CMS Energy Corporation - Climate Change 2022

C0. Introduction

C0.1

(C0.1) Give a general description and introduction to your organization.

CMS Energy Corporation (CMS Energy) is an energy company operating primarily in the State of Michigan, USA. It is the parent holding company of several subsidiaries, including its principal subsidiary, Consumers Energy Company (Consumers Energy), an electric and natural gas utility, and CMS Enterprises Company (CMS Enterprises), primarily a domestic independent power producer and marketer. Consumers Energy's electric utility operations include the generation, purchase, distribution, and sale of electricity, and its gas utility operations include the purchase, transmission, storage, distribution, and sale of natural gas. Consumers Energy serves about 6.8 million of Michigan's 10 million residents. CMS Enterprises, through its subsidiaries and equity investments, is engaged in domestic independent power production, including the development and operation of renewable generation, and the marketing of independent power production. CMS Energy was also the parent holding company of EnerBank USA® (EnerBank) until October 1, 2021 when EnerBank was acquired by Regions Bank.

This CMS Energy report includes information, unless specifically noted, for Consumers Energy and CMS Enterprises (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 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.

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.

C0.2

(C0.2) State the start and end date of the year for which you are reporting data.

	Start date	End date	Indicate if you are providing emissions data for past reporting years	Select the number of past reporting years you will be providing emissions data for
Reporting year	January 1 2021	December 31 2021	No	<Not Applicable>

C0.3

(C0.3) Select the countries/areas in which you operate.

United States of America

C0.4

(C0.4) Select the currency used for all financial information disclosed throughout your response.

USD

C0.5

(C0.5) Select the option that describes the reporting boundary for which climate-related impacts on your business are being reported. Note that this option should align with your chosen approach for consolidating your GHG inventory.

Financial control

C-EU0.7

(C-EU0.7) Which part of the electric utilities value chain does your organization operate in? Select all that apply.

Row 1

Electric utilities value chain

Electricity generation
Transmission
Distribution

Other divisions

Gas storage, transmission and distribution
Smart grids / demand response
Battery storage

C0.8

(C0.8) Does your organization have an ISIN code or another unique identifier (e.g., Ticker, CUSIP, etc.)?

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

C1. Governance

C1.1

(C1.1) Is there board-level oversight of climate-related issues within your organization?

Yes

C1.1a

(C1.1a) Identify the position(s) (do not include any names) of the individual(s) on the board with responsibility for climate-related issues.

Position of individual(s)	Please explain
Director on board	The Board of Directors (Board) made up of a number of directors with experience and knowledge of environmental issues, has the highest level of oversight of our public responsibility and sustainability practices. Review of these practices occurs at the Board level on a quarterly basis with the Governance, Sustainability and Public Responsibility Committee (GS&PR Committee) also being responsible for advising and assisting the Board with respect to our public responsibility and sustainability matters. The GS&PR committee consists of three board members. An example of climate-related decisions made by the Board include the review and approval of the 2021 Integrated Resource Plan (IRP) update. In addition to Board oversight, management of CMS Energy and Consumers Energy has implemented an Environmental and Sustainability Council (E&SC) to create a group of critical internal leaders who will work together to ensure our actions meet our environmental goals. The CEO who is also a Board member sits on the E&SC. Additionally, information covered in the E&SC is reported to the GS&PR Committee as appropriate. Examples of climate-related decisions made by the E&SC include Consumers Energy's 2019 net zero methane emissions goal by 2030 that is integrated into our Natural Gas Delivery plan on file with the MPSC. Additionally, in 2020 the E&SC also approved Consumers Energy's net-zero carbon emissions goal by 2040 for our electric generation.

C1.1b

(C1.1b) Provide further details on the board's oversight of climate-related issues.

Frequency with which climate-related issues are a scheduled agenda item	Governance mechanisms into which climate-related issues are integrated	Scope of board-level oversight	Please explain
Scheduled – some meetings	Reviewing and guiding strategy Reviewing and guiding major plans of action Reviewing and guiding risk management policies Reviewing and guiding annual budgets Reviewing and guiding business plans Setting performance objectives Monitoring implementation and performance of objectives Overseeing major capital expenditures, acquisitions and divestitures Monitoring and overseeing progress against goals and targets for addressing climate-related issues	<Not Applicable>	On a quarterly basis, the Board and GS&PR Committee review sustainability items including climate related issues. Management and our Board consider sustainability regularly in their decision making. The 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.

C1.1d

(C1.1d) Does your organization have at least one board member with competence on climate-related issues?

	Board member(s) have competence on climate-related issues	Criteria used to assess competence of board member(s) on climate-related issues	Primary reason for no board-level competence on climate-related issues	Explain why your organization does not have at least one board member with competence on climate-related issues and any plans to address board-level competence in the future
Row 1	Yes	Three or more years in a supervisory capacity, oversight role, consultation role or operating responsibility within the last ten years in the Sustainability and Environmental field.	<Not Applicable>	<Not Applicable>

C1.2

(C1.2) Provide the highest management-level position(s) or committee(s) with responsibility for climate-related issues.

Name of the position(s) and/or committee(s)	Reporting line	Responsibility	Coverage of responsibility	Frequency of reporting to the board on climate-related issues
Chief Executive Officer (CEO)	<Not Applicable>	Both assessing and managing climate-related risks and opportunities	<Not Applicable>	Quarterly
President	<Not Applicable>	Both assessing and managing climate-related risks and opportunities	<Not Applicable>	Quarterly
Environment/ Sustainability manager	<Not Applicable>	Both assessing and managing climate-related risks and opportunities	<Not Applicable>	Quarterly

C1.2a

(C1.2a) Describe where in the organizational structure this/these position(s) and/or committees lie, what their associated responsibilities are, and how climate-related issues are monitored (do not include the names of individuals).

The GS&PR Committee (a committee of the Board of Directors) reviews sustainability and climate change items 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 respects to sustainability matters as appropriate.

In addition to Board oversight, in 2018 management implemented an E&SC, which is a group of critical internal leaders who will work together to ensure our actions match our environmental goals and discuss climate related issues.

A risk committee also exists that works with our Environmental Quality & Sustainability Department to assess risks associated with climate related issues. Additionally, the Company has personnel responsible for sustainability that work across the Company to identify and address climate-related issues.

C1.3

(C1.3) Do you provide incentives for the management of climate-related issues, including the attainment of targets?

	Provide incentives for the management of climate-related issues	Comment
Row 1	Yes	

C1.3a

(C1.3a) Provide further details on the incentives provided for the management of climate-related issues (do not include the names of individuals).

Entitled to incentive	Type of incentive	Activity incentivized	Comment
Corporate executive team	Monetary reward	Emissions reduction target	To achieve Consumers Energy's 2030 net-zero goal, the need exists to reduce fugitive methane emissions associated with natural gas distribution. Replacement of vintage mains and services, etc. reduces the amount of methane emitted to the environment. Consumers Energy utilizes emission factors provided by the US Environmental Protection Agency to determine its overall emissions. 2021 target was to reduce emissions by ≥ 422 metric tons. This goal impacts the bonuses for all non-exempt and exempt employees, including the executive team.

C2. Risks and opportunities

C2.1

(C2.1) Does your organization have a process for identifying, assessing, and responding to climate-related risks and opportunities?

Yes

C2.1a

(C2.1a) How does your organization define short-, medium- and long-term time horizons?

	From (years)	To (years)	Comment
Short-term	1	5	
Medium-term	5	10	
Long-term	10	30	

C2.1b

(C2.1b) How does your organization define substantive financial or strategic impact on your business?

Financial and strategic impact is defined as the cost of mitigating impacts to earnings and operating cash flow either through direct expense or with long term strategic initiatives that shape business decisions and direction of growth for the Company. Impacts are quantified into 5 categories (i.e., manageable, moderate, major, severe, and catastrophic) which are quantified via a combination of financial (e.g., capital expense, O&M, etc.) and reputational (e.g., media, customer and investor impacts, duration of event, etc.) indicators. The level of response and mitigative measures (e.g., planning, resources, etc.) are determined by the risk category.

C2.2

(C2.2) Describe your process(es) for identifying, assessing and responding to climate-related risks and opportunities.

Value chain stage(s) covered
Direct operations
Upstream
Downstream

Risk management process
Integrated into multi-disciplinary company-wide risk management process

Frequency of assessment
More than once a year

Time horizon(s) covered
Short-term
Medium-term
Long-term

Description 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 facility-specific risk identification and response planning. Management of climate risks is embedded across our ongoing processes and includes consulting with experts, 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 stakeholder communication (customers, energy responders, community members, investors, 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, Board oversight, leadership reviews including the E&SC. As mentioned above, this is a circular and continuous process, once the implementation step is complete the next step goes back to stakeholder communication. 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.

C2.2a

(C2.2a) Which risk types are considered in your organization's climate-related risk assessments?

	Relevance & inclusion	Please explain
Current regulation	Relevant, always included	Current regulations, statutes, litigation and legislation that address greenhouse gas (GHG) emissions are always taken into consideration when evaluating current risks related to operations including the determination of the appropriate level of controls to maintain compliance. For example, The U.S. Environmental Protection Agency (EPA) is considering revising the Clean Air Act Section 111 rule, which governs greenhouse gas emissions from electric generating units. The Company will continue to monitor any proposals to the rule for compliance issues.
Emerging regulation	Relevant, always included	Emerging regulations, statutes, litigation and legislation that address GHG emissions are always taken into consideration when evaluating future risks related to operations and our electric generation and gas delivery strategies. For example, future policy to reduce GHG emissions through either a cap-and-trade scheme or carbon fee or tax with an aggressive schedule may result in increased compliance costs. This risk is currently being managed through participation in both legislative and regulatory policy development, by strategy development, and by monitoring the development of control options through participation with industry research affiliations.
Technology	Relevant, always included	Changes in technology and availability of technology can impact current and future operational plans and therefore are always assessed for risk and impact. For example, federal regulations such as the New Source Performance Standard (NSPS) for new Electric Generating Units (EGUs) require a minimum performance standard for new electric generation facilities. The Company's current strategy does not anticipate construction of any new EGUs subject to this NSPS. However, if it did, future capacity planning must account for costs associated with the accompanying design/performance requirements.
Legal	Relevant, always included	The Company always strives to maintain compliance with all laws, orders and regulations, as well as relevant court decisions. This is taken into consideration when evaluating risks associated with GHG generation. For example, federal regulations such as the New Source Performance Standard (NSPS) for new Electric Generating Units (EGUs) require a minimum performance standard for new electric generation facilities. The Company's current strategy does not anticipate construction of any new EGUs subject to this NSPS. However, if it did, future capacity planning must account for costs associated with the accompanying design/performance requirements.
Market	Relevant, always included	Understanding the market changes and new demands is critical for managing future and current risks to business success and sustainability. For example, from an investment community perspective, including select banks, there is typically some form of coal exclusion criteria. Passive investors, such as index funds, that focus on Environmental, Social, and Governance (ESG) typically have a 5% coal threshold (i.e., MSCI ESG Leaders Index). Additionally, on the gas side of the business, market opportunities for company investments exist including access to voluntary carbon markets.
Reputation	Relevant, always included	How the Company is perceived by its stakeholders can have a large impact on its ability to operate and grow through access to capital funds. For example, from an investment community perspective, including select banks, there is typically some form of coal exclusion criteria. Passive investors, such as index funds, that focus on ESG typically have a 5% coal threshold (i.e., MSCI ESG Leaders Index). Additionally, our reputation with our customers is very important. If customers do not feel that we are sufficiently providing reliable energy or that we do not align with their values, they may choose to invest in energy solution products and services outside of our Company's offerings.
Acute physical	Relevant, always included	Acute risks that are event-driven, including increased severity or extreme weather events, can increase operational and maintenance costs and are therefore included when assessing Company risks. For example, snow, freezing rain, and ice accumulation, and strong winds from more frequent or severe storms, may compromise infrastructure by damaging distribution system equipment. Additionally, ice accumulation on wind turbine blades may also impact electricity generation. Similarly, increased flooding may damage infrastructure and impact distribution systems and hydroelectric facilities.
Chronic physical	Relevant, always included	Chronic risks including longer-term shifts in climate patterns can impact current and future capacity planning and infrastructure. For example, variations in Great Lakes and inland water levels may result in increased infrastructure and maintenance activities as well as fuel supply issues.

C2.3

(C2.3) Have you identified any inherent climate-related risks with the potential to have a substantive financial or strategic impact on your business?
Yes

C2.3a

(C2.3a) Provide details of risks identified with the potential to have a substantive financial or strategic impact on your business.

Identifier
Risk 1

Where in the value chain does the risk driver occur?
Direct operations

Risk type & Primary climate-related risk driver

Emerging regulation	Mandates on and regulation of existing products and services

Primary potential financial impact
Increased indirect (operating) costs

Climate risk type mapped to traditional financial services industry risk classification
<Not Applicable>

Company-specific description
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, or a ban or restrictions on natural gas usage in residential, commercial and or industrial applications.

Time horizon
Short-term

Likelihood
Unlikely

Magnitude of impact
High

Are you able to provide a potential financial impact figure?
Yes, an estimated range

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure – minimum (currency)
15000000

Potential financial impact figure – maximum (currency)
45000000

Explanation of financial impact figure
Future regulatory and/or cap and trade programs or carbon fees or tax could have an impact on the cost of electric generation from fossil fuels due to spending on emission allowance purchases or carbon fees or tax for compliance, or the capital cost of additional equipment. Such polices applied to our natural gas operations may present challenges with agility to respond. While it is challenging to predict costs for these future possibilities, we have estimated the potential risks of a methane fee proposal that Congress has discussed. Among other provisions, the Build Back Better Act includes a charge on methane emissions from selected entities in the oil and gas industry. The charge would apply only to methane emissions from specific types of facilities that are required to report their GHG emissions to the EPA. The charge would start at $900 per metric ton of methane, increasing to $1,500 after two years, which equates to $36 and $60 per metric ton of CO2e, respectively. If enacted, this charge would be the first time the federal government would directly impose a charge, fee, or tax on GHG emissions. We have estimated the additional monetary impact the proposed methane fee would have on upstream suppliers that would likely be passed onto Consumers Energy (CE). The analysis was based on the quantity of natural gas CE delivered in 2019. It ranged from ≈$15M in 2023 to ≈$23M in 2025 and beyond. In addition, CE recognizes that carbon pricing has the potential to significantly impact utility costs for electric generation and thus decided it would be prudent to include a carbon risk analysis as part of the 2021 IRP which included a low, moderate, and high price on carbon. Such evaluations are used in Integrated Resource Planning and used to develop a future resource portfolio that is robust enough to serve CE's full-service electric customer demand during all hours, 365 days per year, stands up to potential significant increases in electric demand, delivers on generation diversity, and provides less financial risk to customers. This analysis showed that the CE's Clean Energy Plan, which retires all CE coal-fired generation by the year 2025, has a narrower range of impacts from the three carbon price forecasts evaluated. The high carbon price forecast under the plan incurs more than $22B NPV in utility costs across 20 years. Under the application of the base level carbon price forecast, the Plan incurs more than $19B NPV in utility costs.

