.8.1.2) Scope 3: Purchased goods and services (metric tons CO2e)

3038333

(7.8.1.3) Scope 3: Capital goods (metric tons CO2e)

348701

(7.8.1.4) Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)

7681668

(7.8.1.5) Scope 3: Upstream transportation and distribution (metric tons CO2e)

0

(7.8.1.6) Scope 3: Waste generated in operations (metric tons CO2e)

28688

(7.8.1.7) Scope 3: Business travel (metric tons CO2e)

5693

(7.8.1.8) Scope 3: Employee commuting (metric tons CO2e)

15094

(7.8.1.9) Scope 3: Upstream leased assets (metric tons CO2e)

2749

(7.8.1.10) Scope 3: Downstream transportation and distribution (metric tons CO2e)

20310

(7.8.1.11) Scope 3: Processing of sold products (metric tons CO2e)

0

(7.8.1.12) Scope 3: Use of sold products (metric tons CO2e)

12430075

(7.8.1.13) Scope 3: End of life treatment of sold products (metric tons CO2e)

0

(7.8.1.14) Scope 3: Downstream leased assets (metric tons CO2e)

0

(7.8.1.15) Scope 3: Franchises (metric tons CO2e)

0

(7.8.1.16) Scope 3: Investments (metric tons CO2e)

0

(7.8.1.17) Scope 3: Other (upstream) (metric tons CO2e)

0

(7.8.1.18) Scope 3: Other (downstream) (metric tons CO2e)

0

(7.8.1.19) Comment

CMS Energy subsidiary NorthStar Clean Energy only reported emissions for two of the Scope 3 categories, Category 5 – Waste Generated in Operations and Category 6 – Business Travel for reporting year 2022. Reporting year 2022 data was restated for Categories 1, 3, 5 and 11 to align with current year reporting and to correct minor errors; this resulted in a decrease in total Scope 3 emissions of approximately 5%.
[Fixed row]

(7.9) Indicate the verification/assurance status that applies to your reported emissions.

	Verification/assurance status
Scope 1	*Select from:* ☑ Third-party verification or assurance process in place
Scope 2 (location-based or market-based)	*Select from:* ☑ Third-party verification or assurance process in place
Scope 3	*Select from:* ☑ Third-party verification or assurance process in place

[Fixed row]

(7.9.1) Provide further details of the verification/assurance undertaken for your Scope 1 emissions, and attach the relevant statements.

Row 1

(7.9.1.1) Verification or assurance cycle in place

Select from:
☑ Annual process

(7.9.1.2) Status in the current reporting year

Select from:
☑ Complete

(7.9.1.3) Type of verification or assurance

Select from:
☑ Limited assurance

(7.9.1.4) Attach the statement

CMS Energy CY2023 GHG Verification Statement 2024-1014.pdf

(7.9.1.6) Relevant standard

Select from:
☑ Corporate GHG verification guidelines from ERT

(7.9.1.7) Proportion of reported emissions verified (%)

90
[Add row]

(7.9.2) Provide further details of the verification/assurance undertaken for your Scope 2 emissions and attach the relevant statements.

Row 1

(7.9.2.1) Scope 2 approach

Select from:

☑ Scope 2 location-based

(7.9.2.2) Verification or assurance cycle in place

Select from:

☑ Annual process

(7.9.2.3) Status in the current reporting year

Select from:

☑ Complete

(7.9.2.4) Type of verification or assurance

Select from:

☑ Limited assurance

(7.9.2.5) Attach the statement

CMS Energy CY2023 GHG Verification Statement 2024-1014.pdf

(7.9.2.7) Relevant standard

Select from:

☑ Corporate GHG verification guidelines from ERT

Row 2

(7.9.2.1) Scope 2 approach

Select from:
☑ Scope 2 market-based

(7.9.2.2) Verification or assurance cycle in place

Select from:
☑ Annual process

(7.9.2.3) Status in the current reporting year

Select from:
☑ Complete

(7.9.2.4) Type of verification or assurance

Select from:
☑ Limited assurance

(7.9.2.5) Attach the statement

CMS Energy CY2023 GHG Verification Statement 2024-1014.pdf

(7.9.2.7) Relevant standard

Select from:
☑ Corporate GHG verification guidelines from ERT
[Add row]

(7.9.3) Provide further details of the verification/assurance undertaken for your Scope 3 emissions and attach the relevant statements.

Row 1

(7.9.3.1) Scope 3 category

Select all that apply

☑ Scope 3: Capital goods

☑ Scope 3: Business travel

☑ Scope 3: Use of sold products

☑ Scope 3: Purchased goods and services

☑ Scope 3: Waste generated in operations

☑ Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2)

(7.9.3.2) Verification or assurance cycle in place

Select from:

☑ Annual process

(7.9.3.3) Status in the current reporting year

Select from:

☑ Complete

(7.9.3.4) Type of verification or assurance

Select from:

☑ Limited assurance

(7.9.3.5) Attach the statement

CMS Energy CY2023 GHG Verification Statement 2024-1014.pdf

(7.9.3.7) Relevant standard

Select from:

☑ Corporate GHG verification guidelines from ERT

(7.9.3.8) Proportion of reported emissions verified (%)

90

[Add row]

(7.10.1) Identify the reasons for any change in your gross global emissions (Scope 1 and 2 combined), and for each of them specify how your emissions compare to the previous year.

Change in renewable energy consumption

(7.10.1.2) Direction of change in emissions

Select from:

☑ No change

(7.10.1.4) Please explain calculation

CMS Energy reports 17% of electric supply is from renewable energy sources, based on total electric generation including owned generation and power purchase agreements (does not take into account RECs).

Other emissions reduction activities

(7.10.1.1) Change in emissions (metric tons CO2e)

2605408

(7.10.1.2) Direction of change in emissions

Select from:

☑ Decreased

(7.10.1.3) Emissions value (percentage)

15

(7.10.1.4) Please explain calculation

Overall CMS Energy had a 15% reduction in Scope 1 emissions the DE Karn Generating Plant due to retirement of two-coal fired electric generating units during calendar year 2023.

Acquisitions

(7.10.1.1) Change in emissions (metric tons CO2e)

1817437

(7.10.1.2) Direction of change in emissions

Select from:

☑ Increased

(7.10.1.3) Emissions value (percentage)

10

(7.10.1.4) Please explain calculation

Consumers Energy purchased an existing natural gas electric generation plant on 6/1/2023. The plant's emissions were added to the emission inventory as of this date and therefore resulted in an increase in emissions by 10% from 2022.

Change in output

(7.10.1.1) Change in emissions (metric tons CO2e)

1599577

(7.10.1.2) Direction of change in emissions

Select from:

☑ Decreased

(7.10.1.3) Emissions value (percentage)

9

(7.10.1.4) Please explain calculation

Approximate 9% reduction in total Scope 1 & 2 CO2e emissions from 2022 to 2023.
[Fixed row]

(7.12.1) Provide the emissions from biogenic carbon relevant to your organization in metric tons CO2.

	CO2 emissions from biogenic carbon (metric tons CO2)	Comment
	463671	*Equity-owned portion of CO2 emissions from biogenic fuel sources.*

[Fixed row]

(7.15.1) Break down your total gross global Scope 1 emissions by greenhouse gas type and provide the source of each used global warming potential (GWP).

Row 1

(7.15.1.1) Greenhouse gas

Select from:
☑ CO2

(7.15.1.2) Scope 1 emissions (metric tons of CO2e)

15677676

(7.15.1.3) GWP Reference

Select from:

☑ IPCC Fourth Assessment Report (AR4 - 100 year)

Row 2

(7.15.1.1) Greenhouse gas

Select from:

☑ CH4

(7.15.1.2) Scope 1 emissions (metric tons of CO2e)

352371

(7.15.1.3) GWP Reference

Select from:

☑ IPCC Fourth Assessment Report (AR4 - 100 year)

Row 3

(7.15.1.1) Greenhouse gas

Select from:

☑ N2O

(7.15.1.2) Scope 1 emissions (metric tons of CO2e)

46038

(7.15.1.3) GWP Reference

Select from:

☑ IPCC Fourth Assessment Report (AR4 - 100 year)

Row 4

(7.15.1.1) Greenhouse gas

Select from:
☑ SF6

(7.15.1.2) Scope 1 emissions (metric tons of CO2e)

7744

(7.15.1.3) GWP Reference

Select from:
☑ IPCC Fourth Assessment Report (AR4 - 100 year)
[Add row]

(7.15.3) Break down your total gross global Scope 1 emissions from electric utilities value chain activities by greenhouse gas type.

Fugitives

(7.15.3.1) Gross Scope 1 CO2 emissions (metric tons CO2)

409

(7.15.3.2) Gross Scope 1 methane emissions (metric tons CH4)

13811

(7.15.3.3) Gross Scope 1 SF6 emissions (metric tons SF6)

0.339

(7.15.3.4) Total gross Scope 1 emissions (metric tons CO2e)

353434

(7.15.3.5) Comment

Emissions calculated in accordance with 40 CFR Part 98 Subpart DD Electric T&D Equipment Use & Subpart W for Natural Gas Systems.

Combustion (Electric utilities)

(7.15.3.1) Gross Scope 1 CO2 emissions (metric tons CO2)

15533077

(7.15.3.2) Gross Scope 1 methane emissions (metric tons CH4)

280

(7.15.3.3) Gross Scope 1 SF6 emissions (metric tons SF6)

0

(7.15.3.4) Total gross Scope 1 emissions (metric tons CO2e)

15585713

(7.15.3.5) Comment

Emissions calculated in accordance with 40 CFR Part 98 Subparts C & D. Vehicle emissions at generating plants are included. Total CO2e emissions include N2O emissions.

Combustion (Gas utilities)

(7.15.3.1) Gross Scope 1 CO2 emissions (metric tons CO2)

86632

(7.15.3.2) Gross Scope 1 methane emissions (metric tons CH4)

1.63

(7.15.3.3) Gross Scope 1 SF6 emissions (metric tons SF6)

0

(7.15.3.4) Total gross Scope 1 emissions (metric tons CO2e)

86722

(7.15.3.5) Comment

Emissions calculated in accordance with 40 CFR Part 98 Subpart C for Gas Compressor Stations. Total CO2e emissions include N2O emissions.

Combustion (Other)

(7.15.3.1) Gross Scope 1 CO2 emissions (metric tons CO2)

48538

(7.15.3.2) Gross Scope 1 methane emissions (metric tons CH4)

1.64

(7.15.3.3) Gross Scope 1 SF6 emissions (metric tons SF6)

0

(7.15.3.4) Total gross Scope 1 emissions (metric tons CO2e)

48928

(7.15.3.5) Comment

Emissions associated with corporate vehicles. Total CO2e emissions include N2O emissions.

Emissions not elsewhere classified

(7.15.3.1) Gross Scope 1 CO2 emissions (metric tons CO2)

11271

(7.15.3.2) Gross Scope 1 methane emissions (metric tons CH4)

0.21

(7.15.3.3) Gross Scope 1 SF6 emissions (metric tons SF6)

0

(7.15.3.4) Total gross Scope 1 emissions (metric tons CO2e)

11283

(7.15.3.5) Comment

Natural gas combustion not otherwise reported (building heat, etc). Total CO2e emissions include N2O emissions.
[Fixed row]

(7.16) Break down your total gross global Scope 1 and 2 emissions by country/area.

	Scope 1 emissions (metric tons CO2e)
United States of America	*16083829*

[Fixed row]

(7.17.1) Break down your total gross global Scope 1 emissions by business division.

	Business division	Scope 1 emissions (metric ton CO2e)
Row 1	*Consumers Energy Company*	*12482384*
Row 2	*NorthStar Clean Energy Company*	*3601445*

[Add row]

(7.17.2) Break down your total gross global Scope 1 emissions by business facility.