Cost of response to risk
0

Description of response and explanation of cost calculation
Consumers Energy's anticipated clean energy investment from 2022-2026 is ~40% of our total $14.3 billion capital plan which is about $5,500,000,000. This includes investments in renewables, hydro, grid modernization, grid storage, conservation voltage reduction, solar interconnections, demand response (electric and gas), damage and leak renewals, enhanced infrastructure Replacement Program (EIRP), vintage service replacement, renewable natural gas, storage and other investments. Additionally, in 2021 the company spent 2.4M on two Picarro systems. In addition to the systems, the cost of the vehicles is about $40K each ($80K in total) and annual licensing fee is $60k per unit ($120K in total). External labor costs are about $550K a year assuming they are fully staffed and anticipated internal labor costs per year are about $336k (salaries). This totals to about $3,486,000.

Comment
We are assessing this on a short-term basis because it is an emerging regulatory scheme that we will continue to evaluate.

Identifier
Risk 2

Where in the value chain does the risk driver occur?
Direct operations

Risk type & Primary climate-related risk driver

Chronic physical	Precipitation and/or hydrological variability

Primary potential financial impact
Increased indirect (operating) costs

Climate risk type mapped to traditional financial services industry risk classification
<Not Applicable>

Company-specific description
CMS Energy in partnership with the Great Lakes Integrated Sciences and Assessments (GLISA) identified changing precipitation levels 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.

Time horizon
Short-term

Likelihood
About as likely as not

Magnitude of impact
Low

Are you able to provide a potential financial impact figure?
Yes, an estimated range

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure – minimum (currency)
1000000

Potential financial impact figure – maximum (currency)
50000000

Explanation of financial impact figure
Heavy rainfall that causes flooding poses an unlikely but potential threat to hydroelectric facilities and their surrounding communities. Given Michigan is expected to experience greater rainfall in the coming decades, this increase will potentially initiate two separate risks 1) inflow design change requirement or 2) resiliency to higher flood events on the structures. Minimum impact is based on maintenance impact of 10% increase and maximum impact is based on major repair or minor section replacement of one spillway.

Cost of response to risk
2000000

Description of response and explanation of cost calculation
We use risk-based methods to best allocate our efforts to reduce the likelihood of dam failure during high precipitation events. We are part of the Risk Informed Decision Making pilot study at the Alcona Dam on the Au Sable River, which is a ground-floor collaboration with FERC. In addition, we are complying with the new FERC Part 12D comprehensive assessments which require work annually that costs about $2,000,000 for all our facilities. Our resiliency measures also include collaboration with local emergency management authorities to ensure public safety. Our hydroelectric team develops and maintains an EAP for each dam, consistent with federal requirements. Each EAP identifies potential emergencies, response and evacuation plans, public warnings and call down charts for staff and emergency responders. Maps of vulnerable areas are also included. Hydro-generation teams hold practice drills to familiarize responders with their roles in the event of dam failures, which is in addition to annual in-person training. Through these efforts, we keep our dams and communities safe.

Comment

Identifier
Risk 3

Where in the value chain does the risk driver occur?
Direct operations

Risk type & Primary climate-related risk driver

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

Primary potential financial impact
Increased indirect (operating) costs

Climate risk type mapped to traditional financial services industry risk classification
<Not Applicable>

Company-specific description
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 participation, there may be a greater frequency of freezing rain , increasing the potential for electric outages. GLISA does not currently provide freezing rain projections. However, 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. Alternative future emissions scenarios are not currently available in the models GLISA uses. Projections reflect mid-century (2040-59) changes relative to trends from 1980-1999. Severe Storm and Wind Gust Projections GLISA also predicts that the frequency and intensity of severe storms may continue as the effects of climate change become more pronounced. However, since climate models do not simulate highly localized wind gusts, uncertainty remains. We expect stronger winds to coincide with more intense storms.

Time horizon
Short-term

Likelihood
About as likely as not

Magnitude of impact
Low

Are you able to provide a potential financial impact figure?
Yes, a single figure estimate

Potential financial impact figure (currency)
580000000

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
Severe storms, including wind gusts and freezing rain, could pose a significant threat to our electric infrastructure. We anticipate to spend $480 million on storm restoration from 2022-2026. Additionally, we've increased our investment in forestry 60% since 2018, which will directly help reduce outages. We use premium materials (i.e., tree wire and aerial spacer cables) to increase electrical wire resiliency and help mitigate tree-caused outages. We also propose dedicating more than $100 million a year to forestry through 2025. Our poles are built to withstand Michigan wind speeds and aging poles and wires are inspected yearly and replaced as needed. Forestry efforts to clear trees from our lines and poles are shown to significantly reduce the number of outages for at least five years following the clearing. Clearing our infrastructure also speeds restoration times by improving access for crews.

Cost of response to risk
1684000000

Description of response and explanation of cost calculation
We anticipate to spend $1.684 billion on grid reliability between 2022-2026.

Comment

Identifier
Risk 4

Where in the value chain does the risk driver occur?
Direct operations

Risk type & Primary climate-related risk driver

Chronic physical	Heat stress

Primary potential financial impact
Increased indirect (operating) costs

Climate risk type mapped to traditional financial services industry risk classification
<Not Applicable>

Company-specific description
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 IPCC, in its 2021 Sixth Assessment Report, projects global temperatures will rise between 2.9°F to 4.3°F by mid-century compared to the 1850-1900 preindustrial period. Those same climate models project a global average temperature increase of 2.5°F to 7.9°F 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 4°F by mid-century compared to the 1850 to 1900 period. In addition, the number of days in Lower Michigan reaching more than 90°F by mid-century is projected to increase by 19 days. GLISA also projects six more days reaching more than 100°F by mid-century, with more occurring in the southern half of Michigan's Lower Peninsula. This trend could increase electricity demand, including air conditioning.

Time horizon
Short-term

Likelihood
Unlikely

Magnitude of impact
Low

Are you able to provide a potential financial impact figure?
Yes, a single figure estimate

Potential financial impact figure (currency)
816000000

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
From 2022 through 2026, our approximate investment allocation to grid demand failures is $816 million.

Cost of response to risk
268100000

Description of response and explanation of cost calculation
In addition to hardening our electric distribution system, we've prepared for increased electricity demand that results from higher temperatures, the transition to electric vehicles and other emergent and growing needs. The most significant demands on our grid's capacity are on extreme temperature days when home and commercial air conditioning use is highest. We prepare for these demands through our natural gas delivery plan and electric distribution plan. We submit long-term electric supply plans to the MPSC every three years, which is frequent enough to allow us to adapt to changing electric demands like those due to climate change. Our customer energy efficiency

and demand response programs are key elements of our Clean Energy Plan, which will help us reduce electric demand on the hottest days of the year. These programs reward customers and businesses who reduce energy when demand is at its highest – such as on high-heat days and between 10 a.m. and 7 p.m. during the summer. Given extreme heat days have increased, likely due to climate change, and are projected to increase more in the future, they are an important tool in our climate resiliency strategy. These programs to reduce peak demand also include working with customers to reduce energy use through rebates for energy-efficient purchases, conducting at-home energy efficiency assessments and providing, free or reduced cost, energy efficient items like LED lightbulbs and smart thermostats that help customers lower their energy use during peak demand. In 2021, the Company's electric Energy Waste Reduction (EWR) Plan spending was approximately $160.7 million. The Company's natural gas EWR Plan spending was approximately $69.3 million in 2021. This totals to approximately $230 million spent on the EWR plan in 2021. Additionally, in 2021, the Company spent $38.1 million on demand response. Comment

Comment

Identifier
Risk 5

Where in the value chain does the risk driver occur?
Downstream

Risk type & Primary climate-related risk driver

Reputation	Increased stakeholder concern or negative stakeholder feedback

Primary potential financial impact
Decreased access to capital

Climate risk type mapped to traditional financial services industry risk classification
<Not Applicable>

Company-specific description
Consumers Energy's efforts to mitigate climate change through policies and practices can affect the perception of our Company. If our reputation is damaged due to inadequate efforts surrounding climate change this may reduce our appeal in the investment community.

Time horizon
Short-term

Likelihood
Unlikely

Magnitude of impact
Medium-low

Are you able to provide a potential financial impact figure?
Yes, an estimated range

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure – minimum (currency)
0

Potential financial impact figure – maximum (currency)
1000000000

Explanation of financial impact figure
There is a growing concern for investing in companies that address environmental issues such as climate change. For instance, from an investment community perspective, including select banks, there is typically some form of coal exclusion criteria. Passive investors, such as index funds, that focus on ESG typically have a 5% coal threshold (i.e. MSCI ESG Leaders Index). Utility investors, who focus primarily on the sector, are carefully evaluating utilities to ensure compliance with current regulations , as well as the goals set by the Paris Climate Agreement, and future mandates. Over time, the sentiment will continue to evolve and will likely move toward a binary yes/no investment decision on utilities that still own coal, which could put customer's investments at risk. Over 50% of CMS Energy's common stock is owned by signatories of the United Nation's Principles for Responsible Investing which represents ~$10 billion of the Company's market capitalization today. We've estimated that if shareholders representing more than more than ~50% of our market cap were to value our coal assets at $0, this could represent a decrease of ~$1 billion in market capitalization presented above - creating up to 5% of volatility in trading of the stock and potentially decreasing our earnings power. It is important for our Company that investors are confident in our business now and in the future.

Cost of response to risk
350000

Description of response and explanation of cost calculation
To manage this risk the Company communicates its efforts surrounding climate change through public reporting. The Company uses its website as a tool to inform the public about its environmental efforts regarding climate change. Additionally, the Company discloses climate change information through its Securities and Exchange Commission (SEC) Form 10-K annual report as well as this response to the Carbon Disclosure Project (CDP), Climate Assessment Report, Climate Change Risk, Vulnerability, and Resiliency Report, annual Sustainability Report, and regular meetings with our investors. While it is challenging to calculate the full costs associated with all these efforts, the $350,000 disclosed above is the approximate collective annual salary of Consumers Energy's Sustainability Team who coordinates ESG disclosures. However, this is not reflective of all the work done by various departments throughout the Company.

Comment

Identifier
Risk 6

Where in the value chain does the risk driver occur?
Downstream

Risk type & Primary climate-related risk driver

Market	Changing customer behavior

Primary potential financial impact
Decreased revenues due to reduced demand for products and services

Climate risk type mapped to traditional financial services industry risk classification
<Not Applicable>

Company-specific description
Regulatory, physical, and other risks driven by climate change have the potential to impact the economy driving costs up for our business and our customers and consequently affecting customers' ability to pay bills.

Time horizon
Long-term

Likelihood
More likely than not

Magnitude of impact
Low

Are you able to provide a potential financial impact figure?
Yes, a single figure estimate

Potential financial impact figure (currency)
22000000

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
Higher energy costs could result in more households not being able to afford their energy bills. In 2021, the Company recorded an uncollectible accounts expense of $22 million.

Cost of response to risk
20062716.64

Description of response and explanation of cost calculation
To help reduce the amount of uncollectible payments, Consumers Energy provided funds to non-profit agencies and secured grants and other energy assistance from its customers through the Michigan Public Service Commission (MPSC). Additionally, Consumers Energy offers different payment plan options to its customers. In collaboration with community stakeholders, for example, Consumers Energy promotes energy assistance programs and in 2021contributed $20,062,716.64 to the Michigan Energy Assistance Program.

Comment

Identifier
Risk 7

Where in the value chain does the risk driver occur?
Direct operations

Risk type & Primary climate-related risk driver

Emerging regulation	Mandates on and regulation of existing products and services

Primary potential financial impact
Increased indirect (operating) costs

Climate risk type mapped to traditional financial services industry risk classification
<Not Applicable>

Company-specific description
Future regulation to reduce GHG emissions may result in increased compliance costs. Policies could include direct regulation involving market based emission allowances such as the EPA’s proposed Good Neughbor Rule. This is expected to impact our owned fossil fuel generation including coal, natural gas, and oil.

Time horizon
Short-term

Likelihood
Likely

Magnitude of impact
Medium

Are you able to provide a potential financial impact figure?
Yes, a single figure estimate

Potential financial impact figure (currency)
17000000

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
TES Filer City, a CMS Enterprises facility NOx ozone season credits cost $40K/ton in (2022 market) which is projected to be around $17 Million in costs to the Company.

However, this is an estimate and the cost will fluctuate based on market changes. This is a continuing cost for the plant until its projected retirement in 2025.

Cost of response to risk
17000000

Description of response and explanation of cost calculation
The only costs associated with this risk including risk mitigation is the purchase of credits which is an estimated 17M at current projected need and current market value. There is no other cost (i.e. installation of control technology, etc.).

Comment
Much of this risk is based on the uncertainty generated in the ozone allowance market based on EPA's proposed Good Neighbor Rule. This rule is expected to be finalized in January 2023 and the final rule will either reduce allowance market uncertainty or increase it.

C2.4

(C2.4) Have you identified any climate-related opportunities with the potential to have a substantive financial or strategic impact on your business?
Yes

C2.4a

(C2.4a) Provide details of opportunities identified with the potential to have a substantive financial or strategic impact on your business.

Identifier
Opp1

Where in the value chain does the opportunity occur?
Direct operations

Opportunity type
Energy source

Primary climate-related opportunity driver
Use of lower-emission sources of energy

Primary potential financial impact
Returns on investment in low-emission technology

Company-specific description
Efficiency standards for electric generation provide an opportunity to invest in our current generating fleet or to retire and build new low to zero carbon emitting sources. As a regulated utility, Consumers Energy recovers a rate of return on investments in infrastructure which includes required emission control equipment or new generation equipment.