Row 1

(7.17.2.1) Facility

Covert Generating Station

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

1819278

(7.17.2.3) Latitude

42.3231

(7.17.2.4) Longitude

-86.2935

Row 2

(7.17.2.1) Facility

Livingston Generating Station

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

8472

(7.17.2.3) Latitude

45.0305

(7.17.2.4) Longitude

-84.7308

Row 3

(7.17.2.1) Facility

Dearborn Industrial Generating Station

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

3294884

(7.17.2.3) Latitude

42.3026

(7.17.2.4) Longitude

-83.154

Row 4

(7.17.2.1) Facility

Northwest Ohio Wind, LLC

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

258

(7.17.2.3) Latitude

41.0189

(7.17.2.4) Longitude

-84.5808

Row 5

(7.17.2.1) Facility

Genesee Generating Station

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

5378

(7.17.2.3) Latitude

44.605

(7.17.2.4) Longitude

-84.6903

Row 6

(7.17.2.1) Facility

CMS Land Company

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

130

(7.17.2.3) Latitude

45.359325

(7.17.2.4) Longitude

-85.052682

Row 7

(7.17.2.1) Facility

Aviator Wind

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

14

(7.17.2.3) Latitude

31.79201

(7.17.2.4) Longitude

-100.71896

Row 8

(7.17.2.1) Facility

Overisel Compressor Station

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

23514

(7.17.2.3) Latitude

42.7

(7.17.2.4) Longitude

-85.95

Row 9

(7.17.2.1) Facility

Muskegon River Compressor Station

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

16580

(7.17.2.3) Latitude

44.08

(7.17.2.4) Longitude

-85.02

Row 10

(7.17.2.1) Facility

Jackson Generating Station

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

892168

(7.17.2.3) Latitude

42.25

(7.17.2.4) Longitude

-84.38

Row 11

(7.17.2.1) Facility

JH Campbell Generating Facility

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

6370954

(7.17.2.3) Latitude

42.91

(7.17.2.4) Longitude

-86.2

Row 12

(7.17.2.1) Facility

Ray Compressor Station

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

18648

(7.17.2.3) Latitude

42.81

(7.17.2.4) Longitude

-82.87

Row 13

(7.17.2.1) Facility

Zeeland Generating Station

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

2181727

(7.17.2.3) Latitude

42.82

(7.17.2.4) Longitude

-86.0

Row 14

(7.17.2.1) Facility

St. Clair Compressor Station

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

19048

(7.17.2.3) Latitude

42.72

(7.17.2.4) Longitude

-82.72

Row 15

(7.17.2.1) Facility

Craven County Wood Energy, L.P.

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

4294

(7.17.2.3) Latitude

35.12864

(7.17.2.4) Longitude

-77.16898

Row 16

(7.17.2.1) Facility

DE Karn Generating Facility

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

720142

(7.17.2.3) Latitude

43.64

(7.17.2.4) Longitude

-83.84

Row 17

(7.17.2.1) Facility

Mid-Michigan Recycling Facility

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

455

(7.17.2.3) Latitude

42.37803

(7.17.2.4) Longitude

-83.36699

Row 18

(7.17.2.1) Facility

Grayling Power Station

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

7224

(7.17.2.3) Latitude

43.0851

(7.17.2.4) Longitude

-83.66932

Row 19

(7.17.2.1) Facility

Kalamazoo River Generating Station

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

124923

(7.17.2.3) Latitude

42.28837

(7.17.2.4) Longitude

-85.49467

Row 20

(7.17.2.1) Facility

White Pigeon Compressor Station

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

13739

(7.17.2.3) Latitude

41.8

(7.17.2.4) Longitude

-85.59

Row 21

(7.17.2.1) Facility

Huron Compressor Station

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

0

(7.17.2.3) Latitude

43.72696

(7.17.2.4) Longitude

-83.35652

Row 22

(7.17.2.1) Facility

Northville Compressor Station

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

6882

(7.17.2.3) Latitude

42.48

(7.17.2.4) Longitude

-83.55

Row 23

(7.17.2.1) Facility

Freedom Compressor Station

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

12518

(7.17.2.3) Latitude

42.21

(7.17.2.4) Longitude

-83.97

Row 24

(7.17.2.1) Facility

T.E.S. Filer City Station

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

155542

(7.17.2.3) Latitude

44.2172

(7.17.2.4) Longitude

-86.2889

Row 26

(7.17.2.1) Facility

Newport Solar

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

2

(7.17.2.3) Latitude

35.68366

(7.17.2.4) Longitude

-91.185969

Row 27

(7.17.2.1) Facility

Delta Solar

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

0

(7.17.2.3) Latitude

42.7534

(7.17.2.4) Longitude

-84.7464

Row 28

(7.17.2.1) Facility

Flambeau Solar

(7.17.2.2) Scope 1 emissions (metric tons CO2e)

0

(7.17.2.3) Latitude

45.70501

(7.17.2.4) Longitude

-90.405496
[Add row]

(7.17.3) Break down your total gross global Scope 1 emissions by business activity.

	Activity	Scope 1 emissions (metric tons CO2e)
Row 1	*Electric Generation & Distribution*	*15591205*
Row 3	*Corporate Owned Buildings/Facilities and Vehicles*	*60211*
Row 4	*Natural Gas Compression, Storage & Distribution*	*432413*

[Add row]

(7.19) Break down your organization's total gross global Scope 1 emissions by sector production activity in metric tons CO2e.

	Gross Scope 1 emissions, metric tons CO2e
Electric utility activities	*16023618*

[Fixed row]

(7.23.1) Break down your gross Scope 1 and Scope 2 emissions by subsidiary.

Row 1

(7.23.1.1) Subsidiary name

Consumers Energy Company

(7.23.1.2) Primary activity

Select from:

☑ CCGT generation

(7.23.1.3) Select the unique identifier you are able to provide for this subsidiary

Select all that apply

☑ Ticker symbol

(7.23.1.7) Ticker symbol

CMSPB

(7.23.1.12) Scope 1 emissions (metric tons CO2e)

12482384

(7.23.1.13) Scope 2, location-based emissions (metric tons CO2e)

53601

(7.23.1.14) Scope 2, market-based emissions (metric tons CO2e)

52960

(7.23.1.15) Comment

The primary activity category for Consumers Energy is Power Generation per CDP-ACS document (however this is not listed in the dropdown selection), which is inclusive of CCGT (combined cycle gas turbine) Generation, Non-CCGT Generation, Coal Generation, Solar Generation and Wind Generation. Consumers Energy is also a Gas Utility. CMS Land Company's Scope 1 emissions are not material (130 metric tons CO2e) and are included within Consumers Energy's total Scope 1 emissions. CMS Land Company is supplied electricity from Consumers Energy and therefore no Scope 2 emissions are reported for CMS Energy.

Row 4

(7.23.1.1) Subsidiary name

NorthStar Clean Energy Company

(7.23.1.2) Primary activity

Select from:

☑ CCGT generation

(7.23.1.3) Select the unique identifier you are able to provide for this subsidiary

Select all that apply

☑ D-U-N-S number

(7.23.1.10) D-U-N-S number

181187006

(7.23.1.12) Scope 1 emissions (metric tons CO2e)

3601445

(7.23.1.13) Scope 2, location-based emissions (metric tons CO2e)

1782

(7.23.1.14) Scope 2, market-based emissions (metric tons CO2e)

1835

(7.23.1.15) Comment

The primary activity category is Power Generation per CDP-ACS document (however this is not listed in the dropdown selection), which is inclusive of CCGT Generation (combined cycle gas turbine), Non-CCGT Generation, Coal Generation, Biomass Generation, Other Renewable Generation, Solar Generation and Wind Generation.
[Add row]

(7.30) Select which energy-related activities your organization has undertaken.

	Indicate whether your organization undertook this energy-related activity in the reporting year
Consumption of fuel (excluding feedstocks)	*Select from:* ☑ Yes
Consumption of purchased or acquired electricity	*Select from:* ☑ Yes
Consumption of purchased or acquired heat	*Select from:* ☑ No
Consumption of purchased or acquired steam	*Select from:* ☑ No
Consumption of purchased or acquired cooling	*Select from:* ☑ No
Generation of electricity, heat, steam, or cooling	*Select from:* ☑ Yes

[Fixed row]

(7.30.1) Report your organization’s energy consumption totals (excluding feedstocks) in MWh.

Consumption of fuel (excluding feedstock)

(7.30.1.1) Heating value

Select from:
☑ HHV (higher heating value)

(7.30.1.2) MWh from renewable sources

1459051

(7.30.1.3) MWh from non-renewable sources

48540832

(7.30.1.4) Total (renewable and non-renewable) MWh

49999882

Consumption of purchased or acquired electricity

(7.30.1.1) Heating value

Select from:
☑ Unable to confirm heating value

(7.30.1.2) MWh from renewable sources

1831

(7.30.1.3) MWh from non-renewable sources

24982

(7.30.1.4) Total (renewable and non-renewable) MWh

26813

Total energy consumption

(7.30.1.1) Heating value

Select from:

☑ HHV (higher heating value)

(7.30.1.2) MWh from renewable sources

1460882

(7.30.1.3) MWh from non-renewable sources

48565814

(7.30.1.4) Total (renewable and non-renewable) MWh

50026695
[Fixed row]

(7.30.6) Select the applications of your organization’s consumption of fuel.

	Indicate whether your organization undertakes this fuel application
Consumption of fuel for the generation of electricity	*Select from:* ☑ Yes
Consumption of fuel for the generation of heat	*Select from:* ☑ Yes
Consumption of fuel for the generation of steam	*Select from:* ☑ No
Consumption of fuel for the generation of cooling	*Select from:* ☑ No
Consumption of fuel for co-generation or tri-generation	*Select from:*

	Indicate whether your organization undertakes this fuel application
	☑ No

[Fixed row]

(7.30.7) State how much fuel in MWh your organization has consumed (excluding feedstocks) by fuel type.

Sustainable biomass

(7.30.7.2) Total fuel MWh consumed by the organization

0

Other biomass

(7.30.7.1) Heating value

Select from:
☑ HHV

(7.30.7.2) Total fuel MWh consumed by the organization

1459051

(7.30.7.3) MWh fuel consumed for self-generation of electricity

1459051

(7.30.7.4) MWh fuel consumed for self-generation of heat

0

Coal

(7.30.7.1) Heating value

Select from:
☑ HHV

(7.30.7.2) Total fuel MWh consumed by the organization

20294047

(7.30.7.3) MWh fuel consumed for self-generation of electricity

20294047

(7.30.7.4) MWh fuel consumed for self-generation of heat

0

Oil

(7.30.7.1) Heating value

Select from:
☑ HHV

(7.30.7.2) Total fuel MWh consumed by the organization

92732

(7.30.7.3) MWh fuel consumed for self-generation of electricity

92732

(7.30.7.4) MWh fuel consumed for self-generation of heat

0

Gas

(7.30.7.1) Heating value

Select from:
☑ HHV

(7.30.7.2) Total fuel MWh consumed by the organization

27883680

(7.30.7.3) MWh fuel consumed for self-generation of electricity

27817195

(7.30.7.4) MWh fuel consumed for self-generation of heat

66485

Other non-renewable fuels (e.g. non-renewable hydrogen)

(7.30.7.1) Heating value

Select from:
☑ HHV

(7.30.7.2) Total fuel MWh consumed by the organization

270373

(7.30.7.3) MWh fuel consumed for self-generation of electricity

64526

(7.30.7.4) MWh fuel consumed for self-generation of heat

205847

(7.30.7.8) Comment

Non-renewable fuels include: tire-derived fuel, gasoline, diesel and propane

Total fuel

(7.30.7.1) Heating value

Select from:
☑ HHV

(7.30.7.2) Total fuel MWh consumed by the organization

49999882

(7.30.7.3) MWh fuel consumed for self-generation of electricity

49727550

(7.30.7.4) MWh fuel consumed for self-generation of heat

272332
[Fixed row]

(7.30.16) Provide a breakdown by country/area of your electricity/heat/steam/cooling consumption in the reporting year.

	Consumption of purchased electricity (MWh)	Consumption of purchased heat, steam, and cooling (MWh)	Total electricity/heat/steam/cooling energy consumption (MWh)
United States of America	*13924*	*0*	*13924.00*

[Fixed row]

(7.33.1) Disclose the following information about your transmission and distribution business.

Row 1

(7.33.1.1) Country/area/region

Select from:

☑ United States of America

(7.33.1.2) Voltage level

Select from:

☑ Distribution (low voltage)

(7.33.1.3) Annual load (GWh)

34430

(7.33.1.4) Annual energy losses (% of annual load)

4.93

(7.33.1.5) Scope where emissions from energy losses are accounted for

Select from:

☑ Scope 1

(7.33.1.6) Emissions from energy losses (metric tons CO2e)

896883

(7.33.1.7) Length of network (km)

155614

(7.33.1.8) Number of connections

1900000

(7.33.1.9) Area covered (km2)

73309

(7.33.1.10) Comment

*Consumers Energy owns and operates electric generation and distribution facilities. CO2e emissions associated with distribution system energy losses are covered by generation of electricity, reported in Scope 1, in order to provide the necessary total electric supply for customers. CO2e emissions from distribution losses are estimated based on the total MWh electric supply * distribution system % loss rate * Consumers Energy's 2023 emission rate owned and purchased power generation (0.528 metric tons CO2e/MWh).*
[Add row]

(7.45) Describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tons CO2e per unit currency total revenue and provide any additional intensity metrics that are appropriate to your business operations.

Row 1

(7.45.1) Intensity figure

0.0022

(7.45.2) Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)

16138624

(7.45.3) Metric denominator

Select from:

☑ unit total revenue

(7.45.4) Metric denominator: Unit total

7462000000

(7.45.5) Scope 2 figure used

Select from:

☑ Market-based

(7.45.6) % change from previous year

5

(7.45.7) Direction of change

Select from:

☑ Increased

(7.45.8) Reasons for change

Select all that apply

☑ Change in revenue

(7.45.9) Please explain

Operating revenue decreased by 1.134 billion.
[Add row]

(7.46) For your electric utility activities, provide a breakdown of your Scope 1 emissions and emissions intensity relating to your total power plant capacity and generation during the reporting year by source.

Coal – hard

(7.46.1) Absolute scope 1 emissions (metric tons CO2e)

7194183

(7.46.2) Emissions intensity based on gross or net electricity generation

Select from:
☑ Net

(7.46.4) Scope 1 emissions intensity (Net generation)

1021.47

Oil

(7.46.1) Absolute scope 1 emissions (metric tons CO2e)

7062

(7.46.2) Emissions intensity based on gross or net electricity generation

Select from:
☑ Net

(7.46.4) Scope 1 emissions intensity (Net generation)

3531.00

Gas

(7.46.1) Absolute scope 1 emissions (metric tons CO2e)

8364516

(7.46.2) Emissions intensity based on gross or net electricity generation

Select from:

☑ Net

(7.46.4) Scope 1 emissions intensity (Net generation)

503.95

Other biomass

(7.46.1) Absolute scope 1 emissions (metric tons CO2e)

16896

(7.46.2) Emissions intensity based on gross or net electricity generation

Select from:

☑ Net

(7.46.4) Scope 1 emissions intensity (Net generation)

60.56

Hydropower

(7.46.1) Absolute scope 1 emissions (metric tons CO2e)

0

(7.46.2) Emissions intensity based on gross or net electricity generation

Select from:

☑ Net

(7.46.4) Scope 1 emissions intensity (Net generation)

0.00

Wind

(7.46.1) Absolute scope 1 emissions (metric tons CO2e)

0

(7.46.2) Emissions intensity based on gross or net electricity generation

Select from:

☑ Net

(7.46.4) Scope 1 emissions intensity (Net generation)

0.00

Solar

(7.46.1) Absolute scope 1 emissions (metric tons CO2e)

0

(7.46.2) Emissions intensity based on gross or net electricity generation

Select from:

☑ Net

(7.46.4) Scope 1 emissions intensity (Net generation)

0.00

Other renewable

(7.46.1) Absolute scope 1 emissions (metric tons CO2e)

0

(7.46.2) Emissions intensity based on gross or net electricity generation

Select from:
☑ Net

Total

(7.46.1) Absolute scope 1 emissions (metric tons CO2e)

15582658

(7.46.2) Emissions intensity based on gross or net electricity generation

Select from:
☑ Net

(7.46.4) Scope 1 emissions intensity (Net generation)

579.69
[Fixed row]

(7.52) Provide any additional climate-related metrics relevant to your business.

Row 1

(7.52.1) Description

Select from:

☑ Waste

(7.52.2) Metric value

1703

(7.52.3) Metric numerator

1703 tons

(7.52.4) Metric denominator (intensity metric only)

N/A

(7.52.5) % change from previous year

19

(7.52.6) Direction of change

Select from:

☑ Increased

(7.52.7) Please explain

Waste sent to landfill increased by 19% due to three primary factors. Consumers Energy employees worked remotely due to the pandemic since 2020. In 2023, employees began working three days of week in-person; increasing the amount of trash generated at company locations. The DE Karn coal-fired power plant was decommissioned in 2023, which generated various landfill and recycling waste streams. Finally, there was an increase in natural gas pipeline pigging in 2023 to compensate for a pause that occurred in the 2022 scheduled projects. Although there was increase in landfill tonnage, Consumers Energy experienced proportional increases in recycling that allowed the company to maintain the goal of annually diverting more than 90% of waste from landfill. The 2023 diversion rate was 91%.

Row 2

(7.52.1) Description

Select from:
☑ Land use

(7.52.2) Metric value

2435.2

(7.52.3) Metric numerator

2435.2 acres

(7.52.4) Metric denominator (intensity metric only)

N/A

(7.52.5) % change from previous year

244

(7.52.6) Direction of change

Select from:
☑ Increased

(7.52.7) Please explain

The Company's goal was to enhance and restore 1,000 acres in 2023. The Company exceeded this goal, as well as increased the total number of acres enhanced / restored from 707 acres in 2022.
[Add row]

(7.53.1) Provide details of your absolute emissions targets and progress made against those targets.

Row 1

(7.53.1.31) Base year total Scope 3 emissions covered by target (metric tons CO2e)

0.000

(7.53.1.32) Total base year emissions covered by target in all selected Scopes (metric tons CO2e)

0.000

(7.53.1.77) Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)

0.000

Row 2

(7.53.1.1) Target reference number

Select from:
☑ Abs 3

(7.53.1.8) Scopes

Select all that apply
☑ Scope 1
☑ Scope 3

(7.53.1.31) Base year total Scope 3 emissions covered by target (metric tons CO2e)

0.000

(7.53.1.32) Total base year emissions covered by target in all selected Scopes (metric tons CO2e)

20219000.000

(7.53.1.53) Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes

100.0

(7.53.1.77) Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)

0.000

(7.53.1.78) Land-related emissions covered by target

Select from:

☑ No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

[Add row]

(7.53.3) Explain why you did not have an emissions target, and forecast how your emissions will change over the next five years.

	Please explain
	Emissions target was replaced with a net-zero target (see question 7.54).

[Fixed row]

(7.54.2) Provide details of any other climate-related targets, including methane reduction targets.

Row 1

(7.54.2.1) Target reference number

Select from:

☑ Oth 1

(7.54.2.2) Date target was set

10/24/2019

(7.54.2.3) Target coverage

Select from:

☑ Business activity

(7.54.2.4) Target type: absolute or intensity

Select from:

☑ Absolute

(7.54.2.5) Target type: category & Metric (target numerator if reporting an intensity target)

Net emissions target

☑ Other net emissions target, please specify **:**Net-zero methane emissions by 2030

(7.54.2.7) End date of base year

12/31/2012

(7.54.2.9) End date of target

12/31/2030

(7.54.2.10) Figure or percentage at end of date of target

0

(7.54.2.13) Target status in reporting year

Select from:

☑ Underway

(7.54.2.18) Please explain target coverage and identify any exclusions

The methane reduction target covers Scope 1 methane emissions associated with Consumers Energy's natural gas delivery system, which includes all Consumers Energy-owned assets downstream of the LDC custody transfer stations. This includes our intrastate natural gas transmission pipelines, natural gas compressor stations, natural gas underground storage and natural gas distribution. Consumers Energy has already reduced methane by approximately 27% over the past decade and plans to continue to reduce methane emissions from its system by about 80 percent by accelerating the replacement of aging pipe, rehabilitating or retiring outdated infrastructure, and adopting new technologies and practices. The remaining emissions will be offset by purchasing and/or producing renewable natural gas. In 2023, 3,030 metric tons of methane (75,751 metric tons of CO2e) emissions were avoided due to voluntary methane reduction programs such as the Methane Challenge Program as well as other Consumers Energy Company initiatives.

(7.54.2.19) Target objective

Consumers Energy's Methane Reduction Plan, released in November 2019, outlines our plan to achieve an 80% reduction from 2012 methane emissions and net-zero methane emissions from its natural gas delivery system by 2030.

(7.54.2.20) Plan for achieving target, and progress made to the end of the reporting year

Consumers Energy is continuing to execute our its Methane Reduction Plan for our natural gas delivery system assets and has already reduced methane by approximately 27%.

Row 2

(7.54.2.1) Target reference number

Select from:

☑ Oth 3

(7.54.2.2) Date target was set

01/01/2023

(7.54.2.3) Target coverage

Select from:

☑ Business division

(7.54.2.4) Target type: absolute or intensity

Select from:

☑ Absolute

(7.54.2.9) End date of target

12/31/2023

(7.54.2.10) Figure or percentage at end of date of target

91

(7.54.2.11) Figure or percentage in reporting year

91

(7.54.2.13) Target status in reporting year

Select from:

☑ Achieved

(7.54.2.15) Is this target part of an emissions target?

No

(7.54.2.16) Is this target part of an overarching initiative?

Select all that apply

☑ No, it's not part of an overarching initiative

(7.54.2.18) Please explain target coverage and identify any exclusions

This goal includes the waste data from question 7.52.7 regarding additional climate-related metrics relevant to our business.

(7.54.2.19) Target objective

Consumers Energy's waste management goal is to maintain a minimum 90% diversion rate by focusing on reducing waste generated and increasing the amount recycled.

(7.54.2.21) List the actions which contributed most to achieving this target

Consumers Energy experienced an increase in recycling that allowed the company to maintain the goal of annually diverting more than 90% of waste from landfill. The 2023 diversion rate was 91%.

Row 3

(7.54.2.1) Target reference number

Select from:

☑ Oth 2

(7.54.2.2) Date target was set

10/24/2019

(7.54.2.3) Target coverage

Select from:

☑ Business activity

(7.54.2.4) Target type: absolute or intensity

Select from:

☑ Absolute

(7.54.2.5) Target type: category & Metric (target numerator if reporting an intensity target)

Methane reduction target

☑ Methane leakage rate (%)

(7.54.2.7) End date of base year

12/31/2012

(7.54.2.9) End date of target

12/31/2030

(7.54.2.10) Figure or percentage at end of date of target

80

(7.54.2.11) Figure or percentage in reporting year

27

(7.54.2.13) Target status in reporting year

Select from:

☑ Underway

(7.54.2.18) Please explain target coverage and identify any exclusions

The methane reduction target covers Scope 1 methane emissions associated with Consumers Energy's natural gas delivery system, which includes all Consumers Energy-owned assets downstream of the LDC custody transfer stations. This includes our intrastate natural gas transmission pipelines, natural gas compressor stations, natural gas underground storage and natural gas distribution. Consumers Energy has already reduced methane by approximately 27% over the past decade and plans to continue to reduce methane emissions from its system by about 80 percent by accelerating the replacement of aging pipe, rehabilitating or retiring outdated infrastructure, and adopting new technologies and practices. The remaining emissions will be offset by purchasing and/or producing renewable natural gas. In 2023, 3,030 metric tons of methane (75,751 metric tons of CO2e) emissions were avoided due to voluntary methane reduction programs such as the Methane Challenge Program as well as other Consumers Energy Company initiatives.

(7.54.2.19) Target objective

Consumers Energy's Methane Reduction Plan, released in November 2019, outlines our plan to achieve an 80% reduction from 2012 methane emissions and net-zero methane emissions from its natural gas delivery system by 2030.

(7.54.2.20) Plan for achieving target, and progress made to the end of the reporting year

Consumers Energy is continuing to execute our its Methane Reduction Plan for our natural gas delivery system assets and has already reduced methane by approximately 27%.
[Add row]

(7.54.3) Provide details of your net-zero target(s).

Row 1

(7.54.3.1) Target reference number

Select from:
☑ NZ2

(7.54.3.2) Date target was set

02/24/2020

(7.54.3.3) Target Coverage

Select from:
☑ Business activity

(7.54.3.5) End date of target for achieving net zero

12/31/2040

(7.54.3.6) Is this a science-based target?

Select from:
☑ No, and we do not anticipate setting one in the next two years

(7.54.3.8) Scopes

Select all that apply

☑ Scope 1

☑ Scope 3

(7.54.3.9) Greenhouse gases covered by target

Select all that apply

☑ Carbon dioxide (CO2)

(7.54.3.10) Explain target coverage and identify any exclusions

At the beginning of 2020, Consumers Energy announced a goal to achieve net-zero carbon emissions by 2040 for all electric generation used to serve customer load. The emissions reported for this target represent carbon (CO2) emissions (excluding biomass) from Consumers Energy's owned and purchased power generation.

(7.54.3.11) Target objective

Consumer's Energy's target is to achieve net-zero carbon emissions by 2040 for all electric generation used to serve customer load.

(7.54.3.12) Do you intend to neutralize any residual emissions with permanent carbon removals at the end of the target?

Select from:

☑ Yes

(7.54.3.17) Target status in reporting year

Select from:

☑ Underway

Row 2

(7.54.3.1) Target reference number

Select from:

☑ NZ3

(7.54.3.2) Date target was set

03/30/2022

(7.54.3.3) Target Coverage

Select from:

☑ Business activity

(7.54.3.5) End date of target for achieving net zero

12/31/2050

(7.54.3.6) Is this a science-based target?