Time horizon
Medium-term

Likelihood
Very likely

Magnitude of impact
Medium-low

Are you able to provide a potential financial impact figure?
Yes, a single figure estimate

Potential financial impact figure (currency)
5500000000

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
The potential impact of product efficiency opportunities is dependent upon the stringency of the federal policy. Because these are case specific applications for our generating assets, it is not possible to determine a monetary value without assessing each application. However, the Company's anticipated clean energy investment from 2022-2026 is ~40% of our total $14.3 billion capital plan. I This includes investments in renewables, hydro, grid modernization, grid storage, conservation voltage reduction, solar interconnections, demand response (electric and gas), damage and leak renewals, enhanced infrastructure Replacement Program (EIRP), vintage service replacement, renewable natural gas, storage and other investments.

Cost to realize opportunity
5500000000

Strategy to realize opportunity and explanation of cost calculation
Consumers Energy's anticipated clean energy investment from 2022-2026 is ~40% of our total $14.3 billion capital plan which is about $5,500,000,000. This includes investments in renewables, hydro, grid modernization, grid storage, conservation voltage reduction, solar interconnections, demand response (electric and gas), damage and leak renewals, enhanced infrastructure Replacement Program (EIRP), vintage service replacement, renewable natural gas, storage and other investments.

Comment

Identifier
Opp2

Where in the value chain does the opportunity occur?
Direct operations

Opportunity type
Products and services

Primary climate-related opportunity driver
Development of climate adaptation, resilience and insurance risk solutions

Primary potential financial impact
Other, please specify (Returns on investment in energy reliability)

Company-specific description
Snow and ice from more frequent or severe storms may compromise infrastructure by damaging our distribution system equipment. There may be new investment opportunities associated with the solutions to these problems, such as, for example, system hardening investments. As a regulated utility, we have the opportunity to earn a return on investment on these capital investments.

Time horizon
Short-term

Likelihood
Very likely

Magnitude of impact
Medium-high

Are you able to provide a potential financial impact figure?
Yes, a single figure estimate

Potential financial impact figure (currency)
31700000000

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
The deployment of a complete electric underground distribution system would roughly cost around $31.7 billion. This is based on an adjusted line mileage of 56,676 miles of electric underground lines at a rough cost of $561,000 per mile.

Cost to realize opportunity
209000000

Strategy to realize opportunity and explanation of cost calculation
Consumers Energy spends an average of $209 million a year on grid reliability. This number reflects an average from 2017-2021.

Comment

Identifier
Opp3

Where in the value chain does the opportunity occur?
Direct operations

Opportunity type
Products and services

Primary climate-related opportunity driver
Development and/or expansion of low emission goods and services

Primary potential financial impact
Increased revenues through access to new and emerging markets

Company-specific description
Positive perceptions driven by our response to climate change may increase the appeal of our business by our customers.

Time horizon
Short-term

Likelihood
More likely than not

Magnitude of impact
Low

Are you able to provide a potential financial impact figure?
Yes, a single figure estimate

Potential financial impact figure (currency)
7000000

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
$7 million was realized from customer payments due to Consumers Energy's voluntary green pricing (VGP) programs including solar gardens, large customer renewable

energy program, green generation, and the renewable energy credit pilot in 2021.

Cost to realize opportunity
590089

Strategy to realize opportunity and explanation of cost calculation
Total VGP Program marketing, administration, and research costs total to $590,089.

Comment

C3. Business Strategy

C3.1

(C3.1) Does your organization's strategy include a transition plan that aligns with a 1.5°C world?

Row 1

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

Publicly available transition plan
Yes

Mechanism by which feedback is collected from shareholders on your transition plan
We have a different feedback mechanism in place

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.

Frequency of feedback collection
More frequently than annually

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

Explain why your organization does not have a transition plan that aligns with a 1.5°C world and any plans to develop one in the future
<Not Applicable>

Explain why climate-related risks and opportunities have not influenced your strategy
<Not Applicable>

C3.2

(C3.2) Does your organization use climate-related scenario analysis to inform its strategy?

	Use of climate-related scenario analysis to inform strategy	Primary reason why your organization does not use climate-related scenario analysis to inform its strategy	Explain why your organization does not use climate-related scenario analysis to inform its strategy and any plans to use it in the future
Row 1	Yes, qualitative and quantitative	<Not Applicable>	<Not Applicable>

C3.2a

(C3.2a) Provide details of your organization's use of climate-related scenario analysis.

Climate-related scenario	Scenario analysis coverage	Temperature alignment of scenario	Parameters, assumptions, analytical choices
Transition scenarios: Customized publicly available transition scenario	Company-wide	1.5ºC	Consumers Energy (CE) utilizes a capacity expansion model called "Aurora". CE is required by the MPSC to evaluate an Environmental Policy scenario (EPS) that assumes climate policies are in place that constrain production from carbon emitting resources. The requirements of this scenario are to reduce or cap carbon production serving CE's service territory by 30% from 2005 levels by the year 2030 and 50% from 2005 levels by the year 2030. Many variables/assumptions were used to perform these analyses, including but not limited to natural gas price forecast (assumption: fuel price forecasts remain at similar levels to BAU AEO), demand and energy forecast (assumption: Modelled at a level equivalent to a 50/50 forecast and consistent with BAU AEO), and technological advancement (assumption: Technological advancement and economies of scale result in a greater potential for demand response. The time horizon evaluated was 1/12/2020-12/31/2040. These assessments have informed the IRP. The IRP proposed course of action exceeds the targets of the Carbon Reduction scenario and the MI Healthy Climate Plan. It also exceeds the carbon reduction targets of the Intergovernmental Panel on Climate Change's 1.5 degree scenario, which calls for a 40-60% reduction by 2030; the plan reduces carbon emission approximately 60% by 2025 from a 2005 baseline.

C3.2b

(C3.2b) Provide details of the focal questions your organization seeks to address by using climate-related scenario analysis, and summarize the results with respect to these questions.

Row 1

Focal questions

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 our business by 2050. Analysis of different resource mixes, including the retirement of existing fossil resources and acquisition and construction of new resources, under climate-related scenario analysis, allows the Company 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 Company analyses options under multiple scenario and sensitivities, including evaluation of different levels of electric demand to ensure that the Proposed Course of Action 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.

Results of the climate-related scenario analysis with respect to the focal questions

Under the climate-related scenario analysis of the Environmental Policy and Carbon Reduction scenarios in the Company's most recent Integrated Resource Plan, 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. The Proposed Course of Action addresses both the climate-related scenarios as defined by the Michigan Public Service Commission, as well as the focal questions the Company was targeted to address such as a plan that represents progress towards the Company's 2040 net zero carbon decarbonization target as well as support and exceedance of state and federal climate targets. The Proposed Course of Action 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.

C3.3

(C3.3) Describe where and how climate-related risks and opportunities have influenced your strategy.

	Have climate-related risks and opportunities influenced your strategy in this area?	Description of influence
Products and services	Yes	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 our 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 the integrated resources plan which was approved in 2019 with a new plan proposed in 2021. Case Study Example: 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 a share of the energy associated with one of the Company'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.
Supply chain and/or value chain	Yes	Description: We acknowledge and understand 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 our 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, we are currently developing a concrete strategy to implement sustainability best practices into our supply chain management. We see a lot of opportunities to pursue developing such a strategy and plan as it will allow us to be a leader among our peers in sustainability. Completion Timeline: In 2021 internal subject matter experts with the support of senior leadership worked together to develop a sustainable supply chain strategy and plan. This plan is based off adopting best practices in supply chain management presented by environmental, social, and governance (ESG) rating organizations with implementation starting in 2022.
Investment in R&D	Yes	Description: The Company 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 the company at risk of not adapting new technology in a timely manner which could cost the Company from both a reputational and monetary standpoint. However, pursuing R&D also presents the Company 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 at EPRI and implemented through the Integrated Resource Plan. Time Horizons Covered by Strategy: Our low carbon products and service offerings are reviewed as a part of our IRP which was approved in 2019 with a new plan released in 2021 and approved in 2022. Case Study Example: Consumers Energy 2019 Clean Energy Plan calls for the build out of renewable solar resources through the use of a competitive solicitation process, which develops independent projects that then sell capacity and energy to the Company under a Power Purchase Agreement (PPA) as well as projects that are built and then transfer ownership to the Company. As a direct result of the 2019 Clean Energy Plan, Consumers Energy has executed contracts for future solar projects of over 1,200MW with commercial operation dates between 2023 and 2025.
Operations	Yes	Description: Physical risks of climate change such as more frequent and severe storms as well as changes in water levels presents 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. To date we have completed hardening our shoreline at DEK, JCW, JHC and LPS sites by adding needed rip rap to protect against storm surge. 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. Time Horizons Covered by Strategy: We have completed RIDM evaluation at Alcona dam to determine the size of an emergency spillway, which is planned to be constructed in 2027/2028 pending regulatory approval in design and permitting a new auxiliary spillway at Hardy dam that will be completed in 2025, initiating design of the spillway at Rogers dam which will start in 2023 and be constructed in 2027/2029, and have started design of spillway modifications at Hodenpyl dam that will be completed in 2028. Case Study Example: At JHC, we installed rip rap along the south jetty at the entrance of Pigeon Lake. We used larger stone than we would have previously to provide protection against wave run up that is expected to increase with changes in storm intensity. At JCW, we increased the size of the rip rap that was present on the shoreline, and we increased the extent of coverage to ensure longer term protection of the existing landfill slopes. At Hardy, we did not account for spill tube capacity in our spillway capacity sizing, resulting in additional capacity to pass a larger than PMF storm if one were to occur.

C3.4

(C3.4) Describe where and how climate-related risks and opportunities have influenced your financial planning.

	Financial planning elements that have been influenced	Description of influence
Row 1	Capital allocation	Description: Understanding climate-related risks and opportunities is vital in determining how to allocate capital. Consumers Energy's Integrated Resource Plan (IRP), which was approved by the Michigan Public Service Commission in 2019, is specifically designed to reduce climate risks posed by Consumers Energy. It has Consumers Energy retiring all coal-fired generation no later than 2040 and building only carbon-free generation in the future, including over 6,000 MW of solar and other carbon-free generation. This plan both reduces Consumers' climate-related risk and create an opportunity for investment by the Company. Similarly, Consumers Energy in June 2021 filed a new IRP that similarly calls for a large build out of solar energy – over 8,000 MW – and retires all Consumers Energy coal facilities by 2025. This new IRP was approved in 2022. Time Horizons Covered by Financial Planning: Our low carbon products and service offerings are reviewed as a part of the IRP which was released in 2019 and updated in 2021. Case Study: As part of the competitive solicitation process to build solar resources that came from the 2019 Energy Plan, Consumers Energy has an agreement with Calhoun Solar to purchase the capacity and energy associated with 140 MW of that project when it is constructed and goes into operation in 2022.

C3.5

(C3.5) In your organization's financial accounting, do you identify spending/revenue that is aligned with your organization's transition to a 1.5°C world?

No, but we plan to in the next two years

C4. Targets and performance

C4.1

(C4.1) Did you have an emissions target that was active in the reporting year?

Absolute target

C4.1a

(C4.1a) Provide details of your absolute emissions target(s) and progress made against those targets.

Target reference number
Abs 3

Year target was set
2020

Target coverage
Business activity

Scope(s)
Scope 1
Scope 3

Scope 2 accounting method
<Not Applicable>

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

Base year
2005

Base year Scope 1 emissions covered by target (metric tons CO2e)
20219000

Base year Scope 2 emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3 emissions covered by target (metric tons CO2e)
4999000

Total base year emissions covered by target in all selected Scopes (metric tons CO2e)
25218000

Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1
80

Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2
<Not Applicable>

Base year Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories)
20

Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes
100

Target year
2040

Targeted reduction from base year (%)
100

Total emissions in target year covered by target in all selected Scopes (metric tons CO2e) [auto-calculated]
0

Scope 1 emissions in reporting year covered by target (metric tons CO2e)
13766518

Scope 2 emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3 emissions in reporting year covered by target (metric tons CO2e)
3483770

Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)
17250288

% of target achieved relative to base year [auto-calculated]
31.5953366642874

Target status in reporting year
Underway

Is this a science-based target?
No, but we anticipate setting one in the next 2 years

Target ambition
<Not Applicable>

Please explain target coverage and identify any exclusions
In the past five years, CMS has created a cleaner, more sustainable energy future for the state by taking a leadership position in reducing air emissions, reducing water usage, saving landfill space, and boosting the amount of renewable energy supplied to customers. Consumers Energy's goal in 2018 was to meet Michigan's energy needs by reducing carbon emissions by 80% and no longer using coal to generate electricity 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 for all electric generation. This continued transformation to cleaner fuel sources is part of a long-term strategic commitment to protect the planet. The emissions reported for this target represent carbon (CO2) emissions (excluding biomass) from Consumers Energy owned and purchased power generation.

Plan for achieving target, and progress made to the end of the reporting year
Consumers expects to meet 90 percent of its electric customers' needs with clean energy sources by 2040 through execution of its Clean Energy Plan. Carbon offset measures including, but not limited to, carbon sequestration, methane emission capture, forest preservation, and reforestation may be used to close the gap to achieving net-zero carbon emissions.

List the emissions reduction initiatives which contributed most to achieving this target
<Not Applicable>

C4.2

(C4.2) Did you have any other climate-related targets that were active in the reporting year?
Target(s) to increase low-carbon energy consumption or production
Target(s) to reduce methane emissions
Net-zero target(s)
Other climate-related target(s)

C4.2a

(C4.2a) Provide details of your target(s) to increase low-carbon energy consumption or production.

Target reference number
Low 1

Year target was set
2016

Target coverage
Business activity

Target type: energy carrier
Electricity

Target type: activity
Production

Target type: energy source
Renewable energy source(s) only

Base year
2009

Consumption or production of selected energy carrier in base year (MWh)
1472

% share of low-carbon or renewable energy in base year
4

Target year
2021

% share of low-carbon or renewable energy in target year
15

% share of low-carbon or renewable energy in reporting year
15

% of target achieved relative to base year [auto-calculated]
100

Target status in reporting year
Achieved

Is this target part of an emissions target?
In 2016 the State of Michigan revised its renewable energy goal through legislation. The new program established renewable energy targets increasing to a 15% state-wide target by 2021.

Is this target part of an overarching initiative?
Other, please specify (State mandate)

Please explain target coverage and identify any exclusions
State mandate

Plan for achieving target, and progress made to the end of the reporting year
<Not Applicable>

List the actions which contributed most to achieving this target
Consumers Energy has continued to invest in renewable energy projects such as solar and wind, as well as secure power purchase agreements (including RECs) as part of its clean energy transition.