Select from:

☑ No, and we do not anticipate setting one in the next two years

(7.54.3.8) Scopes

Select all that apply

☑ Scope 1

☑ Scope 3

(7.54.3.9) Greenhouse gases covered by target

Select all that apply

☑ Carbon dioxide (CO2)

☑ Methane (CH4)

☑ Nitrous oxide (N2O)

(7.54.3.10) Explain target coverage and identify any exclusions

Consumers Energy announced its commitment to achieving net zero greenhouse gas emissions from its entire natural gas delivery system — including customers and suppliers — by 2050. As an interim step on the path to net zero by 2050, Consumers Energy will partner with customers to reduce their emissions by 20 percent

in 2030, from a 2020 baseline. At this time, the only exclusions from this goal are emissions associated with gas transportation customers (i.e., Consumers Energy does not purchase or own the gas).

(7.54.3.11) Target objective

Achieve net-zero greenhouse gas emissions from the company's Consumers Energy's natural gas system.

(7.54.3.12) Do you intend to neutralize any residual emissions with permanent carbon removals at the end of the target?

Select from:

☑ Yes

(7.54.3.17) Target status in reporting year

Select from:

☑ Underway

[Add row]

(7.55.1) Identify the total number of initiatives at each stage of development, and for those in the implementation stages, the estimated CO2e savings.

	Number of initiatives	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Implementation commenced	*2*	*1171167*

[Fixed row]

(7.55.2) Provide details on the initiatives implemented in the reporting year in the table below.

Row 1

(7.55.2.1) Initiative category & Initiative type

Company policy or behavioral change

☑ Customer engagement

(7.55.2.2) Estimated annual CO2e savings (metric tonnes CO2e)

2000

(7.55.2.3) Scope(s) or Scope 3 category(ies) where emissions savings occur

Select all that apply

☑ Scope 3 category 11: Use of sold products

(7.55.2.4) Voluntary/Mandatory

Select from:

☑ Voluntary

(7.55.2.5) Annual monetary savings (unit currency – as specified in C0.4)

0

(7.55.2.7) Payback period

Select from:

☑ No payback

(7.55.2.8) Estimated lifetime of the initiative

Select from:

☑ Ongoing

(7.55.2.9) Comment

Consumers Energy launched its MI Clean Air program on April 21, 2022. By the end of 2023, nearly 700 residential and business customers enrolled in the program, joining their neighbors in leaving the planet a better place – for generations to come. Customer participation in the program helped fund carbon abatement projects in Michigan that are actively removing greenhouse gases from the atmosphere. It was created to help ease the customers' ability to reduce their carbon footprint. Through a small, fixed monthly cost, natural gas customers can offset a portion, or all, of their natural gas usage through carbon offsets procured on their behalf.

Row 2

(7.55.2.1) Initiative category & Initiative type

Fugitive emissions reductions

☑ Oil/natural gas methane leak capture/prevention

(7.55.2.2) Estimated annual CO2e savings (metric tonnes CO2e)

75751

(7.55.2.3) Scope(s) or Scope 3 category(ies) where emissions savings occur

Select all that apply

☑ Scope 1

(7.55.2.4) Voluntary/Mandatory

Select from:

☑ Voluntary

(7.55.2.7) Payback period

Select from:

☑ >25 years

(7.55.2.8) Estimated lifetime of the initiative

Select from:

☑ >30 years

(7.55.2.9) Comment

Consumers Energy's Methane Reduction Plan has implemented multiple programs (3-prong approach) such as natural gas distribution service replacements, transmission temporary compressions and distribution main replacement programs, which resulted in 75,751 metric tons of CO2e emissions avoided in 2023, with an overall total of 1,169,167 metric tons of CO2e emissions avoided since 2012.
[Add row]

(7.55.3) What methods do you use to drive investment in emissions reduction activities?

Row 1

(7.55.3.2) Comment

Voluntary customer purchases of renewable energy and/or carbon offsets drive investments.

Row 2

(7.55.3.1) Method

Select from:
☑ Financial optimization calculations

(7.55.3.2) Comment

Energy efficiency activities within our facilities are determined based on the return on the investment.

Row 3

(7.55.3.1) Method

Select from:
☑ Compliance with regulatory requirements/standards

(7.55.3.2) Comment

Compliance with regulatory requirements receives priority funding.

Row 4

(7.55.3.1) Method

Select from:

☑ Dedicated budget for energy efficiency

(7.55.3.2) Comment

Funding to spur development and deployment of smart-meters, LEED certified buildings and electric vehicle charging stations is intended to help drive the development and deployment of clean and efficient energy and remain current with the industry direction.

Row 5

(7.55.3.1) Method

Select from:

☑ Internal price on carbon

(7.55.3.2) Comment

The estimated cost of carbon may be incorporated into financial investment decisions. For example, Consumers Energy modeled a carbon price in our most recent IRP.
[Add row]

(7.74.1) Provide details of your products and/or services that you classify as low-carbon products.

Row 2

(7.74.1.1) Level of aggregation

Select from:

☑ Product or service

(7.74.1.2) Taxonomy used to classify product(s) or service(s) as low-carbon

Select from:

☑ Other, please specify **:**Michigan Public Service Commission

(7.74.1.3) Type of product(s) or service(s)

Power

☑ Other, please specify **:**Energy Waste Reduction (i.e., Energy Efficiency Programs)

(7.74.1.4) Description of product(s) or service(s)

Consumers Energy's waste reduction program includes 18 products/services that help reduce customers' carbon footprint through reducing energy waste. These products/services include: Appliance Recycling, Consumers Energy Store, ENERGY STAR Appliances, ENERGY STAR Lighting, Home Energy Analysis, Home Energy Report, Home Performance with ENERGY STAR, HVAC and Water Heating, Income Qualified Energy Assistance, Insulation and Windows Program, Residential Agriculture, Residential Multifamily, Residential Multifamily Income Qualified, New Home Construction, Think! Energy!, Comprehensive & Custom Business Solutions, Small Business Direct Install, and Business Multifamily Direct Install

(7.74.1.5) Have you estimated the avoided emissions of this low-carbon product(s) or service(s)

Select from:

☑ Yes

(7.74.1.6) Methodology used to calculate avoided emissions

Select from:

☑ Other, please specify **:**Specific calculation details described below using Consumers Energy data

(7.74.1.7) Life cycle stage(s) covered for the low-carbon product(s) or services(s)

Select from:

☑ Use stage

(7.74.1.8) Functional unit used

MWh and MCF

(7.74.1.9) Reference product/service or baseline scenario used

These products and services collectively achieved energy savings of 659,487 MWh and 3,752,780 Mcf in 2023.

(7.74.1.10) Life cycle stage(s) covered for the reference product/service or baseline scenario

Select from:

☑ Use stage

(7.74.1.11) Estimated avoided emissions (metric tons CO2e per functional unit) compared to reference product/service or baseline scenario

3300000

(7.74.1.12) Explain your calculation of avoided emissions, including any assumptions

Consumers Energy's gas and electric 2023 EWR portfolio energy savings achieved estimated avoided emissions of 3.3 million metric tons. Each kWh and Mcf saved through energy waste reduction programs avoids GHG emissions associated with that consumption. The methodology utilized calculates CO2 emissions avoided associated with the generation of each kWh based on Consumers Energy's annual generation emissions factors as reported to the MPSC and regional emission factors (based on EIA data for MI, OH, IN, IL and WI) weighted to account for the percentage of energy purchased from the grid and the percentage of electricity coming from renewable sources. Avoided emissions from natural gas consumption are based on the average carbon dioxide coefficient of natural gas.

Row 3

(7.74.1.1) Level of aggregation

Select from:

☑ Product or service

(7.74.1.2) Taxonomy used to classify product(s) or service(s) as low-carbon

Select from:

☑ Other, please specify :Transportation Electrification Programs (TEPS)

(7.74.1.3) Type of product(s) or service(s)

Power

☑ Other, please specify :Electric Vehicle Program, Off-peak charging education, time of use rates, rebates, and incentives

(7.74.1.4) Description of product(s) or service(s)

Level 2 EVSE rebates and incentives for residential, commercial, and fleet overnight charging. DCFC rebates for electric transportation public infrastructure development.

(7.74.1.5) Have you estimated the avoided emissions of this low-carbon product(s) or service(s)

Select from:

☑ Yes

(7.74.1.6) Methodology used to calculate avoided emissions

Select from:

☑ Other, please specify :Specific calculation details described below using Consumers Energy data

(7.74.1.7) Life cycle stage(s) covered for the low-carbon product(s) or services(s)

Select from:

☑ Use stage

(7.74.1.8) Functional unit used

kWh and mpg

(7.74.1.9) Reference product/service or baseline scenario used

Based off of average fuel economies by major vehicle categories as provided by the U.S. Department of Energy.

(7.74.1.10) Life cycle stage(s) covered for the reference product/service or baseline scenario

Select from:

☑ Use stage

(7.74.1.11) Estimated avoided emissions (metric tons CO2e per functional unit) compared to reference product/service or baseline scenario

5851

(7.74.1.12) Explain your calculation of avoided emissions, including any assumptions

The approximately 10.9M kWh from EV charging were multiplied by Consumers Energy's residual mix specific emission factor. The kWh total was then translated into mileage utilizing an EV efficiency estimate of 3 miles per kWh. That mileage was translated in gallons of gasoline that would have been used via AFDC's average of 24.2 mpg for light duty vehicles, and the gallons of gasoline estimated was translated into lbs of CO2 utilizing EPA's GHG emissions calculator. The delta between the gasoline alternative and kWh actual resulted in approximately 12.9M lbs of CO2 (5,851 metric tons CO2) being avoided. It is worth noting however that some of these customers are subscribed to our renewables programs and thus have lower or zero intensity electricity emission rates, but this level of detail is not currently available.

Row 4

(7.74.1.1) Level of aggregation

Select from:

☑ Product or service

(7.74.1.2) Taxonomy used to classify product(s) or service(s) as low-carbon

Select from:

☑ Other, please specify **:**Michigan Renewable Energy Certification System (MIRECS)

(7.74.1.3) Type of product(s) or service(s)

Power

☑ Other, please specify :Our Voluntary Green Pricing (VGP) Program includes the following elements: the Large Customer Renewable Energy Program, Solar Gardens, MI Renewable Energy Credit (REC) Program, National REC Program and Green Generation.

(7.74.1.4) Description of product(s) or service(s)

Renewable Energy product summary: Consumers Energy's renewable energy programs offer residential, commercial and industrial customers to match their subscribed electric use with renewable energy to support their carbon reduction goals. Large Customer Renewable Energy Program: Enables business customers to match up to 100% their electricity use with local, Michigan made wind or solar energy. This program is customer driven and accelerates bringing utility scale wind and solar projects to the State of Michigan. Solar Gardens Program: Enables residential and small business customers to source their electricity use with high visibility, local, Michigan made community solar electricity. MI REC Program: Enables all customers to match their electric usage with Michigan based renewable energy credits from existing wind and solar facilities. Customers can subscribe a percentage of their consumption between 1-100%. National REC Program: Enables business customers to match their electric usage with nationally based renewable energy credits from existing wind and solar facilities. Customers can subscribe a percentage of their consumption between 1-100%.

(7.74.1.5) Have you estimated the avoided emissions of this low-carbon product(s) or service(s)

Select from:

☑ Yes

(7.74.1.6) Methodology used to calculate avoided emissions

Select from:

☑ Other, please specify :Best engineering judgement

(7.74.1.7) Life cycle stage(s) covered for the low-carbon product(s) or services(s)

Select from:

☑ Use stage

(7.74.1.8) Functional unit used

MWh

(7.74.1.9) Reference product/service or baseline scenario used

In 2023, 430,795 MWhs of subscribed electric consumption was matched with renewable energy from our voluntary renewable energy programs. Additionally, 99,732 MWhs national RECs were also purchased and retired on behalf of subscribed customers.

(7.74.1.10) Life cycle stage(s) covered for the reference product/service or baseline scenario

Select from:

☑ Use stage

(7.74.1.11) Estimated avoided emissions (metric tons CO2e per functional unit) compared to reference product/service or baseline scenario

280499

(7.74.1.12) Explain your calculation of avoided emissions, including any assumptions

Subscribed energy consumption of 430,795 MWh times Consumers Energy's residual mix emission rate (1244 lbs CO2e / MWh) was used to calculate avoided emissions for the Michigan subscriptions, while an U.S. average eGRID2022 emission factor (827 lbs CO2e / MWh) was used to calculate the emissions for the National REC Program subscriptions of 99,732 MWh to estimate avoided emissions.
[Add row]

(7.79.1) Provide details of the project-based carbon credits canceled by your organization in the reporting year.

Row 1

(7.79.1.1) Project type

Select from:

☑ Biomass energy

(7.79.1.2) Type of mitigation activity

Select from:

☑ Emissions reduction

(7.79.1.3) Project description

RECs from various renewable energy generation systems are cancelled for compliance with our State's Renewable Portfolio Standard (RPS).