C4.2b

(C4.2b) Provide details of any other climate-related targets, including methane reduction targets.

Target reference number
Oth 1

Year target was set
2015

Target coverage
Business division

Target type: absolute or intensity
Absolute

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

Methane reduction target	Other, please specify (Consumers Energy has a five-year target to replace 3% of our vintage cast iron / unprotected steel distribution mains.)

Target denominator (intensity targets only)
<Not Applicable>

Base year
2016

Figure or percentage in base year
0

Target year
2021

Figure or percentage in target year
3

Figure or percentage in reporting year
18.92

% of target achieved relative to base year [auto-calculated]
630.666666666667

Target status in reporting year
Achieved

Is this target part of an emissions target?
Yes - In October 2019, Consumers set a goal of net-zero methane emissions from its natural gas delivery system by 2030.

Is this target part of an overarching initiative?
Other, please specify (EPA's voluntary Methane Challenge Program)

Please explain target coverage and identify any exclusions
Consumers Energy participates in the EPA's voluntary Methane Challenge Program. As part of this initiative, Consumers Energy has a five-year target to replace 3% of our vintage cast iron / unprotected steel distribution mains. For 2021, 478 metric tons of methane (11,959 metric tons of CO2e) emissions were avoided due to this voluntary methane reduction program. The Methane Challenge Program is one component of our Methane Reduction Plan goal.

Plan for achieving target, and progress made to the end of the reporting year
<Not Applicable>

List the actions which contributed most to achieving this target
Working our plan for replacing vintage distribution mains.

Target reference number
Oth 2

Year target was set
2019

Target coverage
Business division

Target type: absolute or intensity
Absolute

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

Methane reduction target	Other, please specify (Target encompasses accelerating the replacement of aging pipe, rehabilitating or retiring outdated infrastructure and adopting new technologies and practices to reduce methane emissions. The remaining emissions reductions will be from offsets.)

Target denominator (intensity targets only)
<Not Applicable>

Base year
2012

Figure or percentage in base year
0

Target year
2030

Figure or percentage in target year
80

Figure or percentage in reporting year
7

% of target achieved relative to base year [auto-calculated]
8.75

Target status in reporting year
Underway

Is this target part of an emissions target?
Yes. In October 2019, Consumers Energy set a goal of 80% reduction from 2012 methane emissions and net-zero methane emissions from its natural gas delivery system by 2030.

Is this target part of an overarching initiative?
Other, please specify (Net-zero greenhouse gas emissions for the entire natural gas system by 2050.)

Please explain target coverage and identify any exclusions
Consumers Energy's Methane Reduction Plan, released in November 2019, outlines our plan to reach this net-zero emissions goal. Consumers Energy has already reduced methane by 15% 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. The base year has been established as 2012. In 2021, 4,271 metric tons of methane (106,766 metric tons of CO2e) emissions were avoided due to voluntary methane reduction programs per the Methane Challenge Program and Natural Gas STAR program.

Plan for achieving target, and progress made to the end of the reporting year
15% progress has been made through accelerating the replacement of aging pipe and rehabilitating or retiring outdated infrastructure.

List the actions which contributed most to achieving this target
<Not Applicable>

C4.2c

(C4.2c) Provide details of your net-zero target(s).

Target reference number
NZ1

Target coverage
Business activity

Absolute/intensity emission target(s) linked to this net-zero target
Not applicable

Target year for achieving net zero
2030

Is this a science-based target?
No, and we do not anticipate setting one in the next 2 years

Please explain target coverage and identify any exclusions
This net-zero target is identified in C4.2b under “Oth 2”. Consumers Energy’s Methane Reduction Plan, released in November 2019, outlines our plan to reach this net-zero emissions goal. Consumers Energy has already reduced methane by 15% 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.

Do you intend to neutralize any unabated emissions with permanent carbon removals at the target year?
Yes

Planned milestones and/or near-term investments for neutralization at target year
Consumers Energy is continuing to execute our methane reduction plan. Additionally, Consumers Energy plans to construct a renewable natural gas (RNG) facility, to be in operation in 2023. See C4.3b for the low-carbon energy generation - biogas details.

Planned actions to mitigate emissions beyond your value chain (optional)

Target reference number
NZ2

Target coverage
Business activity

Absolute/intensity emission target(s) linked to this net-zero target
Abs3

Target year for achieving net zero
2040

Is this a science-based target?
No, and we do not anticipate setting one in the next 2 years

Please explain target coverage and identify any exclusions
At the beginning of 2020, Consumers Energy announced a new goal to achieve net-zero carbon emissions by 2040 for all electric generation. The emissions reported for this target represent carbon (CO2) emissions (excluding biomass) from Consumers Energy owned and purchased power generation.

Do you intend to neutralize any unabated emissions with permanent carbon removals at the target year?
Yes

Planned milestones and/or near-term investments for neutralization at target year
Consumers Energy has continued to invest in renewable energy projects such as solar and wind, as well as secure power purchase agreements from renewable energy sources as part of its clean energy transition. See C4.3b for solar PPA details. Additionally, forest preservation and reforestation may be used to close the gap to achieving net-zero carbon emissions.

Planned actions to mitigate emissions beyond your value chain (optional)

C4.3

(C4.3) Did you have emissions reduction initiatives that were active within the reporting year? Note that this can include those in the planning and/or implementation phases.
Yes

C4.3a

(C4.3a) 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 *)
Under investigation	0	0
To be implemented*	1	18000
Implementation commenced*	1	8164
Implemented*	1	106766
Not to be implemented	0	0

C4.3b

(C4.3b) Provide details on the initiatives implemented in the reporting year in the table below.

Initiative category & Initiative type

Fugitive emissions reductions	Oil/natural gas methane leak capture/prevention

Estimated annual CO2e savings (metric tonnes CO2e)
106766

Scope(s) or Scope 3 category(ies) where emissions savings occur
Scope 1

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
778526

Investment required (unit currency – as specified in C0.4)
21523723

Payback period
>25 years

Estimated lifetime of the initiative
>30 years

Comment
Our 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 in 2021 resulted in 4,271 metric tons of methane emissions avoided. This is equivalent to 106,766 metric tons of CO2e avoided emissions.

Initiative category & Initiative type

Low-carbon energy generation	Biogas

Estimated annual CO2e savings (metric tonnes CO2e)
18000

Scope(s) or Scope 3 category(ies) where emissions savings occur
Scope 3 category 11: Use of sold products

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
0

Investment required (unit currency – as specified in C0.4)
18000000

Payback period
No payback

Estimated lifetime of the initiative
21-30 years

Comment
Consumers Energy plans to construct a renewable natural gas (RNG) facility, to be in operation in 2023. The estimated emission reduction, as recorded in Consumers Energy's gas rate case testimony is 18,000 metric tons of CO2e per year. This was calculated using the California Air Resource Board model for biomethane production via anaerobic digestion with dairy and swine manures. The preliminary lifecycle carbon intensity score (grams of CO2e per megajoule of energy) of the RNG project was estimated by a third party (Michigan State University) and that CI score was applied to an estimated energy production.

Initiative category & Initiative type

Low-carbon energy generation	Solar PV

Estimated annual CO2e savings (metric tonnes CO2e)

8164

Scope(s) or Scope 3 category(ies) where emissions savings occur
Scope 3 category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
0

Investment required (unit currency – as specified in C0.4)
138000000

Payback period
No payback

Estimated lifetime of the initiative
16-20 years

Comment
Lyons Solar and MacBeth Solar are two 20-year contracts that were implemented in 2021. Estimated annual CO2e savings were calculated by multiplying the forecasted 2021 MWh generation for both solar Power Purchase Agreements (PPAs) by Consumers Energy's current CO2e emission rate for owned generation and purchased power resulting in approximately 8,164 metric tons of CO2e avoided in 2021; for 2022 and future years the estimated annual CO2e savings is approximately 43,700 metric tons.

C4.3c

(C4.3c) What methods do you use to drive investment in emissions reduction activities?

Method	Comment
Compliance with regulatory requirements/standards	Compliance with regulatory requirements receives priority funding.
Financial optimization calculations	Energy efficiency activities within our facilities are determined based on the return on the investment.
Internal price on carbon	The estimated cost of carbon may be incorporated into financial investment decisions. For example, Consumers Energy modeled a carbon price in our 2021 IRP.
Dedicated budget for energy efficiency	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.

C4.5

(C4.5) Do you classify any of your existing goods and/or services as low-carbon products?
Yes

C4.5a

(C4.5a) Provide details of your products and/or services that you classify as low-carbon products.

Level of aggregation
Product or service

Taxonomy used to classify product(s) or service(s) as low-carbon
Other, please specify (Michigan Renewable Energy Certification System (MIRECS))

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, Renewable Energy Credit Program, and Green Generation.)

Description of product(s) or service(s)
Renewable Energy product summary: Our renewable energy programs offer residential, commercial and industrial customers to match electric and/or gas use with renewable energy to support their carbon reduction goals. Large Customer Renewable Energy Program: Enables business customers to source their electricity use with local, Michigan made wind or solar electricity. This program is customer driven and accelerates brining utility scale wind and solar project to the State of Michigan. Solar Gardens Program: Enables residential and small business customers source their electricity use with high visibility, local, Michigan made community solar electricity.

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

Methodology used to calculate avoided emissions
Other, please specify (Subscribed energy consumption is translated into pounds of CO2 avoided utilizing Consumers Energy's residual mix emission rate to calculate avoided emissions.)

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

Functional unit used
MWh

Reference product/service or baseline scenario used
In 2021, 196,316 MWhs of electric consumption was matched with renewable energy from our VGP programs.

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

Estimated avoided emissions (metric tons CO2e per functional unit) compared to reference product/service or baseline scenario
102006

Explain your calculation of avoided emissions, including any assumptions
Consumers Energy's residual mix emission rate was multiplied by the 196,316 MWhs of electric consumption was matched with renewable energy from our VGP programs.

Revenue generated from low-carbon product(s) or service(s) as % of total revenue in the reporting year
0

Level of aggregation
Product or service

Taxonomy used to classify product(s) or service(s) as low-carbon
No taxonomy used to classify product(s) or service(s) as low carbon

Type of product(s) or service(s)

Other	Other, please specify (Electric Vehicle Program)

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.

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

Methodology used to calculate avoided emissions
Other, please specify (Specific calculation details described below using Consumers Energy data)

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

Functional unit used
kWh and mpg

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.

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

Estimated avoided emissions (metric tons CO2e per functional unit) compared to reference product/service or baseline scenario
2223

Explain your calculation of avoided emissions, including any assumptions
The approximately 3.95M kWh from EV charging were multiplied by our Company specific emissions factor of 1,184 lbs CO2 per MWh. 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 4.9M lbs of CO2 (2,2,23 metric tons CO2) being avoided.

Revenue generated from low-carbon product(s) or service(s) as % of total revenue in the reporting year
0.01

Level of aggregation
Product or service

Taxonomy used to classify product(s) or service(s) as low-carbon
Other, please specify (Michigan Public Service Commission)

Type of product(s) or service(s)

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

Description of product(s) or service(s)
Our Energy waste production program includes 17 products/services that help reduce our customers carbon footprint through reducing energy waste. These 17 products/services include: Appliance Recycling, Energy Star Appliances Energy Star Lighting Home Energy Analysis Home Energy Report Home Performance with Energy Star HVAC and Water Heating Income Qualified Income Qualified – Electric Insulation and Windows Residential Consumers Energy Store Residential Multifamily Multifamily Income Qualified New Home Construction Residential Agriculture Think! Energy

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

Methodology used to calculate avoided emissions
Other, please specify (Specific calculation details described below using Consumers Energy data)

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

Functional unit used
MWh and MCF

Reference product/service or baseline scenario used
These products and services collectively achieved energy savings of 715,458 MWh and 3,135,825 Mcf in 2021.

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

Estimated avoided emissions (metric tons CO2e per functional unit) compared to reference product/service or baseline scenario
2499931

Explain your calculation of avoided emissions, including any assumptions
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 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.

Revenue generated from low-carbon product(s) or service(s) as % of total revenue in the reporting year
3

C-EU4.6

(C-EU4.6) Describe your organization's efforts to reduce methane emissions from your activities.

Operational Context: The Company focuses on optimizing combustion processes as well as eliminating leaks occurring from infrastructure that delivers natural gas to our combustion facilities and residential customers.

Case Study: In 2016, Consumers Energy became a founding member in EPA's voluntary Methane Challenge program, where members commit to utilizing best management practices to reduce fugitive methane losses from distribution and transmission processes. Our methane challenge commitment is to reduce cast iron and unprotected steel mains at a minimum rate of 3% annually, targeted at 5-year time frame. This was reported in Section C4.2b.

In 2019, Consumers Energy released its Methane Reduction Plan, which set a goal of net-zero methane emissions from its natural gas delivery system by 2030. Consumers Energy plans 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 total, 2021 methane emissions avoided equated to 106,766 metric tons CO2e.

C5. Emissions methodology

C5.1

(C5.1) Is this your first year of reporting emissions data to CDP?
No

C5.1a

(C5.1a) 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?

Row 1

Has there been a structural change?
Yes, a divestment

Name of organization(s) acquired, divested from, or merged with
EnerBank USA ("EnerBank")

Details of structural change(s), including completion dates
On Oct. 1, 2021 the Company announced the close of its previously announced sale of home improvement point-of-sale lender EnerBank USA ("EnerBank") to Regions Bank, a subsidiary of Regions Financial Corporation (NYSE: RF) ("Regions"). Estimated proceeds from the transaction, which include customary adjustments at closing, are approximately $1 billion and will be used to fund key initiatives in CMS Energy's core utility businesses. Historically, we have not included Enerbank in the reporting scope of our CDP report, so this organizational change does not have an impact on our CDP disclosures.

C5.1b

(C5.1b) Has your emissions accounting methodology, boundary, and/or reporting year definition changed in the reporting year?

	Change(s) in methodology, boundary, and/or reporting year definition?	Details of methodology, boundary, and/or reporting year definition change(s)
Row 1	No	<Not Applicable>

C5.1c

(C5.1c) Have your organization's base year emissions been recalculated as result of the changes or errors reported in C5.1a and C5.1b?

	Base year recalculation	Base year emissions recalculation policy, including significance threshold
Row 1	No, because the operations acquired or divested did not exist in the base year	Base year emissions will be adjusted under the following conditions: • Change in Organizational Boundary from Consumers Energy to CMS Energy. • The acquisition of operations or facilities which existed prior to the organization base year. • The divestiture of operations or facilities. Base year emissions may be adjusted under the following conditions: • Significant change in emission factors, constants, or methodologies. • Errors are discovered in previously submitted data that represent a significant change

C5.2

(C5.2) Provide your base year and base year emissions.