(7.79.1.4) Credits canceled by your organization from this project in the reporting year (metric tons CO2e)

763

(7.79.1.5) Purpose of cancelation

Select from:

☑ Other, please specify **:**Michigan's Renewable Portfolio Standard (RPS)

(7.79.1.6) Are you able to report the vintage of the credits at cancelation?

Select from:

☑ Yes

(7.79.1.7) Vintage of credits at cancelation

2021

(7.79.1.8) Were these credits issued to or purchased by your organization?

Select from:

☑ Purchased

(7.79.1.9) Carbon-crediting program by which the credits were issued

Select from:

☑ Other regulatory carbon crediting program, please specify **:**Michigan's Renewable Portfolio Standard (RPS)

Row 2

(7.79.1.1) Project type

Select from:

☑ Biomass energy

(7.79.1.2) Type of mitigation activity

Select from:

☑ Emissions reduction

(7.79.1.3) Project description

RECs from various renewable energy generation systems are cancelled for compliance with our State's Renewable Portfolio Standard (RPS).

(7.79.1.4) Credits canceled by your organization from this project in the reporting year (metric tons CO2e)

741497

(7.79.1.5) Purpose of cancelation

Select from:

☑ Other, please specify **:**Michigan's Renewable Portfolio Standard (RPS)

(7.79.1.6) Are you able to report the vintage of the credits at cancelation?

Select from:

☑ Yes

(7.79.1.7) Vintage of credits at cancelation

2022

(7.79.1.8) Were these credits issued to or purchased by your organization?

Select from:

☑ Purchased

(7.79.1.9) Carbon-crediting program by which the credits were issued

Select from:

☑ Other regulatory carbon crediting program, please specify :Michigan’s Renewable Portfolio Standard (RPS)

Row 3

(7.79.1.1) Project type

Select from:

☑ Biomass energy

(7.79.1.2) Type of mitigation activity

Select from:

☑ Emissions reduction

(7.79.1.3) Project description

RECs from various renewable energy generation systems are cancelled for compliance with our State’s Renewable Portfolio Standard (RPS).

(7.79.1.4) Credits canceled by your organization from this project in the reporting year (metric tons CO2e)

304388

(7.79.1.5) Purpose of cancelation

Select from:

☑ Other, please specify :Michigan’s Renewable Portfolio Standard (RPS)

(7.79.1.6) Are you able to report the vintage of the credits at cancelation?

Select from:

☑ Yes

(7.79.1.7) Vintage of credits at cancelation

2023

(7.79.1.8) Were these credits issued to or purchased by your organization?

Select from:

☑ Purchased

(7.79.1.9) Carbon-crediting program by which the credits were issued

Select from:

☑ Other regulatory carbon crediting program, please specify **:**Michigan’s Renewable Portfolio Standard (RPS)

Row 4

(7.79.1.1) Project type

Select from:

☑ Energy efficiency: supply side

(7.79.1.2) Type of mitigation activity

Select from:

☑ Emissions reduction

(7.79.1.3) Project description

RECs from various renewable energy generation systems are cancelled for compliance with our State’s Renewable Portfolio Standard (RPS).

(7.79.1.4) Credits canceled by your organization from this project in the reporting year (metric tons CO2e)

177991

(7.79.1.5) Purpose of cancelation

Select from:

☑ Other, please specify **:**Michigan’s Renewable Portfolio Standard (RPS)

(7.79.1.6) Are you able to report the vintage of the credits at cancelation?

Select from:

☑ Yes

(7.79.1.7) Vintage of credits at cancelation

2022

(7.79.1.8) Were these credits issued to or purchased by your organization?

Select from:

☑ Issued

(7.79.1.9) Carbon-crediting program by which the credits were issued

Select from:

☑ Other regulatory carbon crediting program, please specify **:**Michigan’s Renewable Portfolio Standard (RPS)

Row 5

(7.79.1.1) Project type

Select from:

☑ Hydro

(7.79.1.2) Type of mitigation activity

Select from:

☑ Emissions reduction

(7.79.1.3) Project description

RECs from various renewable energy generation systems are cancelled for compliance with our State's Renewable Portfolio Standard (RPS).

(7.79.1.4) Credits canceled by your organization from this project in the reporting year (metric tons CO2e)

655670

(7.79.1.5) Purpose of cancelation

Select from:

☑ Other, please specify **:**Michigan's Renewable Portfolio Standard (RPS)

(7.79.1.6) Are you able to report the vintage of the credits at cancelation?

Select from:

☑ Yes

(7.79.1.7) Vintage of credits at cancelation

2022

(7.79.1.8) Were these credits issued to or purchased by your organization?

Select from:

☑ Purchased

(7.79.1.9) Carbon-crediting program by which the credits were issued

Select from:

☑ Other regulatory carbon crediting program, please specify **:**Michigan's Renewable Portfolio Standard (RPS)

Row 6

(7.79.1.1) Project type

Select from:

☑ Hydro

(7.79.1.2) Type of mitigation activity

Select from:

☑ Emissions reduction

(7.79.1.3) Project description

RECs from various renewable energy generation systems are cancelled for compliance with our State's Renewable Portfolio Standard (RPS).

(7.79.1.4) Credits canceled by your organization from this project in the reporting year (metric tons CO2e)

387942

(7.79.1.5) Purpose of cancelation

Select from:

☑ Other, please specify **:**Michigan's Renewable Portfolio Standard (RPS)

(7.79.1.6) Are you able to report the vintage of the credits at cancelation?

Select from:

☑ Yes

(7.79.1.7) Vintage of credits at cancelation

2023

(7.79.1.8) Were these credits issued to or purchased by your organization?

Select from:

☑ Issued

(7.79.1.9) Carbon-crediting program by which the credits were issued

Select from:

☑ Other regulatory carbon crediting program, please specify **:**Michigan’s Renewable Portfolio Standard (RPS)

Row 7

(7.79.1.1) Project type

Select from:

☑ Hydro

(7.79.1.2) Type of mitigation activity

Select from:

☑ Emissions reduction

(7.79.1.4) Credits canceled by your organization from this project in the reporting year (metric tons CO2e)

442011

(7.79.1.5) Purpose of cancelation

Select from:

☑ Other, please specify **:**Michigan’s Renewable Portfolio Standard (RPS)

(7.79.1.6) Are you able to report the vintage of the credits at cancelation?

Select from:

☑ Yes

(7.79.1.7) Vintage of credits at cancelation

2023

(7.79.1.8) Were these credits issued to or purchased by your organization?

Select from:

☑ Purchased

(7.79.1.9) Carbon-crediting program by which the credits were issued

Select from:

☑ Other regulatory carbon crediting program, please specify :Michigan’s Renewable Portfolio Standard (RPS)

Row 8

(7.79.1.1) Project type

Select from:

☑ Landfill gas

(7.79.1.2) Type of mitigation activity

Select from:

☑ Emissions reduction

(7.79.1.4) Credits canceled by your organization from this project in the reporting year (metric tons CO2e)

267

(7.79.1.5) Purpose of cancelation

Select from:

☑ Other, please specify :Michigan’s Renewable Portfolio Standard (RPS)

(7.79.1.6) Are you able to report the vintage of the credits at cancelation?

Select from:

☑ Yes

(7.79.1.7) Vintage of credits at cancelation

2019

(7.79.1.8) Were these credits issued to or purchased by your organization?

Select from:

☑ Purchased

(7.79.1.9) Carbon-crediting program by which the credits were issued

Select from:

☑ Other regulatory carbon crediting program, please specify **:**Michigan’s Renewable Portfolio Standard (RPS)

Row 9

(7.79.1.1) Project type

Select from:

☑ Landfill gas

(7.79.1.2) Type of mitigation activity

Select from:

☑ Emissions reduction

(7.79.1.4) Credits canceled by your organization from this project in the reporting year (metric tons CO2e)

123948

(7.79.1.5) Purpose of cancelation

Select from:

☑ Other, please specify **:**Michigan’s Renewable Portfolio Standard (RPS)

(7.79.1.6) Are you able to report the vintage of the credits at cancelation?

Select from:

☑ Yes

(7.79.1.7) Vintage of credits at cancelation

2022

(7.79.1.8) Were these credits issued to or purchased by your organization?

Select from:

☑ Purchased

(7.79.1.9) Carbon-crediting program by which the credits were issued

Select from:

☑ Other regulatory carbon crediting program, please specify **:**Michigan’s Renewable Portfolio Standard (RPS)

Row 10

(7.79.1.1) Project type

Select from:

☑ Landfill gas

(7.79.1.2) Type of mitigation activity

Select from:

☑ Emissions reduction

(7.79.1.4) Credits canceled by your organization from this project in the reporting year (metric tons CO2e)

32825

(7.79.1.5) Purpose of cancelation

Select from:

☑ Other, please specify **:**Michigan’s Renewable Portfolio Standard (RPS)

(7.79.1.6) Are you able to report the vintage of the credits at cancelation?

Select from:

☑ Yes

(7.79.1.7) Vintage of credits at cancelation

2023

(7.79.1.8) Were these credits issued to or purchased by your organization?

Select from:

☑ Purchased

(7.79.1.9) Carbon-crediting program by which the credits were issued

Select from:

☑ Other regulatory carbon crediting program, please specify **:**Michigan’s Renewable Portfolio Standard (RPS)

Row 11

(7.79.1.1) Project type

Select from:

☑ Solar

(7.79.1.2) Type of mitigation activity

Select from:

☑ Emissions reduction

(7.79.1.4) Credits canceled by your organization from this project in the reporting year (metric tons CO2e)

28968

(7.79.1.5) Purpose of cancelation

Select from:

☑ Other, please specify **:**Michigan’s Renewable Portfolio Standard (RPS)

(7.79.1.6) Are you able to report the vintage of the credits at cancelation?

Select from:

☑ Yes

(7.79.1.7) Vintage of credits at cancelation

2022

(7.79.1.8) Were these credits issued to or purchased by your organization?

Select from:

☑ Purchased

(7.79.1.9) Carbon-crediting program by which the credits were issued

Select from:

☑ Other regulatory carbon crediting program, please specify **:**Michigan’s Renewable Portfolio Standard (RPS)

Row 12

(7.79.1.1) Project type

Select from:

☑ Solar

(7.79.1.2) Type of mitigation activity

Select from:

☑ Emissions reduction

(7.79.1.4) Credits canceled by your organization from this project in the reporting year (metric tons CO2e)

776

(7.79.1.5) Purpose of cancelation

Select from:

☑ Other, please specify **:**Michigan’s Renewable Portfolio Standard (RPS)

(7.79.1.6) Are you able to report the vintage of the credits at cancelation?

Select from:

☑ Yes

(7.79.1.7) Vintage of credits at cancelation

2023

(7.79.1.8) Were these credits issued to or purchased by your organization?

Select from:

☑ Issued

(7.79.1.9) Carbon-crediting program by which the credits were issued

Select from:

☑ Other regulatory carbon crediting program, please specify **:**Michigan’s Renewable Portfolio Standard (RPS)

Row 13

(7.79.1.1) Project type

Select from:

☑ Wind

(7.79.1.2) Type of mitigation activity

Select from:

☑ Emissions reduction

(7.79.1.4) Credits canceled by your organization from this project in the reporting year (metric tons CO2e)

1767435

(7.79.1.5) Purpose of cancelation

Select from:

☑ Other, please specify **:**Michigan’s Renewable Portfolio Standard (RPS)

(7.79.1.6) Are you able to report the vintage of the credits at cancelation?

Select from:

☑ Yes

(7.79.1.7) Vintage of credits at cancelation

2022

(7.79.1.8) Were these credits issued to or purchased by your organization?

Select from:

☑ Purchased

(7.79.1.9) Carbon-crediting program by which the credits were issued

Select from:

☑ Other regulatory carbon crediting program, please specify **:**Michigan’s Renewable Portfolio Standard (RPS)

Row 14

(7.79.1.1) Project type

Select from:

☑ Wind

(7.79.1.2) Type of mitigation activity

Select from:

☑ Emissions reduction

(7.79.1.4) Credits canceled by your organization from this project in the reporting year (metric tons CO2e)

182858

(7.79.1.5) Purpose of cancelation

Select from:

☑ Other, please specify **:**Michigan’s Renewable Portfolio Standard (RPS)

(7.79.1.6) Are you able to report the vintage of the credits at cancelation?

Select from:

☑ Yes

(7.79.1.7) Vintage of credits at cancelation

2023

(7.79.1.8) Were these credits issued to or purchased by your organization?

Select from:

☑ Purchased

(7.79.1.9) Carbon-crediting program by which the credits were issued

Select from:

☑ Other regulatory carbon crediting program, please specify **:**Michigan’s Renewable Portfolio Standard (RPS)

[Add row]

C9. Environmental performance - Water security

(9.1.1) Provide details on these exclusions.