Scope 1

Base year start
January 1 2014

Base year end
December 31 2014

Base year emissions (metric tons CO2e)
20132836

Comment
This was re-baselined in reporting year 2020 due to a change in reporting boundary from Consumers Energy to CMS Energy.

Scope 2 (location-based)

Base year start
January 1 2014

Base year end
December 31 2014

Base year emissions (metric tons CO2e)
44001

Comment
This was re-baselined in reporting year 2020 due to a change in reporting boundary from Consumers Energy to CMS Energy.

Scope 2 (market-based)

Base year start
January 1 2014

Base year end
December 31 2014

Base year emissions (metric tons CO2e)
44001

Comment
This was re-baselined in reporting year 2020 due to a change in reporting boundary from Consumers Energy to CMS Energy. Location-based emission factors were used in the absence of utility specific information.

Scope 3 category 1: Purchased goods and services

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment
Not evaluated

Scope 3 category 2: Capital goods

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment
Not evaluated

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

Base year start
January 1 2019

Base year end
December 31 2019

Base year emissions (metric tons CO2e)
5149732

Comment
This represents GHG emissions from the generation sources associated with Consumers Energy's Power Purchase Agreements and market purchases. Biogenic CO2 emissions are excluded. This does not include full LCA emissions from upstream production of fuels (coal, oil, gas) purchased by CMS Energy as applicable emission factors were unknown at the time of reporting.

Scope 3 category 4: Upstream transportation and distribution

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment
Relevant, not yet fully calculated for reporting year 2021 and thus CMS Energy does not consider this category to be baselined yet.

Scope 3 category 5: Waste generated in operations

Base year start
January 1 2020

Base year end
December 31 2020

Base year emissions (metric tons CO2e)
65223

Comment
Reporting year 2020 was the first year this category for Scope 3 as reported.

Scope 3 category 6: Business travel

Base year start
January 1 2019

Base year end
December 31 2019

Base year emissions (metric tons CO2e)
1140

Comment
Business travel (airfare and auto rental only) was reported for all of CMS Energy employees. Business travel associated with contractor-owned vehicle mileage was not included.

Scope 3 category 7: Employee commuting

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment
Not relevant. CMS Energy has limited data and does not consider reported emissions as a baseline, however still continues to report known emissions.

Scope 3 category 8: Upstream leased assets

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment
Not relevant

Scope 3 category 9: Downstream transportation and distribution

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment
Not relevant

Scope 3 category 10: Processing of sold products

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment
Not relevant

Scope 3 category 11: Use of sold products

Base year start
January 1 2014

Base year end
December 31 2014

Base year emissions (metric tons CO2e)
17922880

Comment
In 2014, this emission information was reported under Scope 3 category 1: Purchased goods and services category.

Scope 3 category 12: End of life treatment of sold products

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment
Not relevant

Scope 3 category 13: Downstream leased assets

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment
Not relevant

Scope 3 category 14: Franchises

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment
Not relevant

Scope 3 category 15: Investments

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment
Not relevant

Scope 3: Other (upstream)

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment
Not relevant

Scope 3: Other (downstream)

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment
Not relevant

C5.3

(C5.3) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate emissions.

The Climate Registry: Electric Power Sector (EPS) Protocol
The Climate Registry: General Reporting Protocol
The Greenhouse Gas Protocol: Scope 2 Guidance
US EPA Mandatory Greenhouse Gas Reporting Rule
US EPA Emissions & Generation Resource Integrated Database (eGRID)

C6. Emissions data

C6.1

(C6.1) What were your organization's gross global Scope 1 emissions in metric tons CO2e?

Reporting year

Gross global Scope 1 emissions (metric tons CO2e)
17558176

Start date
<Not Applicable>

End date
<Not Applicable>

Comment
Excludes biomass

C6.2

(C6.2) Describe your organization's approach to reporting Scope 2 emissions.

Row 1

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

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

Comment
GHG emissions are calculated for Scope 2 using default regional emission factors (from eGRID Subregion RFC Michigan) for location-based figures and using a combination of supplier-specific data when available and eGRID emission factors when unavailable for market-based figures. T&D line losses are not reflected here as CMS Energy is not a "wires only" utility and any associated line losses are captured in Scope 1 or Scope 3 based on total generation. This is a change to last year's Scope 2 reporting boundary, however aligns with the baseline year boundary.

C6.3

(C6.3) What were your organization's gross global Scope 2 emissions in metric tons CO2e?

Reporting year

Scope 2, location-based
11782

Scope 2, market-based (if applicable)
13120

Start date
<Not Applicable>

End date
<Not Applicable>

Comment
For market-based figure, 2020 and 2021 utility-specific emission rates were utilized in CMS Energy's calculations if available, 2020 eGRID emission factors were utilized when utility-specific emission rates were unknown.

C6.4

(C6.4) Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure?

Yes

C6.4a

(C6.4a) Provide details of the sources of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure.

Source
HFC emissions

Relevance of Scope 1 emissions from this source
Emissions are not evaluated

Relevance of location-based Scope 2 emissions from this source
Emissions are not relevant

Relevance of market-based Scope 2 emissions from this source (if applicable)
Emissions are not relevant

Explain why this source is excluded
Emissions are not relevant for Scope 1 based on size criteria. GHGs associated with refrigerant usage are contained in closed loop applications. 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 minims (i.e., less than 1% of Scope 1 emissions) and not required to be reported. HFCs are not relevant to Scope 2 emissions.

Estimated percentage of total Scope 1+2 emissions this excluded source represents
<Not Applicable>

Explain how you estimated the percentage of emissions this excluded source represents
<Not Applicable>

Source
Emergency Operations

Relevance of Scope 1 emissions from this source
Emissions are not relevant

Relevance of location-based Scope 2 emissions from this source
Emissions are not relevant

Relevance of market-based Scope 2 emissions from this source (if applicable)
Emissions are not relevant

Explain why this source is excluded
Emissions are not relevant for Scope 1 based on size criteria. De minimis emissions associated with emergency operations, such as emergency generators, do not contribute significantly to Scope 1, are not reported in 40 CFR Part 98 Subpart C and thus are not included in Scope 1.

Estimated percentage of total Scope 1+2 emissions this excluded source represents
0

Explain how you estimated the percentage of emissions this excluded source represents
One percent of CMS Energy's Scope 1 & 2 emissions is 175,923 metric tons CO2e. This would equate to approximately three times the amount of CO2e (metric tons) emitted annually from our office buildings based on stationary equipment natural gas usage, and approximately nine times the amount of CO2e (metric tons) emitted based on electric usage. CMS Energy works hard to minimize outages where emergency generators need to operate and therefore this source of emissions does not seem significant based on its size.

Source
Scope 1 & 2 utility invoices

Relevance of Scope 1 emissions from this source
Emissions are not relevant

Relevance of location-based Scope 2 emissions from this source
Emissions are not relevant

Relevance of market-based Scope 2 emissions from this source (if applicable)
Emissions are not relevant

Explain why this source is excluded
Some utility invoices were not obtained for the reporting year, however this was not deemed significant based on size criteria. In total, 1% of the invoices were not obtained.

Estimated percentage of total Scope 1+2 emissions this excluded source represents
0

Explain how you estimated the percentage of emissions this excluded source represents
Consumers Energy reviewed the total number of utility accounts and verified that 1 percent of the utility accounts were not obtained. However, of those accounts, Consumers Energy is not aware of any accounts with significant electric or natural gas purchases which would change the significance criteria.

C6.5

(C6.5) Account for your organization’s gross global Scope 3 emissions, disclosing and explaining any exclusions.

Purchased goods and services

Evaluation status
Not evaluated

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
CMS Energy has not evaluated what purchased goods and services might be relevant to the business as it is assumed that CMS Energy has little influence on potential emissions reductions for this category. However, emissions associated with this category could potentially contribute significantly to the Scope 3 emissions, depending on how the boundary is defined.

Capital goods

Evaluation status
Not evaluated

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
CMS Energy has not evaluated what capital goods might be relevant to the business as it is assumed that CMS Energy has little influence on potential emissions reductions for this category. However, emissions associated with this category could potentially contribute significantly to the Scope 3 emissions, depending on how the boundary is defined.

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

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
4516811

Emissions calculation methodology
Supplier-specific method
Hybrid method

Percentage of emissions calculated using data obtained from suppliers or value chain partners
10

Please explain
GHG emissions from generation sources associated with Consumers Energy's Power Purchase Agreements and MISO market purchases are calculated utilizing specific GHG emission factors for the source, if known, or default emission factors from eGRID (subregion RFC Michigan) or The Climate Registry for CO2, CH4 and N2O emissions. Biogenic CO2 emissions are excluded. Actual CO2 emissions from two power purchase contracts are utilized, reputable emission factors are used when supplier specific data is not available. Not included in this disclosure are emissions from upstream production of fuels (coal, oil, gas) purchased by CMS Energy as applicable emission factors were unknown at the time of reporting.

Upstream transportation and distribution

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
1018801

Emissions calculation methodology
Average data method

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain
Emissions associated with electric line loss emissions from transmission & distribution (T&D) systems (e.g. MISO) are estimated using EPA's eGRID Eastern Interconnect Power Grid Gross Loss percentage of 5.3%. Emissions from upstream transportation of fuels (coal, oil, gas) through delivery to CMS Energy were not calculated as applicable data and/or emission factors were unknown at the time of reporting.

Waste generated in operations

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
19224

Emissions calculation methodology
Average product method

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain
This represents emissions from waste generated at our company-owned facilities. 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 the landfill and thus may influence emission reductions in this category. We utilize the tonnage of waste disposed in conjunction with the appropriate emission factors per type of waste and disposal method. Emission factors are from EPA's Center for Corporate Climate Leadership's GHG Emission Factor Hub, Table 9. All ash utilizes the fly ash emission factors. Emissions are not reported for hazardous waste, liquids, toner cartridges, appliances (refrigerators and freezers recycling on the behalf of customers) or bottom ash. Consumers Energy obtains primary data from some waste vendors as well as from internal sources.

Business travel

Evaluation status
Not relevant, calculated

Emissions in reporting year (metric tons CO2e)
489

Emissions calculation methodology
Supplier-specific method

Percentage of emissions calculated using data obtained from suppliers or value chain partners
100

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 (airfare and auto rental only) was reported for all CMS Energy employees. Business travel associated with contractor-owned vehicle mileage was not included. Employee expensed business mileage was included in Scope 1 emissions with estimated emissions from company-owned vehicles. Information provided is from vendors for airline and auto-rental agencies.

Employee commuting

Evaluation status
Not relevant, calculated

Emissions in reporting year (metric tons CO2e)
352

Emissions calculation methodology
Distance-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

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 all employees. Emissions were calculated for employee commuting based on mileage records and an assumed average 22.3 mpg. Emission factors from The Climate Registry, 2020 default emission factors document, April 2020, Table 2.1 U.S. Default Factors for Calculating CO2 Emissions from Combustion of Transport Fuels and Table 2.9 Factors for Estimating CH4 and N2O Emissions from Gasoline and Diesel Vehicles (SEM). Data was calculated based on employee reported commute mileage for Consumers Energy owned vehicles.

Upstream leased assets

Evaluation status
Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
Emissions from upstream leased assets such as buildings and vehicles are reported in Scope 1.

Downstream transportation and distribution

Evaluation status
Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
Emissions associated with our natural gas distribution system are calculated per 40 CFR 98 Subpart W and reported as Scope 1.

Processing of sold products

Evaluation status
Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
No additional processing of sold products (electricity and natural gas) takes place.

Use of sold products

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
15380877

Emissions calculation methodology
Hybrid method
Fuel-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain
Consumers Energy reports emissions from natural gas sales pursuant to 40 CFR Part 98 Subpart NN and utilizes this as the basis of this calculation; these reported emissions represent the annual CO2 emissions from the complete combustion of the total volume of natural gas distributed to Consumers Energy end users. Accounting adjustments are made to include emissions from large customer end users who consume more than 460,000 Mscf/year of natural gas (who are excluded from reporting under Subpart NN), and to exclude emissions associated with Consumers Energy's own natural gas usage and other fugitive losses which are reported in Scope 1, and emissions associated with natural gas sales to entities we account for in Scope 3, Category 3 emissions. Emissions associated with the annual volume of natural gas delivered to downstream transmission pipelines or other LDCs are excluded from our boundary and not reported.

End of life treatment of sold products

Evaluation status
Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
Not applicable to electric or natural gas sales.

Downstream leased assets

Evaluation status
Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
Emissions from leased assets such as buildings and vehicles are included in Scope 1 emissions. The Company has not evaluated what other leased assets might be relevant to the business, it is assumed that the Company may have little influence on potential emissions reductions for this category.

Franchises

Evaluation status
Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
The Company's business model does not include franchises

Investments

Evaluation status
Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
The Company's business model does not include investments.

Other (upstream)

Evaluation status
Not evaluated

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
No other upstream emissions known.

Other (downstream)

Evaluation status
Not evaluated

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
No other downstream emissions known.

C6.7

(C6.7) Are carbon dioxide emissions from biogenic carbon relevant to your organization?
Yes

C6.7a

(C6.7a) Provide the emissions from biogenic carbon relevant to your organization in metric tons CO2.

	CO2 emissions from biogenic carbon (metric tons CO2)	Comment
Row 1	508001	Equity-owned portion of CO2 emissions from renewable energy generation sources.

C6.10

(C6.10) 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.

Intensity figure
0.0024

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)
17571295

Metric denominator
unit total revenue

Metric denominator: Unit total
7329000000

Scope 2 figure used
Market-based

% change from previous year
6.1

Direction of change
Increased

Reason for change
Both Scope 1& 2 total emissions and operating revenue increased for calendar year 2021.

Intensity figure
2066

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)
17571295

Metric denominator
full time equivalent (FTE) employee

Metric denominator: Unit total
8504

Scope 2 figure used
Market-based

% change from previous year
11.3

Direction of change
Increased

Reason for change
Both Scope 1& 2 total emissions and number of FTEs increased for calendar year 2021.

Intensity figure
0.429

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)
17571295

Metric denominator
megawatt hour generated (MWh)

Metric denominator: Unit total
40936000

Scope 2 figure used
Market-based

% change from previous year
19

Direction of change
Increased

Reason for change
Both Scope 1& 2 total emissions and total generation increased for calendar year 2021.

C7. Emissions breakdowns

C7.1

(C7.1) Does your organization break down its Scope 1 emissions by greenhouse gas type?
Yes

C7.1a

(C7.1a) Break down your total gross global Scope 1 emissions by greenhouse gas type and provide the source of each used greenhouse warming potential (GWP).

Greenhouse gas	Scope 1 emissions (metric tons of CO2e)	GWP Reference
CO2	17206031	Other, please specify (EPA 40 CFR Appendix Table A-1 of Part 98, GWPs)
CH4	272243	Other, please specify (EPA 40 CFR Appendix Table A-1 of Part 98, GWPs)
N2O	68223	Other, please specify (EPA 40 CFR Appendix Table A-1 of Part 98, GWPs)
SF6	4966	Other, please specify (EPA 40 CFR Appendix Table A-1 of Part 98, GWPs)
Other, please specify (CO2e)	6714	Other, please specify (EPA's Center for Corporate Climate Leadership emission factors (Table 9) are only provided as CO2e and therefore CO2e cannot be broken down further into GHG constituents.)

C-EU7.1b

(C-EU7.1b) Break down your total gross global Scope 1 emissions from electric utilities value chain activities by greenhouse gas type.

	Gross Scope 1 CO2 emissions (metric tons CO2)	Gross Scope 1 methane emissions (metric tons CH4)	Gross Scope 1 SF6 emissions (metric tons SF6)	Total gross Scope 1 emissions (metric tons CO2e)	Comment
Fugitives	3332	10604	0.217	280125	40 CFR Part 98 Subparts DD & W and on-site ash disposal. Includes N2O emissions
Combustion (Electric utilities)	17021329	278	0	17095734	40 CFR Part 98 Subparts C & D. Includes N2O emissions
Combustion (Gas utilities)	81925	1.55	0	82010	40 CFR Part 98 Subpart C for Gas Compressor Stations. Includes N2O emissions
Combustion (Other)	38815	0.73	0	38855	Corporate offices/buildings. Includes N2O emissions
Emissions not elsewhere classified	60630	1.51	0	61451	Vehicles/mobile equipment. Includes N2O emissions

C7.2

(C7.2) Break down your total gross global Scope 1 emissions by country/region.

Country/Region	Scope 1 emissions (metric tons CO2e)
United States of America	17558176

C7.3

(C7.3) Indicate which gross global Scope 1 emissions breakdowns you are able to provide.

By business division
By facility
By activity

C7.3a

(C7.3a) Break down your total gross global Scope 1 emissions by business division.

Business division	Scope 1 emissions (metric ton CO2e)
Electric Generation and Distribution	17111809
Natural Gas Compression, Storage and Distribution	350456
Corporate functions (assets = offices, vehicles)	95911

C7.3b

(C7.3b) Break down your total gross global Scope 1 emissions by business facility.

Facility	Scope 1 emissions (metric tons CO2e)	Latitude	Longitude
JH Campbell Generating Facility	8019205	42.91	-86.2
DE Karn Generating Facility	3412705	43.64	-83.84
Zeeland Generating Station	1450236	42.82	-86
Freedom Compressor Station	9482	42.21	-83.97
Muskegon River Compressor Station	23308	44.08	-85.02
Northville Compressor Station	7940	42.48	-83.55
Overisel Compressor Station	20923	42.7	-85.95
Ray Compressor Station	23752	42.81	-82.87
St. Clair Compressor Station	15516	42.72	-82.72
White Pigeon Compressor Station	10177	41.8	-85.59
Jackson Generating Station	958778	42.25	-84.38
Craven County Wood Energy, L.P.	4061	35.12864	-77.16898
Dearborn Industrial Generating Station	2972665	42.3026	-83.154
Genesee Generating Station	10723	44.605	-84.6903
Grayling Power Station	7209	43.0851	-83.66932
Kalamazoo River Generating Station	26975	42.28837	-85.49467
Livingston Generating Station	6868	45.0305	-84.7308
T.E.S. Filer City Station	237026	44.2172	-86.2889
Northwest Ohio Wind, LLC	133	41.0189	-84.5808
Mid-Michigan Recycling Facility	259	42.37803	-83.36699

C7.3c

(C7.3c) Break down your total gross global Scope 1 emissions by business activity.

Activity	Scope 1 emissions (metric tons CO2e)
Corporate Owned Vehicle emissions	57056
Corporate Owned Buildings/Facilities	38855
Electric Generation & Distribution	17111809
Natural Gas Compression, Storage & Distribution	350456

C-CE7.4/C-CH7.4/C-CO7.4/C-EU7.4/C-MM7.4/C-OG7.4/C-ST7.4/C-TO7.4/C-TS7.4

(C-CE7.4/C-CH7.4/C-CO7.4/C-EU7.4/C-MM7.4/C-OG7.4/C-ST7.4/C-TO7.4/C-TS7.4) 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	Net Scope 1 emissions , metric tons CO2e	Comment
Cement production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Chemicals production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Coal production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Electric utility activities	17106843	<Not Applicable>	Includes EGU electricity production, including onsite vehicles & fly ash disposal. Excludes distribution (SF6 emissions) and biomass CO2 emissions.
Metals and mining production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Oil and gas production activities (upstream)	<Not Applicable>	<Not Applicable>	<Not Applicable>
Oil and gas production activities (midstream)	<Not Applicable>	<Not Applicable>	<Not Applicable>
Oil and gas production activities (downstream)	<Not Applicable>	<Not Applicable>	<Not Applicable>
Steel production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Transport OEM activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Transport services activities	<Not Applicable>	<Not Applicable>	<Not Applicable>

C7.9

(C7.9) How do your gross global emissions (Scope 1 and 2 combined) for the reporting year compare to those of the previous reporting year?

Increased

C7.9a

(C7.9a) 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 emissions (metric tons CO2e)	Direction of change	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption	0	No change	0	N/A
Other emissions reduction activities	0	No change	0	N/A
Divestment	0	No change	0	N/A
Acquisitions	0	No change	0	N/A
Mergers	0	No change	0	N/A
Change in output	2729608	Increased	19	CMS Energy's electric generation (Scope 1) increased from 21,860 GWh to 25,440 GWh. Coal generation increased and natural gas generation decreased in 2021, which resulted in an overall increase to emissions. MISO determined this dispatch based off its economic cost models.
Change in methodology	280776	Decreased	96	Emissions associated with distribution electric line losses were included in Scope 2 market-based emission reporting in calendar year 2020, however in reporting year 2021 these emissions are reported in Scope 3 per utility industry best practices and therefore this appears as a Scope 2 decrease. Overall, emissions from purchased power reported in Scope 2 remained about the same from year to year.
Change in boundary	0	No change	0	N/A
Change in physical operating conditions	0	No change	0	N/A
Unidentified	0	No change	0	N/A
Other	0	No change	0	N/A

C7.9b

(C7.9b) Are your emissions performance calculations in C7.9 and C7.9a based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure?

Market-based

C8. Energy

C8.1

(C8.1) What percentage of your total operational spend in the reporting year was on energy?

More than 75% but less than or equal to 80%

C8.2

(C8.2) 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)	Yes
Consumption of purchased or acquired electricity	Yes
Consumption of purchased or acquired heat	No
Consumption of purchased or acquired steam	No
Consumption of purchased or acquired cooling	No
Generation of electricity, heat, steam, or cooling	Yes

C8.2a

(C8.2a) Report your organization's energy consumption totals (excluding feedstocks) in MWh.

	Heating value	MWh from renewable sources	MWh from non-renewable sources	Total (renewable and non-renewable) MWh
Consumption of fuel (excluding feedstock)	HHV (higher heating value)	1472143	61041247	62513390
Consumption of purchased or acquired electricity	<Not Applicable>	0	15075	15075
Consumption of purchased or acquired heat	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of purchased or acquired steam	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of purchased or acquired cooling	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of self-generated non-fuel renewable energy	<Not Applicable>	30082	<Not Applicable>	30082
Total energy consumption	<Not Applicable>	1502225	61056322	62558547

C8.2b

(C8.2b) 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	Yes
Consumption of fuel for the generation of heat	Yes
Consumption of fuel for the generation of steam	No
Consumption of fuel for the generation of cooling	No
Consumption of fuel for co-generation or tri-generation	No

C8.2c

(C8.2c) State how much fuel in MWh your organization has consumed (excluding feedstocks) by fuel type.

Sustainable biomass

Heating value
HHV

Total fuel MWh consumed by the organization
0

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat
0

MWh fuel consumed for self-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
<Not Applicable>

Comment

Other biomass

Heating value
HHV

Total fuel MWh consumed by the organization
1472143

MWh fuel consumed for self-generation of electricity
1472143

MWh fuel consumed for self-generation of heat
0

MWh fuel consumed for self-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
<Not Applicable>

Comment

Other renewable fuels (e.g. renewable hydrogen)

Heating value
HHV

Total fuel MWh consumed by the organization
0

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat
0

MWh fuel consumed for self-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
<Not Applicable>

Comment
N/A

Coal

Heating value
HHV

Total fuel MWh consumed by the organization
35281396

MWh fuel consumed for self-generation of electricity
35272960

MWh fuel consumed for self-generation of heat
8437

MWh fuel consumed for self-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
<Not Applicable>

Comment

Oil

Heating value
HHV

Total fuel MWh consumed by the organization
122670

MWh fuel consumed for self-generation of electricity
87802

MWh fuel consumed for self-generation of heat
34868

MWh fuel consumed for self-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
<Not Applicable>

Comment

Gas

Heating value
HHV

Total fuel MWh consumed by the organization
25183959

MWh fuel consumed for self-generation of electricity
24048443

MWh fuel consumed for self-generation of heat
1135516

MWh fuel consumed for self-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
<Not Applicable>

Comment

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

Heating value
HHV

Total fuel MWh consumed by the organization
453221

MWh fuel consumed for self-generation of electricity
63903

MWh fuel consumed for self-generation of heat
389319

MWh fuel consumed for self-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
<Not Applicable>

Comment
Tire-derived fuel, gasoline, diesel & propane

Total fuel

Heating value
HHV

Total fuel MWh consumed by the organization
62513390

MWh fuel consumed for self-generation of electricity
60945250

MWh fuel consumed for self-generation of heat
1568140

MWh fuel consumed for self-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
<Not Applicable>

Comment

C-EU8.2d

(C-EU8.2d) For your electric utility activities, provide a breakdown of your total power plant capacity, generation, and related emissions during the reporting year by source.

Coal – hard

Nameplate capacity (MW)
2078

Gross electricity generation (GWh)

Net electricity generation (GWh)
11105

Absolute scope 1 emissions (metric tons CO2e)
11387912

Scope 1 emissions intensity (metric tons CO2e per GWh)
1025

Comment
Net generation is our preferred measure and used in the emissions intensity calculations in this section.

Lignite

Nameplate capacity (MW)
0

Gross electricity generation (GWh)
0

Net electricity generation (GWh)
0

Absolute scope 1 emissions (metric tons CO2e)
0

Scope 1 emissions intensity (metric tons CO2e per GWh)
0

Comment

Oil

Nameplate capacity (MW)
701

Gross electricity generation (GWh)

Net electricity generation (GWh)
7

Absolute scope 1 emissions (metric tons CO2e)
7073

Scope 1 emissions intensity (metric tons CO2e per GWh)
1010

Comment
Nameplate capacity represents half of oil & natural gas fired EGUs.

Gas

Nameplate capacity (MW)
3312

Gross electricity generation (GWh)

Net electricity generation (GWh)
9687

Absolute scope 1 emissions (metric tons CO2e)
5275157

Scope 1 emissions intensity (metric tons CO2e per GWh)
545

Comment

Sustainable biomass

Nameplate capacity (MW)
0

Gross electricity generation (GWh)
0

Net electricity generation (GWh)
0

Absolute scope 1 emissions (metric tons CO2e)
0

Scope 1 emissions intensity (metric tons CO2e per GWh)
0

Comment

Other biomass

Nameplate capacity (MW)
64

Gross electricity generation (GWh)

Net electricity generation (GWh)
320

Absolute scope 1 emissions (metric tons CO2e)
387343

Scope 1 emissions intensity (metric tons CO2e per GWh)
1212

Comment
Nameplate capacity ratings and plant categorization (i.e., biomass) is consistent with our 2021 SEC Form 10-K report and EIA information. Biomass plants also burn tire-derived fuel.

Waste (non-biomass)

Nameplate capacity (MW)
0

Gross electricity generation (GWh)
0

Net electricity generation (GWh)
0

Absolute scope 1 emissions (metric tons CO2e)
0

Scope 1 emissions intensity (metric tons CO2e per GWh)
0

Comment
Tire derived fuel emissions are aggregated with biomass plant emissions based on how plants are identified in our 2021 SEC Form 10-K report.

Nuclear

Nameplate capacity (MW)
0

Gross electricity generation (GWh)
0

Net electricity generation (GWh)
0

Absolute scope 1 emissions (metric tons CO2e)
0

Scope 1 emissions intensity (metric tons CO2e per GWh)
0

Comment

Fossil-fuel plants fitted with CCS

Nameplate capacity (MW)
0

Gross electricity generation (GWh)
0

Net electricity generation (GWh)
0

Absolute scope 1 emissions (metric tons CO2e)
0

Scope 1 emissions intensity (metric tons CO2e per GWh)
0

Comment

Geothermal

Nameplate capacity (MW)
0

Gross electricity generation (GWh)
0

Net electricity generation (GWh)
0

Absolute scope 1 emissions (metric tons CO2e)
0

Scope 1 emissions intensity (metric tons CO2e per GWh)
0

Comment

Hydropower

Nameplate capacity (MW)
132

Gross electricity generation (GWh)

Net electricity generation (GWh)
398

Absolute scope 1 emissions (metric tons CO2e)
0

Scope 1 emissions intensity (metric tons CO2e per GWh)
0

Comment
Potential methane emissions from hydro-electric reservoirs were not calculated as emission factors were unknown at the time of reporting.