Row 1

(9.1.1.1) Exclusion

Select from:

☑ Facilities

(9.1.1.2) Description of exclusion

Hydroelectric Operations

(9.1.1.3) Reason for exclusion

Select from:

☑ Data is not available

(9.1.1.4) Primary reason why data is not available

Select from:

☑ Judged to be unimportant or not relevant

(9.1.1.7) Percentage of water volume the exclusion represents

Select from:

☑ Unknown

(9.1.1.8) Please explain

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, hydroelectric operations are not included in this report.

Row 2

(9.1.1.1) Exclusion

Select from:

☑ Business activities

(9.1.1.2) Description of exclusion

Electric Distribution Operations

(9.1.1.3) Reason for exclusion

Select from:

☑ Data is not available

(9.1.1.4) Primary reason why data is not available

Select from:

☑ No standardized procedure for collecting data

(9.1.1.7) Percentage of water volume the exclusion represents

Select from:

☑ Unknown

(9.1.1.8) Please explain

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, electric distribution operations are not included in this report.

Row 3

(9.1.1.1) Exclusion

Select from:

☑ Business activities

(9.1.1.2) Description of exclusion

Gas Distribution, Transmission and Storage Operations

(9.1.1.3) Reason for exclusion

Select from:

☑ Data is not available

(9.1.1.4) Primary reason why data is not available

Select from:

☑ No standardized procedure for collecting data

(9.1.1.7) Percentage of water volume the exclusion represents

Select from:

☑ Unknown

(9.1.1.8) Please explain

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, Gas Distribution, Transmission, and Storage operations are not included in this report.

Row 4

(9.1.1.1) Exclusion

Select from:

☑ Business activities

(9.1.1.2) Description of exclusion

Service Center, Call Centers, and Office Buildings

(9.1.1.3) Reason for exclusion

Select from:

☑ Data is not available

(9.1.1.4) Primary reason why data is not available

Select from:

☑ No standardized procedure for collecting data

(9.1.1.7) Percentage of water volume the exclusion represents

Select from:

☑ Unknown

(9.1.1.8) Please explain

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, Service Center, Call Center, and Office Building operations are not included in this report.

Row 5

(9.1.1.1) Exclusion

Select from:

☑ Business activities

(9.1.1.2) Description of exclusion

Non-Utility Operations

(9.1.1.3) Reason for exclusion

Select from:

☑ Data is not available

(9.1.1.4) Primary reason why data is not available

Select from:

☑ No standardized procedure for collecting data

(9.1.1.7) Percentage of water volume the exclusion represents

Select from:

☑ Unknown

(9.1.1.8) Please explain

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.

Row 6

(9.1.1.1) Exclusion

Select from:

☑ Specific groups, businesses, or organizations

(9.1.1.2) Description of exclusion

North Star Clean Energy

(9.1.1.3) Reason for exclusion

Select from:

☑ Other, please specify **:**Historically not included in report

(9.1.1.7) Percentage of water volume the exclusion represents

Select from:

☑ Unknown

(9.1.1.8) Please explain

This section focuses on Consumers Energy's largest sources of water withdrawals, our steam electric power generating facilities which operate as a regulated utility. Therefore, these operations are the non-regulated portion of CMS Energy's business and are not included in this report.
[Add row]

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

Water withdrawals – total volumes

(9.2.1) % of sites/facilities/operations

Select from:

☑ 100%

(9.2.2) Frequency of measurement

Select from:

☑ 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.

(9.2.3) Method of measurement

Flow meter and/or calculated flow are used as methods for measurement, depending on the location.

(9.2.4) Please explain

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

(9.2.1) % of sites/facilities/operations

Select from:

☑ 100%

(9.2.2) Frequency of measurement

Select from:

☑ 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

(9.2.3) Method of measurement

Flow meter and/or calculated flow are used as methods for measurement, depending on the location.

(9.2.4) Please explain

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.

Water withdrawals quality

(9.2.1) % of sites/facilities/operations

Select from:

☑ 100%

(9.2.2) Frequency of measurement

Select from:

☑ 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

(9.2.3) Method of measurement

Water quality is measured using analytical laboratory methods and reported monthly to the State of Michigan in our NPDES permit discharge monitoring reports (DMR).

(9.2.4) Please explain

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

(9.2.1) % of sites/facilities/operations

Select from:

☑ 100%

(9.2.2) Frequency of measurement

Select from:

☑ 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.

(9.2.3) Method of measurement

Flow meter and/or calculated flow are used as methods for measurement, depending on the location.

(9.2.4) Please explain

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

(9.2.1) % of sites/facilities/operations

Select from:

☑ 100%

(9.2.2) Frequency of measurement

Select from:

☑ 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

(9.2.3) Method of measurement

Flow meter and/or calculated flow are used as methods for measurement, depending on the location.

(9.2.4) Please explain

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

(9.2.1) % of sites/facilities/operations

Select from:

☑ 100%

(9.2.2) Frequency of measurement

Select from:

☑ 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

(9.2.3) Method of measurement

Water quality is measured using analytical laboratory methods and reported monthly to the State of Michigan in our NPDES permit discharge monitoring reports (DMR).

(9.2.4) Please explain

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

(9.2.1) % of sites/facilities/operations

Select from:

☑ 100%

(9.2.2) Frequency of measurement

Select from:

☑ 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

(9.2.3) Method of measurement

Water quality is measured using analytical laboratory methods and reported monthly to the State of Michigan in our NPDES permit discharge monitoring reports (DMR).

(9.2.4) Please explain

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)

(9.2.1) % of sites/facilities/operations

Select from:

☑ 100%

(9.2.2) Frequency of measurement

Select from:

☑ Other, please specify **:**Measurements for phosphorus are taken at intervals determined by their respective NPDES and POTW permits issued by the State of Michigan or local municipality and reported according to permit frequency

(9.2.3) Method of measurement

Water quality is measured using analytical laboratory methods and reported to the State of Michigan in our NPDES permit discharge monitoring reports (DMR) and/or local municipality.

(9.2.4) Please explain

Water discharge quality for phosphorus 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 local POTW municipality permits.

Water discharge quality – temperature

(9.2.1) % of sites/facilities/operations

Select from:

☑ 100%

(9.2.2) Frequency of measurement

Select from:

☑ 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

(9.2.3) Method of measurement

Discharge water temperature is measured by temperature probes.

(9.2.4) Please explain

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

(9.2.1) % of sites/facilities/operations

Select from:

☑ 100%

(9.2.2) Frequency of measurement

Select from:

☑ 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

(9.2.3) Method of measurement

Flow meter and/or calculated flow are used as methods for measurement, depending on the location.

(9.2.4) Please explain

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

(9.2.1) % of sites/facilities/operations

Select from:

☑ 26-50

(9.2.2) Frequency of measurement

Select from:

☑ Quarterly

(9.2.3) Method of measurement

Flow meter and/or calculated flow are used as methods for measurement, depending on the location.

(9.2.4) Please explain

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

(9.2.1) % of sites/facilities/operations

Select from:

☑ Not relevant

(9.2.4) Please explain

Not relevant
[Fixed row]

(9.2.2) 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?

Total withdrawals

(9.2.2.1) Volume (megaliters/year)

978570

(9.2.2.2) Comparison with previous reporting year

Select from:

☑ Lower

(9.2.2.3) Primary reason for comparison with previous reporting year

Select from:

☑ Facility closure

(9.2.2.4) Five-year forecast

Select from:

☑ Much lower

(9.2.2.5) Primary reason for forecast

Select from:

☑ Facility closure

(9.2.2.6) Please explain

Over the next year 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

(9.2.2.1) Volume (megaliters/year)

969696

(9.2.2.2) Comparison with previous reporting year

Select from:

☑ Lower

(9.2.2.3) Primary reason for comparison with previous reporting year

Select from:

☑ Facility closure

(9.2.2.4) Five-year forecast

Select from:

☑ Much lower

(9.2.2.5) Primary reason for forecast

Select from:

☑ Facility closure

(9.2.2.6) Please explain

Over the next year 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

(9.2.2.1) Volume (megaliters/year)

8874

(9.2.2.2) Comparison with previous reporting year

Select from:

☑ Higher

(9.2.2.3) Primary reason for comparison with previous reporting year

Select from:

☑ Mergers and acquisitions

(9.2.2.4) Five-year forecast

Select from:

☑ Lower

(9.2.2.5) Primary reason for forecast

Select from:

☑ Facility closure

(9.2.2.6) Please explain

Over the next year 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.
[Fixed row]

(9.2.7) Provide total water withdrawal data by source.

Fresh surface water, including rainwater, water from wetlands, rivers, and lakes

(9.2.7.1) Relevance

Select from:

☑ Relevant

(9.2.7.2) Volume (megaliters/year)

971568

(9.2.7.3) Comparison with previous reporting year

Select from:

☑ Lower

(9.2.7.4) Primary reason for comparison with previous reporting year

Select from:

☑ Facility closure

(9.2.7.5) Please explain

Surface Water was withdrawn for cooling water purposes. Consumers Energy withdrew 37% less than 2022 due to the retirement of two coal fired units.

Brackish surface water/Seawater

(9.2.7.1) Relevance

Select from:

☑ Not relevant

(9.2.7.5) Please explain

Not relevant.

Groundwater – renewable

(9.2.7.1) Relevance

Select from:

☑ Relevant

(9.2.7.2) Volume (megaliters/year)

3198

(9.2.7.3) Comparison with previous reporting year

Select from:

☑ About the same

(9.2.7.4) Primary reason for comparison with previous reporting year

Select from:

☑ Other, please specify :Change in water use from municipal to groundwater

(9.2.7.5) Please explain

Process groundwater usage was 10% higher than 2022.

Groundwater – non-renewable

(9.2.7.1) Relevance

Select from:

☑ Not relevant

(9.2.7.5) Please explain

Not relevant.

Produced/Entrained water

(9.2.7.1) Relevance

Select from:

☑ Not relevant

(9.2.7.5) Please explain

Not relevant.

Third party sources

(9.2.7.1) Relevance

Select from:

☑ Relevant

(9.2.7.2) Volume (megaliters/year)

3803

(9.2.7.3) Comparison with previous reporting year

Select from:

☑ Lower

(9.2.7.4) Primary reason for comparison with previous reporting year

Select from:

☑ Other, please specify **:**Change in water use from municipal to groundwater

(9.2.7.5) Please explain

Municipal water was withdrawn for cooling water purposes. Consumers Energy withdrew 24% less than 2022. Due to rising municipal water rates, Consumers Energy installed process water wells in accordance with State regulations at one of our combined cycle gas plants. As a result of this change, municipal water use has been reduced.
[Fixed row]

(9.2.8) Provide total water discharge data by destination.

Fresh surface water

(9.2.8.1) Relevance

Select from:
☑ Relevant

(9.2.8.2) Volume (megaliters/year)

968792

(9.2.8.3) Comparison with previous reporting year

Select from:
☑ Lower

(9.2.8.4) Primary reason for comparison with previous reporting year

Select from:
☑ Facility closure

(9.2.8.5) Please explain

The electric generating plants which discharge water from surface water sources discharged 38% less in 2023 due to the retirement of two coal fired units.

Brackish surface water/seawater

(9.2.8.1) Relevance

Select from:
☑ Not relevant

(9.2.8.5) Please explain

Consumers Energy electric generation operations are not near brackish water/seawater.

Groundwater

(9.2.8.1) Relevance

Select from:

☑ Relevant

(9.2.8.2) Volume (megaliters/year)

224

(9.2.8.3) Comparison with previous reporting year

Select from:

☑ About the same

(9.2.8.4) Primary reason for comparison with previous reporting year

Select from:

☑ Increase/decrease in business activity

(9.2.8.5) Please explain

The electric generating plants which discharge water from groundwater sources discharged 3% more in 2023

Third-party destinations

(9.2.8.1) Relevance

Select from:

☑ Relevant

(9.2.8.2) Volume (megaliters/year)

680

(9.2.8.3) Comparison with previous reporting year

Select from:

☑ Higher

(9.2.8.4) Primary reason for comparison with previous reporting year

Select from:

☑ Increase/decrease in business activity

(9.2.8.5) Please explain

The electric generating plants which discharge water from municipal sources discharged 19% more in 2023.
[Fixed row]

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

	Relevance of treatment level to discharge	Please explain
Tertiary treatment	*Select from:* ☑ Not relevant	*Consumers Energy does not use tertiary treatment on discharge water.*
Secondary treatment	*Select from:* ☑ Relevant but volume unknown	*Consumers Energy utilizes secondary treatment on discharge water, but does not track volume of wastewater treated only total volume discharged.*
Primary treatment only	*Select from:* ☑ Relevant but volume unknown	*Consumers Energy utilizes primary treatment on discharge water, but does not track volume of wastewater treated only total volume discharged.*
Discharge to the natural environment without treatment	*Select from:* ☑ Not relevant	*Consumers Energy does not use discharges to the natural environment without treatment in the electrical generation process*
Discharge to a third party without treatment	*Select from:* ☑ Relevant but volume unknown	*Consumers Energy uses municipal wastewater treatment plants for third party treatment of discharge water.*
Other	*Select from:*	*Not Relevant*

	Relevance of treatment level to discharge	Please explain
	☑ Not relevant	

[Fixed row]

(9.2.10) Provide details of your organization's emissions of nitrates, phosphates, pesticides, and other priority substances to water in the reporting year.

(9.2.10.2) Categories of substances included

Select all that apply

☑ Phosphates

(9.2.10.4) Please explain

Phosphorus 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 local POTW municipality permits. Metric tons of phosphorus emissions to water is not tracked.
[Fixed row]

(9.3) In your direct operations and upstream value chain, what is the number of facilities where you have identified substantive water-related dependencies, impacts, risks, and opportunities?

Direct operations

(9.3.1) Identification of facilities in the value chain stage

Select from:

☑ Yes, we have assessed this value chain stage and identified facilities with water-related dependencies, impacts, risks, and opportunities

(9.3.2) Total number of facilities identified

5

(9.3.3) % of facilities in direct operations that this represents

Select from:
☑ 100%

(9.3.4) Please explain

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

Upstream value chain

(9.3.1) Identification of facilities in the value chain stage

Select from:
☑ No, we have not assessed this value chain stage for facilities with water-related dependencies, impacts, risks, and opportunities, and are not planning to do so in the next 2 years

(9.3.4) Please explain

We have not assessed this value chain stage for facilities with water-related dependencies, impacts, risks, and opportunities.
[Fixed row]

(9.3.1) For each facility referenced in 9.3, provide coordinates, water accounting data, and a comparison with the previous reporting year.

Row 1

(9.3.1.1) Facility reference number

Select from:

☑ Facility 1

(9.3.1.2) Facility name (optional)

JH Campbell

(9.3.1.3) Value chain stage

Select from:

☑ Direct operations

(9.3.1.4) Dependencies, impacts, risks, and/or opportunities identified at this facility

Select all that apply

☑ Dependencies

(9.3.1.5) Withdrawals or discharges in the reporting year

Select from:

☑ Yes, withdrawals and discharges

(9.3.1.7) Country/Area & River basin

United States of America

☑ St. Lawrence

(9.3.1.8) Latitude

42.91

(9.3.1.9) Longitude

-86.2

(9.3.1.10) Located in area with water stress

Select from:

☑ No

(9.3.1.11) Primary power generation source for your electricity generation at this facility

Select from:

☑ Coal - hard

(9.3.1.13) Total water withdrawals at this facility (megaliters)

852600

(9.3.1.14) Comparison of total withdrawals with previous reporting year

Select from:

☑ Lower

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

851178

(9.3.1.16) Withdrawals from brackish surface water/seawater

0

(9.3.1.17) Withdrawals from groundwater - renewable

1421

(9.3.1.18) Withdrawals from groundwater - non-renewable

0

(9.3.1.19) Withdrawals from produced/entrained water

0

(9.3.1.20) Withdrawals from third party sources

0

(9.3.1.21) Total water discharges at this facility (megaliters)

852340

(9.3.1.22) Comparison of total discharges with previous reporting year

Select from:

☑ Lower

(9.3.1.23) Discharges to fresh surface water

852116

(9.3.1.24) Discharges to brackish surface water/seawater

0

(9.3.1.25) Discharges to groundwater

224

(9.3.1.26) Discharges to third party destinations

0

(9.3.1.27) Total water consumption at this facility (megaliters)

260

(9.3.1.28) Comparison of total consumption with previous reporting year

Select from:

☑ Lower

(9.3.1.29) 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 13% decrease in withdrawals and discharges and a 21% decrease in consumption when compared to the previous year.

Row 2

(9.3.1.1) Facility reference number

Select from:

☑ Facility 2

(9.3.1.2) Facility name (optional)

DE Karn

(9.3.1.3) Value chain stage

Select from:

☑ Direct operations

(9.3.1.4) Dependencies, impacts, risks, and/or opportunities identified at this facility

Select all that apply

☑ Dependencies

(9.3.1.5) Withdrawals or discharges in the reporting year

Select from:

☑ Yes, withdrawals and discharges

(9.3.1.7) Country/Area & River basin

Canada

☑ St. Lawrence

(9.3.1.8) Latitude

43.64

(9.3.1.9) Longitude

-83.84

(9.3.1.10) Located in area with water stress

Select from:

☑ No

(9.3.1.11) Primary power generation source for your electricity generation at this facility

Select from:

☑ Coal - hard

(9.3.1.13) Total water withdrawals at this facility (megaliters)

116491

(9.3.1.14) Comparison of total withdrawals with previous reporting year

Select from:

☑ Much lower

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

116392

(9.3.1.16) Withdrawals from brackish surface water/seawater

0

(9.3.1.17) Withdrawals from groundwater - renewable

0

(9.3.1.18) Withdrawals from groundwater - non-renewable

0

(9.3.1.19) Withdrawals from produced/entrained water

0

(9.3.1.20) Withdrawals from third party sources

99

(9.3.1.21) Total water discharges at this facility (megaliters)

116245

(9.3.1.22) Comparison of total discharges with previous reporting year

Select from:

☑ Much lower

(9.3.1.23) Discharges to fresh surface water

116245

(9.3.1.24) Discharges to brackish surface water/seawater

0

(9.3.1.25) Discharges to groundwater

0

(9.3.1.26) Discharges to third party destinations

0

(9.3.1.27) Total water consumption at this facility (megaliters)

246

(9.3.1.28) Comparison of total consumption with previous reporting year

Select from:

☑ Much lower

(9.3.1.29) Please explain

Withdrawal, discharges, and consumption are based on actual pump operating hours and the estimated flow rate of each operating pump and was much lower than last year with roughly a 222% decrease in withdrawals and discharges and a 258% decrease in consumption. This is due to the closure of coal fired units at this location in May 2023.

Row 3

(9.3.1.1) Facility reference number

Select from:

☑ Facility 3

(9.3.1.2) Facility name (optional)

Zeeland Generating Station

(9.3.1.3) Value chain stage

Select from:

☑ Direct operations

(9.3.1.4) Dependencies, impacts, risks, and/or opportunities identified at this facility

Select all that apply

☑ Dependencies

(9.3.1.5) Withdrawals or discharges in the reporting year

Select from:

☑ Yes, withdrawals and discharges

(9.3.1.7) Country/Area & River basin

Canada

☑ St. Lawrence

(9.3.1.8) Latitude

42.82

(9.3.1.9) Longitude

-85.99

(9.3.1.10) Located in area with water stress

Select from:

☑ No

(9.3.1.11) Primary power generation source for your electricity generation at this facility

Select from:

☑ Gas

(9.3.1.13) Total water withdrawals at this facility (megaliters)

3047

(9.3.1.14) Comparison of total withdrawals with previous reporting year

Select from:

☑ About the same

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

0

(9.3.1.16) Withdrawals from brackish surface water/seawater

0

(9.3.1.17) Withdrawals from groundwater - renewable

0

(9.3.1.18) Withdrawals from groundwater - non-renewable

0

(9.3.1.19) Withdrawals from produced/entrained water

0

(9.3.1.20) Withdrawals from third party sources

3047

(9.3.1.21) Total water discharges at this facility (megaliters)

34

(9.3.1.22) Comparison of total discharges with previous reporting year

Select from:

☑ Lower

(9.3.1.23) Discharges to fresh surface water

0

(9.3.1.24) Discharges to brackish surface water/seawater

0

(9.3.1.25) Discharges to groundwater

0

(9.3.1.26) Discharges to third party destinations

34

(9.3.1.27) Total water consumption at this facility (megaliters)

3013

(9.3.1.28) Comparison of total consumption with previous reporting year

Select from:

☑ About the same

(9.3.1.29) 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. Continued increased dispatch at this location lends to comparison with the previous reporting year to be about the same. Zeeland Generating Station saw a 6% decrease in withdrawals, 13% reduction in discharges, and 6% decrease in consumption when compared to the previous reporting year.

Row 4

(9.3.1.1) Facility reference number

Select from:

☑ Facility 4

(9.3.1.2) Facility name (optional)

Jackson Generating Station

(9.3.1.3) Value chain stage

Select from:

☑ Direct operations

(9.3.1.4) Dependencies, impacts, risks, and/or opportunities identified at this facility

Select all that apply

☑ Dependencies

(9.3.1.5) Withdrawals or discharges in the reporting year

Select from:

☑ Yes, withdrawals and discharges

(9.3.1.7) Country/Area & River basin

Canada

☑ St. Lawrence

(9.3.1.8) Latitude

42.24

(9.3.1.9) Longitude

-84.37

(9.3.1.10) Located in area with water stress

Select from:

☑ No

(9.3.1.11) Primary power generation source for your electricity generation at this facility

Select from:

☑ Gas

(9.3.1.13) Total water withdrawals at this facility (megaliters)

2435

(9.3.1.14) Comparison of total withdrawals with previous reporting year

Select from:

☑ About the same

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

0

(9.3.1.16) Withdrawals from brackish surface water/seawater

0

(9.3.1.17) Withdrawals from groundwater - renewable

1777

(9.3.1.18) Withdrawals from groundwater - non-renewable

0

(9.3.1.19) Withdrawals from produced/entrained water

0

(9.3.1.20) Withdrawals from third party sources

658

(9.3.1.21) Total water discharges at this facility (megaliters)

646

(9.3.1.22) Comparison of total discharges with previous reporting year

Select from:

☑ Higher

(9.3.1.23) Discharges to fresh surface water

0

(9.3.1.24) Discharges to brackish surface water/seawater

0

(9.3.1.25) Discharges to groundwater

0

(9.3.1.26) Discharges to third party destinations

646

(9.3.1.27) Total water consumption at this facility (megaliters)

1788

(9.3.1.28) Comparison of total consumption with previous reporting year

Select from:

☑ Lower

(9.3.1.29) 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 decreased 3%, discharges increased 21%, and consumption decreased 11% when compared to the previous year.

Row 5

(9.3.1.1) Facility reference number

Select from:

☑ Facility 5

(9.3.1.2) Facility name (optional)

Covert Generating Station

(9.3.1.3) Value chain stage

Select from:

☑ Direct operations

(9.3.1.4) Dependencies, impacts, risks, and/or opportunities identified at this facility

Select all that apply

☑ Dependencies

(9.3.1.5) Withdrawals or discharges in the reporting year

Select from:

☑ Yes, withdrawals and discharges

(9.3.1.7) Country/Area & River basin

Canada

☑ St. Lawrence

(9.3.1.8) Latitude

42.32

(9.3.1.9) Longitude

-86.29

(9.3.1.10) Located in area with water stress

Select from:

☑ No

(9.3.1.11) Primary power generation source for your electricity generation at this facility

Select from:

☑ Gas

(9.3.1.13) Total water withdrawals at this facility (megaliters)

3998

(9.3.1.14) Comparison of total withdrawals with previous reporting year

Select from:

☑ This is our first year of measurement

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

3998

(9.3.1.16) Withdrawals from brackish surface water/seawater

0

(9.3.1.17) Withdrawals from groundwater - renewable

0

(9.3.1.18) Withdrawals from groundwater - non-renewable

0

(9.3.1.19) Withdrawals from produced/entrained water

0

(9.3.1.20) Withdrawals from third party sources

0

(9.3.1.21) Total water discharges at this facility (megaliters)

431

(9.3.1.22) Comparison of total discharges with previous reporting year

Select from:

☑ This is our first year of measurement

(9.3.1.23) Discharges to fresh surface water

431

(9.3.1.24) Discharges to brackish surface water/seawater

0

(9.3.1.25) Discharges to groundwater

0

(9.3.1.26) Discharges to third party destinations

0

(9.3.1.27) Total water consumption at this facility (megaliters)

3567

(9.3.1.28) Comparison of total consumption with previous reporting year

Select from:

☑ This is our first year of measurement

(9.3.1.29) Please explain

Withdrawal, discharges, and consumption are based on actual pump operating hours and the estimated flow rate of each operating pump. This facility was acquired at the end of May 2023 and values reflect June 1, 2023 – December 31, 2023, when facility was under direct operational control of Consumers Energy.
[Add row]

(9.3.2) For the facilities in your direct operations referenced in 9.3.1, what proportion of water accounting data has been third party verified?