Wind

Nameplate capacity (MW)
1009

Gross electricity generation (GWh)

Net electricity generation (GWh)
2749

Absolute scope 1 emissions (metric tons CO2e)
0

Scope 1 emissions intensity (metric tons CO2e per GWh)
0

Comment

Solar

Nameplate capacity (MW)
31

Gross electricity generation (GWh)

Net electricity generation (GWh)
54

Absolute scope 1 emissions (metric tons CO2e)
0

Scope 1 emissions intensity (metric tons CO2e per GWh)
0

Comment

Marine

Nameplate capacity (MW)
0

Gross electricity generation (GWh)
0

Net electricity generation (GWh)
0

Absolute scope 1 emissions (metric tons CO2e)
0

Scope 1 emissions intensity (metric tons CO2e per GWh)
0

Comment

Other renewable

Nameplate capacity (MW)
1154

Gross electricity generation (GWh)

Net electricity generation (GWh)
0

Absolute scope 1 emissions (metric tons CO2e)
0

Scope 1 emissions intensity (metric tons CO2e per GWh)
0

Comment
Equity ownership of a pumped storage plant. Net pumped-storage generation is negative (-321 GWh), as the facility consumes electricity to pump water during off-peak hours for storage. Emissions are captured within other scope 1 source categories.

Other non-renewable

Nameplate capacity (MW)
1

Gross electricity generation (GWh)

Net electricity generation (GWh)
0

Absolute scope 1 emissions (metric tons CO2e)
0

Scope 1 emissions intensity (metric tons CO2e per GWh)
0

Comment
Battery storage facilities.

Total

Nameplate capacity (MW)
8481

Gross electricity generation (GWh)

Net electricity generation (GWh)
23998

Absolute scope 1 emissions (metric tons CO2e)
17057485

Scope 1 emissions intensity (metric tons CO2e per GWh)
711

Comment

C8.2g

(C8.2g) Provide a breakdown of your non-fuel energy consumption by country.

Country/area
United States of America

Consumption of electricity (MWh)
15075

Consumption of heat, steam, and cooling (MWh)
1568140

Total non-fuel energy consumption (MWh) [Auto-calculated]
1583215

Is this consumption excluded from your RE100 commitment?
<Not Applicable>

C-EU8.4

(C-EU8.4) Does your electric utility organization have a transmission and distribution business?
Yes

C-EU8.4a

(C-EU8.4a) Disclose the following information about your transmission and distribution business.

Country/Region
United States of America

Voltage level
Distribution (low voltage)

Annual load (GWh)
34386

Annual energy losses (% of annual load)
7.04

Scope where emissions from energy losses are accounted for
Scope 1

Emissions from energy losses (metric tons CO2e)
959505

Length of network (km)
155347

Number of connections
1816355

Area covered (km2)
73350

Comment
Consumers Energy owns and operates electric generation and distribution facilities. CO2e emissions associated with energy losses are covered by generation of electricity in Scope 1 as well as Scope 3, Category 3, and are reported based on total annual MWh of energy loss (1,786,000 MWh) times our CO2e lb/net MWh emission rate for owned and purchased generation.

C9. Additional metrics

C9.1

(C9.1) Provide any additional climate-related metrics relevant to your business.

Description
Land use

Metric value
325

Metric numerator
325

Metric denominator (intensity metric only)
N/A

% change from previous year
86

Direction of change
Decreased

Please explain
In 2018, Consumers Energy established a set of planet goal including a goal for land, water, waste and air performance. The land goal was to enhance, protect or restore 5,000 acres of land in five year, 2018-2022. Consumers Energy impacted 761 acres in 2018,1508 acres in 2019, 2444 in 2020 and 3245 acres in 2021 resulting in 5038 acres from 2018 through 2021. Protecting, restoring, and enhancing land can have a positive impact on natural carbon sequestration.

Description
Waste

Metric value
1571

Metric numerator
1571

Metric denominator (intensity metric only)
N/A

% change from previous year
15

Direction of change
Decreased

Please explain
In 2021, the Company set and surpassed our waste goal that targets the reduction of hazardous waste and non-regulated wastes sent to landfill 10% by reducing those wastes 1,571 tons which is a 15% reduction from the 2020 baseline of 10,540 tons. This reduction contributed to the 44% waste reduction achieved in 2021 toward the five-year 35% waste reduction goal set in 2018 based on the 2017 baseline. Reducing our waste reduces the number of waste pickups and reduces the amount of time trucks are on the road picking up and disposing of waste. CMS Enterprises is not included in this goal.

C-EU9.5a

(C-EU9.5a) Break down, by source, your organization's CAPEX in the reporting year and CAPEX planned over the next 5 years.

Coal – hard

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)
63000000

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year
25

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

Explain your CAPEX calculations, including any assumptions
CAPEX provided reflects Consumers Energy (our regulated utility) only. 2022-2026 CAPEX is based on 2022 budget and does not include the impacts of the most recent IRP.

Lignite

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)
0

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year
0

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

Explain your CAPEX calculations, including any assumptions
CAPEX provided reflects Consumers Energy (our regulated utility) only. 2022-2026 CAPEX is based on 2022 budget and does not include the impacts of the most recent IRP.

Oil

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)
10000000

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year
4

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

Explain your CAPEX calculations, including any assumptions
CAPEX provided reflects Consumers Energy (our regulated utility) only. 2022-2026 CAPEX is based on 2022 budget and does not include the impacts of the most recent IRP.

Gas

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)
47000000

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year
18

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
4

Explain your CAPEX calculations, including any assumptions
CAPEX provided reflects Consumers Energy (our regulated utility) only. 2022-2026 CAPEX is based on 2022 budget and does not include the impacts of the most recent IRP.

Sustainable biomass

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)
0

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year
0

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

Explain your CAPEX calculations, including any assumptions
CAPEX provided reflects Consumers Energy (our regulated utility) only. 2022-2026 CAPEX is based on 2022 budget and does not include the impacts of the most recent IRP.

Other biomass

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)
0

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year
0

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

Explain your CAPEX calculations, including any assumptions
CAPEX provided reflects Consumers Energy (our regulated utility) only. 2022-2026 CAPEX is based on 2022 budget and does not include the impacts of the most recent IRP.

Waste (non-biomass)

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)
0

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year
0

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

Explain your CAPEX calculations, including any assumptions
CAPEX provided reflects Consumers Energy (our regulated utility) only. 2022-2026 CAPEX is based on 2022 budget and does not include the impacts of the most recent IRP.

Nuclear

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)
0

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year
0

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

Explain your CAPEX calculations, including any assumptions
CAPEX provided reflects Consumers Energy (our regulated utility) only. 2022-2026 CAPEX is based on 2022 budget and does not include the impacts of the most recent IRP.

Geothermal

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)
0

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year
0

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

Explain your CAPEX calculations, including any assumptions
CAPEX provided reflects Consumers Energy (our regulated utility) only. 2022-2026 CAPEX is based on 2022 budget and does not include the impacts of the most recent IRP.

Hydropower

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)
56000000

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year
22

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

Explain your CAPEX calculations, including any assumptions
CAPEX provided reflects Consumers Energy (our regulated utility) only. 2022-2026 CAPEX is based on 2022 budget and does not include the impacts of the most recent IRP.

Wind

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)
19000000

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year
7

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
9

Explain your CAPEX calculations, including any assumptions
CAPEX provided reflects Consumers Energy (our regulated utility) only. 2022-2026 CAPEX is based on 2022 budget and does not include the impacts of the most recent IRP.

Solar

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)
24000000

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year
9

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

Explain your CAPEX calculations, including any assumptions
CAPEX provided reflects Consumers Energy (our regulated utility) only. 2022-2026 CAPEX is based on 2022 budget and does not include the impacts of the most recent IRP.

Marine

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)
0

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year
0

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

Explain your CAPEX calculations, including any assumptions
CAPEX provided reflects Consumers Energy (our regulated utility) only. 2022-2026 CAPEX is based on 2022 budget and does not include the impacts of the most recent IRP.

Fossil-fuel plants fitted with CCS

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)
0

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year
0

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

Explain your CAPEX calculations, including any assumptions
CAPEX provided reflects Consumers Energy (our regulated utility) only. 2022-2026 CAPEX is based on 2022 budget and does not include the impacts of the most recent IRP.

Other renewable (e.g. renewable hydrogen)

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)
0

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year
0

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

Explain your CAPEX calculations, including any assumptions
CAPEX provided reflects Consumers Energy (our regulated utility) only. 2022-2026 CAPEX is based on 2022 budget and does not include the impacts of the most recent IRP.

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

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)
38000000

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year
15

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
3

Explain your CAPEX calculations, including any assumptions
This primarily reflects decommissioning, major environmental projects and generation administration. CAPEX provided reflects Consumers Energy (our regulated utility) only. 2022-2026 CAPEX is based on 2022 budget and does not include the impacts of the most recent IRP.

C-EU9.5b

(C-EU9.5b) Break down your total planned CAPEX in your current CAPEX plan for products and services (e.g. smart grids, digitalization, etc.).

Products and services	Description of product/service	CAPEX planned for product/service	Percentage of total CAPEX planned products and services	End of year CAPEX plan
Energy management services	This represents switch and device installations related to demand response for 2022-2026.	37600000		2026
Charging networks	This represents Charging Infrastructure for PowerMiFleet for 2022-2026.	36100000		2026
Home storage systems	Consumers Energy Capex is planned for 2022-2026. There is no associated planned capital for this category.	0	0	2026
Smart appliances	Consumers Energy Capex is planned for 2022-2026. There is no associated planned capital for this category.	0	0	2026
Home systems	Consumers Energy Capex is planned for 2022-2026. There is no associated planned capital for this category.	0	0	2026
Prosumer services	Consumers Energy Capex is planned for 2022-2026. There is no associated planned capital for this category.	0	0	2026
Information campaigns	Consumers Energy Capex is planned for 2022-2026. There is no associated planned capital for this category.	0	0	2026
Audits	Consumers Energy Capex is planned for 2022-2026. There is no associated planned capital for this category.	0	0	2026
Tariff measures	Consumers Energy Capex is planned for 2022-2026. There is no associated planned capital for this category.	0	0	2026
Energy audits	Consumers Energy Capex is planned for 2022-2026. There is no associated planned capital for this category.	0	0	2026
Heating systems	Consumers Energy Capex is planned for 2022-2026. There is no associated planned capital for this category.	0	0	2026
HVAC	Consumers Energy Capex is planned for 2022-2026. There is no associated planned capital for this category.	0	0	2026
CHP	Consumers Energy Capex is planned for 2022-2026. There is no associated planned capital for this category.	0	0	2026
Lighting	Consumers Energy Capex is planned for 2022-2026. There is no associated planned capital for this category.	0	0	2026

C-CE9.6/C-CG9.6/C-CH9.6/C-CN9.6/C-CO9.6/C-EU9.6/C-MM9.6/C-OG9.6/C-RE9.6/C-ST9.6/C-TO9.6/C-TS9.6

(C-CE9.6/C-CG9.6/C-CH9.6/C-CN9.6/C-CO9.6/C-EU9.6/C-MM9.6/C-OG9.6/C-RE9.6/C-ST9.6/C-TO9.6/C-TS9.6) Does your organization invest in research and development (R&D) of low-carbon products or services related to your sector activities?

	Investment in low-carbon R&D	Comment
Row 1	Yes	The Company works with industry partners and organizations to leverage funding for and participation in low-carbon product and services R&D. For example, Consumers Energy collaborates with the Electric Power Research Institute (EPRI) and Gas Technology Institute's Low Carbon Resource Initiative and funds a variety of their programs including some low-carbon product and service R&D programs.

C-CO9.6a/C-EU9.6a/C-OG9.6a

(C-CO9.6a/C-EU9.6a/C-OG9.6a) Provide details of your organization's investments in low-carbon R&D for your sector activities over the last three years.

Technology area	Stage of development in the reporting year	Average % of total R&D investment over the last 3 years	R&D investment figure in the reporting year (optional)	Comment
Unable to disaggregate by technology area	<Not Applicable>	≤20%	636648	Disclosure reflects the amount Consumers Energy spent on the Electric Power Research Institute's LCRI (low carbon research initiative) in 2021.
Distributed energy resources	Applied research and development	≤20%	138654	Disclosure reflects the amount Consumers Energy spent on the Electric Power Research Institute's Integration of Distributed Energy Resources program in 2021.
Energy storage	Applied research and development	≤20%	143098	Disclosure reflects the amount Consumers Energy spent on the Electric Power Research Institute's energy battery storage program in 2021.and external support/consultation for Compressed Air Energy Storage at CE-owned assets.
Renewable energy	Applied research and development	≤20%	130556	Disclosure reflects the amount Consumers Energy spent on the Electric Power Research Institute's renewable economics program in 2021.
Carbon capture and storage/utilisation	Applied research and development	≤20%	35000	Disclosure reflects the amount Consumers Energy spent on external support/consultation for carbon capture and sequestration technology at company-owned generation facilities to determine if sites would be viable options for carbon capture, utilization, and storage.

C10. Verification

C10.1

(C10.1) Indicate the verification/assurance status that applies to your reported emissions.

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

C10.1a

(C10.1a) Provide further details of the verification/assurance undertaken for your Scope 1 emissions, and attach the relevant statements.

Verification or assurance cycle in place
Annual process

Status in the current reporting year
Complete

Type of verification or assurance
Limited assurance

Attach the statement
CMS Energy CY 2021 GHG Verification Statement_FINAL 2022-0725.pdf

Page/ section reference
All

Relevant standard
Other, please specify (Numerous including The Climate Registry (see attachment))

Proportion of reported emissions verified (%)
90

C10.1b

(C10.1b) Provide further details of the verification/assurance undertaken for your Scope 2 emissions and attach the relevant statements.

Scope 2 approach
Scope 2 market-based

Verification or assurance cycle in place
Annual process

Status in the current reporting year
Complete

Type of verification or assurance
Limited assurance

Attach the statement
CMS Energy CY 2021 GHG Verification Statement_FINAL 2022-0725.pdf

Page/ section reference
All

Relevant standard
Other, please specify (WRI/WBCSD Scope 2 Guidance (amendment to the GHG Protocol Corporate Standard), US EPA Center for Corporate Climate Leadership GHG Emission Factors Hub)

Proportion of reported emissions verified (%)
80

Scope 2 approach
Scope 2 location-based

Verification or assurance cycle in place
Annual process

Status in the current reporting year
Complete

Type of verification or assurance
Limited assurance

Attach the statement
CMS Energy CY 2021 GHG Verification Statement_FINAL 2022-0725.pdf

Page/ section reference
All

Relevant standard
Other, please specify (WRI/WBCSD Scope 2 Guidance (amendment to the GHG Protocol Corporate Standard), US EPA Emissions & Generation Resource Integrated Database (eGRID) (updated January 2022), US EPA Center for Corporate Climate Leadership GHG Emission Factors Hub))

Proportion of reported emissions verified (%)
80

C10.1c

(C10.1c) Provide further details of the verification/assurance undertaken for your Scope 3 emissions and attach the relevant statements.