Water withdrawals – total volumes

(9.3.2.1) % verified

Select from:
☑ Not verified

(9.3.2.3) Please explain

We do not currently verify any water information reported in our CDP disclosure

Water withdrawals – volume by source

(9.3.2.1) % verified

Select from:
☑ Not verified

(9.3.2.3) Please explain

We do not currently verify any water information reported in our CDP disclosure

Water withdrawals – quality by standard water quality parameters

(9.3.2.1) % verified

Select from:
☑ Not verified

(9.3.2.3) Please explain

We do not currently verify any water information reported in our CDP disclosure

Water discharges – total volumes

(9.3.2.1) % verified

Select from:
☑ Not verified

(9.3.2.3) Please explain

We do not currently verify any water information reported in our CDP disclosure

Water discharges – volume by destination

(9.3.2.1) % verified

Select from:
☑ Not verified

(9.3.2.3) Please explain

We do not currently verify any water information reported in our CDP disclosure

Water discharges – volume by final treatment level

(9.3.2.1) % verified

Select from:
☑ Not verified

(9.3.2.3) Please explain

We do not currently verify any water information reported in our CDP disclosure

Water discharges – quality by standard water quality parameters

(9.3.2.1) % verified

Select from:
☑ Not verified

(9.3.2.3) Please explain

We do not currently verify any water information reported in our CDP disclosure

Water consumption – total volume

(9.3.2.1) % verified

Select from:
☑ Not verified

(9.3.2.3) Please explain

We do not currently verify any water information reported in our CDP disclosure
[Fixed row]

(9.5) Provide a figure for your organization's total water withdrawal efficiency.

(9.5.1) Revenue (currency)

7462000000

(9.5.2) Total water withdrawal efficiency

7625.41

(9.5.3) Anticipated forward trend

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.
[Fixed row]

(9.7.1) Provide the following intensity information associated with your electricity generation activities.

Row 1

(9.7.1.1) Water intensity value (m3/denominator)

50

(9.7.1.2) Numerator: water aspect

Select from:
☑ Total water withdrawals

(9.7.1.3) Denominator

Select from:
☑ MWh

(9.7.1.4) Comparison with previous reporting year

Select from:
☑ Much lower

(9.7.1.5) Please explain

Water intensity decreased 43% when compared to the previous year. This is due to coal fired unit retirements in 2023 from our DE Karn facility. Water withdrawal from this facility decreased 222% when compared to 2022 total water withdrawal.
[Add row]

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

	Products contain hazardous substances	Comment
	Select from: ☑ No	.

[Fixed row]

(9.14) Do you classify any of your current products and/or services as low water impact?

(9.14.1) Products and/or services classified as low water impact

Select from:

☑ Yes

(9.14.2) Definition used to classify low water impact

Water withdrawals

(9.14.4) Please explain

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.
[Fixed row]

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

Water pollution

(9.15.1.1) Target set in this category

Select from:

☑ No, and we do not plan to within the next two years

(9.15.1.2) Please explain

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

(9.15.1.1) Target set in this category

Select from:

☑ Yes

Water, Sanitation, and Hygiene (WASH) services

(9.15.1.1) Target set in this category

Select from:

☑ No, and we do not plan to within the next two years

(9.15.1.2) Please explain

NA

Other

(9.15.1.1) Target set in this category

Select from:

☑ No, and we do not plan to within the next two years

(9.15.1.2) Please explain

NA
[Fixed row]

(9.15.2) Provide details of your water-related targets and the progress made.

Row 1

(9.15.2.1) Target reference number

Select from:

☑ Target 1

(9.15.2.2) Target coverage

Select from:

☑ Organization-wide (direct operations only)

(9.15.2.3) Category of target & Quantitative metric

Water withdrawals

☑ Reduction in total water withdrawals

(9.15.2.4) Date target was set

01/01/2023

(9.15.2.5) End date of base year

12/31/2023

(9.15.2.6) Base year figure

463000000

(9.15.2.7) End date of target year

12/31/2027

(9.15.2.8) Target year figure

1700000000

(9.15.2.9) Reporting year figure

660000000

(9.15.2.10) Target status in reporting year

Select from:

☑ New

(9.15.2.11) % of target achieved relative to base year

16

(9.15.2.12) Global environmental treaties/initiatives/ frameworks aligned with or supported by this target

Select all that apply

☑ None, alignment not assessed

(9.15.2.13) Explain target coverage and identify any exclusions

Target is organization-wide

(9.15.2.14) Plan for achieving target, and progress made to the end of the reporting year

Quarterly updates are provided to drive progress at achieving target. Linear progress has been made.

(9.15.2.16) Further details of target

Target was set at the end of 2022 with the first full year of data collected in 2023. The company exceeded its first-year target by 43%.
[Add row]

C10. Environmental performance - Plastics

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

	Targets in place
	Select from: ☑ No, and we do not plan to within the next two years

[Fixed row]

C11. Environmental performance - Biodiversity

(11.2) What actions has your organization taken in the reporting year to progress your biodiversity-related commitments?

(11.2.1) Actions taken in the reporting period to progress your biodiversity-related commitments

Select from:

☑ Yes, we are taking actions to progress our biodiversity-related commitments

(11.2.2) Type of action taken to progress biodiversity- related commitments

Select all that apply

☑ Land/water protection

☑ Land/water management

☑ Other, please specify **:**Grant-making

[Fixed row]

(11.3) Does your organization use biodiversity indicators to monitor performance across its activities?

	Does your organization use indicators to monitor biodiversity performance?	Indicators used to monitor biodiversity performance
	Select from: ☑ Yes, we use indicators	*Select all that apply* ☑ Other, please specify **:**We track the number of acres we enhance, protect, and restore in support of our land goal. For more information please see our biodiversity report located on the CMS Energy website.

[Fixed row]

(11.4) Does your organization have activities located in or near to areas important for biodiversity in the reporting year?

Legally protected areas

(11.4.1) Indicate whether any of your organization's activities are located in or near to this type of area important for biodiversity

Select from:

☑ Yes

(11.4.2) Comment

Consumers Energy looks to leave the environment better than we found it. This is accomplished by working with experts to prioritize the biodiversity needs of a specific location and find value-added opportunities during the ERC review and recommendation process. For example, we frequently work with a bat habitat and conservation expert in Michigan to identify bat roosting trees. We also remove trees in the winter months when bats don't inhabit them prior to spring construction. In addition, we often prioritize the removal of invasive species and the use of pollinator supportive seed mix post-construction. Our crews are always on the lookout for turtles and their eggs. We have even created ponds to release turtles that have incubated and hatched during projects. We use a variety of controls such as orange silt fencing instead of the traditional black to better see our amphibian friends and denote environmentally sensitive areas. In the fall of 2023, we released 56 turtle hatchlings back into natural wetland habitats after the juveniles were rescued as eggs along the path of the Mid-Michigan Pipeline Project. The turtles came from eggs of adult females that were safely removed from the pipeline path throughout the course of the summer and were incubated and nurtured by our partner, Herpetological Resource and Management (HRM).

UNESCO World Heritage sites

(11.4.1) Indicate whether any of your organization's activities are located in or near to this type of area important for biodiversity

Select from:

☑ No

(11.4.2) Comment

N/A

UNESCO Man and the Biosphere Reserves

(11.4.1) Indicate whether any of your organization's activities are located in or near to this type of area important for biodiversity

Select from:

☑ No

(11.4.2) Comment

N/A

Ramsar sites

(11.4.1) Indicate whether any of your organization's activities are located in or near to this type of area important for biodiversity

Select from:

☑ No

(11.4.2) Comment

N/A

Key Biodiversity Areas

(11.4.1) Indicate whether any of your organization's activities are located in or near to this type of area important for biodiversity

Select from:

☑ Yes

(11.4.2) Comment

We take biodiverse-rich wetlands, including prairie fens, into consideration before performing construction to minimize impact and avoid these sensitive areas. We use sustainable construction practices that we continue to adopt and enhance during projects as appropriate: 1) Herpetofauna training for major projects and Low

Effect Habitat Conservation Plan (LEHCP); 2) Use of wildlife-safe barrier fencing; 3) Construction site walking and protected species removal away from construction areas; 4) Coconut leno weave blankets, which biodegrade naturally; 5) Rerouting projects to avoid habitat loss; 6) Seed banking of native plants along right of ways prior to construction for some areas with threatened and endangered plants; 7) Invasive species control, which helps native species flourish; 8) Invasive species monitoring and removal during and post construction.

Other areas important for biodiversity

(11.4.1) Indicate whether any of your organization's activities are located in or near to this type of area important for biodiversity

Select from:

☑ Yes

(11.4.2) Comment

We target non-residential, non-wetland upland habitat for our pollinator restoration program. We know how important pollinators are for the environment and society. At Consumers Energy, we focus on planting pollinator supportive seed mix to restore land, where applicable. On the Saginaw Pipeline Project, an effort to replace 78 miles of aging natural gas transmission pipeline in Saginaw, Genesee and Oakland counties, we used a seed mix containing native grasses and wildflowers to attract bees, butterflies and other pollinators losing their habitat across the country. We have planted more than 2,000 acres of pollinator-supportive habitat since 2018. We also partnered with the U.S. Fish and Wildlife Service to join the Monarch Candidate Conservation Agreement with Assurances (CCAA). The CCAA is a program that relies on land surveys and adaptive land management strategies to help restore monarch habitats and grow the monarch population, which has slowly declined for years. We have enrolled over 259,000 acres in the CCAA program, which includes land around electric and gas distribution and transmission lines, service centers and dams.
[Fixed row]

(11.4.1) Provide details of your organization’s activities in the reporting year located in or near to areas important for biodiversity.

Row 1

(11.4.1.2) Types of area important for biodiversity

Select all that apply

☑ Legally protected areas

☑ Key Biodiversity Areas

☑ Other areas important for biodiversity

(11.4.1.3) Protected area category (IUCN classification)

Select from:

☑ Unknown

(11.4.1.4) Country/area

Select from:

☑ United States of America

(11.4.1.5) Name of the area important for biodiversity

Our service territory for natural gas and electricity spans all 68 Lower Peninsula counties in Michigan. Many of our activities occur in or adjacent to areas that are considered important for biodiversity.

(11.4.1.6) Proximity

Select from:

☑ Overlap

(11.4.1.7) Area of overlap (hectares)

0

(11.4.1.8) Briefly describe your organization’s activities in the reporting year located in or near to the selected area

Activities include construction of new or replacement of existing natural gas pipelines, the addition or replacement of distribution lines, and the development of new energy generation facilities.

(11.4.1.9) Indicate whether any of your organization’s activities located in or near to the selected area could negatively affect biodiversity

Select from:

☑ Yes, but mitigation measures have been implemented

(11.4.1.10) Mitigation measures implemented within the selected area

Select all that apply

☑ Scheduling

☑ Restoration

☑ Site selection

☑ Project design

☑ Physical controls

☑ Abatement controls

☑ Operational controls

(11.4.1.11) Explain how your organization’s activities located in or near to the selected area could negatively affect biodiversity, how this was assessed, and describe any mitigation measures implemented

Consumers Energy has a wide variety of activities located in or near sensitive areas. We use the Environmental Review Checklist (ERC), a process that ensures Consumers Energy maintains compliance with environmental laws and regulations, reduces its environmental footprint, and where possible, enhances the environmental quality during operational projects. All projects impacting the environment are required to complete an ERC prior to implementation. This allows for projects to be designed with the environment in mind and provides a mechanism to maintain compliance with environmental law. The ERC is managed by our Environmental Quality and Sustainability Department who uses this tool to robustly evaluate projects and offer solutions. This process uses a best-practice hierarchy approach for each unique project to minimize disturbance to the environment by first assessing the habitat and working with our engineers to determine if disruption avoidance is possible. Where avoidance is not possible, we then focus on minimizing the disturbance. We look to leave the environment better than we found it where possible. This is accomplished by working with experts to prioritize the biodiversity needs of a specific location and find value-added opportunities during the ERC review and recommendation process. For example, we frequently work with a bat habitat and conservation expert in Michigan to identify bat roosting trees. We also remove trees in the winter months when bats don’t inhabit them prior to spring construction. To expand environmental consideration in large projects we have also started a program to introduce sustainable construction practices at the beginning of projects.

[Add row]

C13. Further information & sign off

(13.1) Indicate if any environmental information included in your CDP response (not already reported in 7.9.1/2/3, 8.9.1/2/3/4, and 9.3.2) is verified and/or assured by a third party?

	Other environmental information included in your CDP response is verified and/or assured by a third party	Primary reason why other environmental information included in your CDP response is not verified and/or assured by a third party	Explain why other environmental information included in your CDP response is not verified and/or assured by a third party
	Select from: ☑ No, and we do not plan to obtain third-party verification/assurance of other environmental information in our CDP response within the next two years	*Select from:* ☑ Not an immediate strategic priority	*Not an immediate strategic priority*

[Fixed row]

(13.3) Provide the following information for the person that has signed off (approved) your CDP response.

(13.3.1) Job title

Executive Director, Environmental Quality and Sustainability

(13.3.2) Corresponding job category

Select from:

☑ Other, please specify

[Fixed row]