Scope 3 category
Scope 3: Use of sold products

Verification or assurance cycle in place
Annual process

Status in the current reporting year
Complete

Type of verification or assurance
Limited assurance

Attach the statement
CMS Energy CY 2021 GHG Verification Statement_FINAL 2022-0725.pdf

Page/section reference
All

Relevant standard
Other, please specify (WRI/WBCSD Greenhouse Gas Protocol, Corporate Value Chain (Scope 3) Accounting and Reporting Standard))

Proportion of reported emissions verified (%)
95

C10.2

(C10.2) Do you verify any climate-related information reported in your CDP disclosure other than the emissions figures reported in C6.1, C6.3, and C6.5?
No, we are waiting for more mature verification standards and/or processes

C11. Carbon pricing

C11.1

(C11.1) Are any of your operations or activities regulated by a carbon pricing system (i.e. ETS, Cap & Trade or Carbon Tax)?
No, and we do not anticipate being regulated in the next three years

C11.2

(C11.2) Has your organization originated or purchased any project-based carbon credits within the reporting period?
Yes

C11.2a

(C11.2a) Provide details of the project-based carbon credits originated or purchased by your organization in the reporting period.

Credit origination or credit purchase
Credit origination

Project type
Other, please specify (Hydroelectric, Solar, Wind, Pumped Storage)

Project identification
Various Consumers Energy owned renewable energy systems. Based from the CDP Disclosure Best Practice supplemental document, it is assumed that 1 REC = 1 MWh. Number of credits are calculated as the number of RECs times Consumers Energy's 2021 CO2e metric ton/MWh emission rate.

Verified to which standard
Other, please specify (Michigan Renewable Energy Certification System (MIRECS), per Michigan Public Service Commission Act 295 of 2008)

Number of credits (metric tonnes CO2e)
1496384

Number of credits (metric tonnes CO2e): Risk adjusted volume
0

Credits cancelled
No

Purpose, e.g. compliance
Compliance

Credit origination or credit purchase
Credit origination

Project type
Other, please specify (Hydroelectric, Solar, Wind, Pumped Storage)

Project identification
Various Consumers Energy owned renewable energy systems, vintage RECs retired for RPS Compliance. Based from the CDP Disclosure Best Practice supplemental document, it is assumed that 1 REC = 1 MWh. Number of credits are calculated as the number of RECs times Consumers Energy's 2021 CO2e metric ton/MWh emission rate.

Verified to which standard
Other, please specify (Michigan Renewable Energy Certification System (MIRECS), per Michigan Public Service Commission Act 295 of 2008)

Number of credits (metric tonnes CO2e)
878640

Number of credits (metric tonnes CO2e): Risk adjusted volume
0

Credits cancelled
Yes

Purpose, e.g. compliance
Compliance

Credit origination or credit purchase
Credit purchase

Project type
Other, please specify (Landfill Gas, Wind, Hydroelectric, Anaerobic Digester, Biomass, Solar, Municipal Solid Waste)

Project identification
Various renewable energy systems which Consumers Energy has secured contracts for purchased power. Based from the CDP Disclosure Best Practice supplemental document, it is assumed that 1 REC = 1 MWh. Number of credits are calculated as the number of RECs times Consumers Energy's 2021 CO2e metric ton/MWh emission rate.

Verified to which standard
Other, please specify (Michigan Renewable Energy Certification System (MIRECS), per Michigan Public Service Commission Act 295 of 2008)

Number of credits (metric tonnes CO2e)
972637

Number of credits (metric tonnes CO2e): Risk adjusted volume
0

Credits cancelled
No

Purpose, e.g. compliance
Compliance

Credit origination or credit purchase
Credit purchase

Project type
Other, please specify (Landfill Gas, Wind, Hydroelectric, Anaerobic Digester, Biomass, Solar, Municipal Solid Waste)

Project identification
Various Consumers Energy contracted renewable energy systems, vintage RECs retired for RPS Compliance. Based from the CDP Disclosure Best Practice supplemental document, it is assumed that 1 REC = 1 MWh. Number of credits are calculated as the number of RECs times Consumers Energy's 2021 CO2e metric ton/MWh emission rate.

Verified to which standard
Other, please specify (Michigan Renewable Energy Certification System (MIRECS), per Michigan Public Service Commission Act 295 of 2008)

Number of credits (metric tonnes CO2e)
1760347

Number of credits (metric tonnes CO2e): Risk adjusted volume
0

Credits cancelled
Yes

Purpose, e.g. compliance
Compliance

Credit origination or credit purchase
Credit origination

Project type
Other, please specify (Solar, Wind, Biomass)

Project identification
Various CMS Enterprises owned renewable energy systems. Based from the CDP Disclosure Best Practice supplemental document, it is assumed that 1 REC = 1 MWh. Number of credits are calculated as the number of RECs times CMS Enterprises' 2021 CO2e metric ton/MWh emission rate.

Verified to which standard
Other, please specify (Michigan Renewable Energy Certification System (MIRECS), North Carolina Renewable Energy Tracking System, PJM Generation Attribute Tracking System (GATS), ERCOT)

Number of credits (metric tonnes CO2e)
950356

Number of credits (metric tonnes CO2e): Risk adjusted volume
0

Credits cancelled
No

Purpose, e.g. compliance
Other, please specify (CMS Enterprises sells RECs unbundled or bundled with renewable energy generation as part of power purchase agreements)

Credit origination or credit purchase
Credit origination

Project type
Other, please specify (Solar, Wind, Hydroelectric, Biomass)

Project identification
Various Consumers Energy renewable energy systems which are used for our voluntary green energy programs in which customers subscribe to receive specified amounts of renewable energy. Consumers Energy retires the associated RECs on behalf of subscribed customers. Based from the CDP Disclosure Best Practice supplemental document, it is assumed that 1 REC = 1 MWh. Number of credits are calculated as the number of RECs times Consumers Energy's 2021 residual mix CO2e metric ton/MWh emission rate.

Verified to which standard
Other, please specify (Michigan Renewable Energy Certification System (MIRECS), per Michigan Public Service Commission Act 295 of 2008)

Number of credits (metric tonnes CO2e)

111001

Number of credits (metric tonnes CO2e): Risk adjusted volume
0

Credits cancelled
Yes

Purpose, e.g. compliance
Voluntary Offsetting

C11.3

(C11.3) Does your organization use an internal price on carbon?
Yes

C11.3a

(C11.3a) Provide details of how your organization uses an internal price on carbon.

Objective for implementing an internal carbon price
Navigate GHG regulations
Stakeholder expectations
Change internal behavior
Drive energy efficiency
Drive low-carbon investment
Identify and seize low-carbon opportunities

GHG Scope
Scope 1
Scope 3

Application
At this time, no regulatory framework is currently in law that includes any carbon pricing or emission restrictions applicable to Consumers Energy, such as a cap-and-trade or carbon tax program. Therefore, our base assumption assumes no price on carbon. That being said, stakeholder input and prudency recommends modelling a price on carbon. For the purposes of evaluating the effects of a carbon price on a resource portfolio, Consumers Energy developed a Base, Medium, and High carbon price forecast and then modelled identified resource portfolios against all three forecasts to evaluate the effects of a range of potential carbon prices. The Base forecast utilized is the IHS Markit 2019- North American Power Market Outlook, the High forecast is the EIA 2020 AEO, and the Medium forecast was developed by Consumers Energy as a blend of the Base and High forecast in regard to starting year and $/Short Ton cost.

Actual price(s) used (Currency /metric ton)
9

Variance of price(s) used
IHS Market assumes US federal carbon policy takes the form of a price on power plant CO2 emissions beginning in 2030. Prices escalate annually from $9 per metric ton (real 2017 US dollars) in 2030 to $38 per metric ton by 2050. Consumers Energy developed a Base, Medium, and High carbon price forecast and then modelled identified resource portfolios against all three forecasts to evaluate the effects of a range of potential carbon prices.

Type of internal carbon price
Implicit price

Impact & implication
At this time, no regulatory framework currently in law includes any carbon pricing or emission restrictions applicable to Consumers Energy, such as a cap-and-trade or carbon tax program; therefore, the Company's base assumption assumes no price on carbon. However, the Company recognizes that carbon pricing has the potential to significantly impact utility costs and thus decided it would be prudent to run a risk analysis which includes a low, moderate, and high price on carbon. Such evaluations are used in Integrated Resource Planning and used to develop a future resource portfolio that: (i) is robust enough to serve Consumers Energy's full-service electric customer demand during all hours, 365 days per year; (ii) stands up to potential significant increases in electric demand; (iii) delivers on generation diversity; and (iv) provides less financial risk to customers.

Objective for implementing an internal carbon price
Stakeholder expectations
Change internal behavior
Drive energy efficiency
Drive low-carbon investment
Stress test investments
Identify and seize low-carbon opportunities

GHG Scope
Scope 1
Scope 3

Application
At this time, no regulatory framework currently that requires any carbon pricing or emission restrictions applicable to Consumers Energy As part of its voluntary Natural Gas Delivery Plan, Consumers Energy evaluates long term strategic investments. These investment strategies incorporate a carbon price or abatement cost as decision making metric, when those investments are expected to contribute to carbon reduction.

Actual price(s) used (Currency /metric ton)
10000

Variance of price(s) used
Prices vary widely, as each investment or technology is evaluated separately to establish a unit technology-based abatement cost. Carbon pricing can range from $0 to $10,000/ton using this bottom-up methodology. The number disclosed above reflects the top of this range.

Type of internal carbon price
Implicit price

Impact & implication
The carbon price and/or abatement costs has established priorities for near-term, carbon-reducing investments, which are lowest among alternatives evaluated. This includes evaluating capital investment opportunities, and also associated pricing for alternative, low-carbon gas supply.

C12. Engagement

C12.1

(C12.1) Do you engage with your value chain on climate-related issues?
Yes, our customers/clients
Yes, other partners in the value chain

C12.1b

(C12.1b) Give details of your climate-related engagement strategy with your customers.

Type of engagement & Details of engagement

Collaboration & innovation	Run a campaign to encourage innovation to reduce climate change impacts

% of customers by number
36

% of customer - related Scope 3 emissions as reported in C6.5
0

Please explain the rationale for selecting this group of customers 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.

Impact of engagement, including 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, delivering energy savings of 715,458 MWh and 3,135,825 Mcf in 2021. The success of our Energy Efficiency Programs are not reflected in (question C6.5) for Scope 3, category 11 emissions, as customer energy savings are avoided emissions (while Scope 3 category 11 represents the amount of GHG emissions from natural gas used by customers). Overall, our energy efficiency program savings equates to over 21.4 million tons of avoided carbon dioxide emissions over the life of the programs.

C12.1d

(C12.1d) Give details of your climate-related engagement strategy with other partners in the value chain.

CMS Energy believes the basis of its sustainability efforts should be founded on what both we and our stakeholders deem to be most impactful and effective. To do this CMS Energy conducted an ESG materiality assessment stakeholder survey in 2021 to help further shape and prioritize its sustainability efforts. This survey was sent to both internal and external company stakeholders to get insights into what environmental, social and governance (ESG) topics are most important to them. The results of this survey allowed the Company to produce an ESG materiality assessment that resulted in a list of 13 top material ESG issues that the company is focusing on from a performance and disclosure perspective.

Additionally, in 2018 Consumers Energy announced new corporate wide planet goals. Consumers Energy met with key stakeholders including customers, state and local government, United Tribes of Michigan, non-governmental organizations, trade associations and universities to engage them collaboratively and get input and feedback on what environmental issues we should be focusing on. The results of these meetings and surveys were compiled and became the basis for the goals set for all environmental media, including water, for the next five years which also serves as a case study of climate-related engagement strategy with other partners in the value chain. In 2019, engagement around the planet goals was revisited by holding a meeting with a variety of Michigan based environmental non-governmental organizations to share our progress and solicit feedback on our environmental goals and initiatives including emission reduction efforts and integrated resource plan. In addition, every 3 years an Integrated Resource Plan is submitted detailing the planned generation mix for the next 20 years and numerous stakeholder outreach meetings around the state of Michigan are held to gather input.

C12.2

(C12.2) Do your suppliers have to meet climate-related requirements as part of your organization's purchasing process?
No, but we plan to introduce climate-related requirements within the next two years

C12.3

(C12.3) Does your organization engage in activities that could either directly or indirectly influence policy, law, or regulation that may impact the climate?

Row 1

Direct or indirect engagement that could influence policy, law, or regulation that may impact the climate

Yes, we engage directly with policy makers

Yes, we engage indirectly through trade associations

Yes, we engage indirectly by funding other organizations whose activities may influence policy, law, or regulation that may significantly impact the climate

Does your organization have a public commitment or position statement to conduct your engagement activities in line with the goals of the Paris Agreement?

Yes

Attach commitment or position statement(s)

Source.docx

Describe the process(es) your organization has in place to ensure that your engagement activities are consistent with your overall climate change strategy

The Company has developed a set of principles to guide its perspectives on climate change policy proposals. One such principle is that Consumers Energy takes positions on climate policy that has environmental integrity or are consistent with policies that limit global warming to no more than 2 degrees Celsius, and preferably 1.5 degrees. These principles are implemented on a policy-by-policy basis by at least two internal working teams that focus on policy and regulatory matters known as the Regulatory Policy Team and the Carbon Council and Policy Team. Additionally, the Company is participating in a clean energy supportive initiative with C2ES and this commitment is publicly available (attached).

Primary reason for not engaging in activities that could directly or indirectly influence policy, law, or regulation that may impact the climate

<Not Applicable>

Explain why your organization does not engage in activities that could directly or indirectly influence policy, law, or regulation that may impact the climate

<Not Applicable>

C12.3a

(C12.3a) On what policy, law, or regulation that may impact the climate has your organization been engaging directly with policy makers in the reporting year?

Focus of policy, law, or regulation that may impact the climate
Climate-related targets

Specify the policy, law, or regulation on which your organization is engaging with policy makers
MI Healthy Climate Plan

Policy, law, or regulation geographic coverage
Sub-national

Country/region the policy, law, or regulation applies to
United States of America

Your organization's position on the policy, law, or regulation
Support with no exceptions

Description of engagement with policy makers
In 2016, the State of Michigan passed new state energy policy, which became effective in April 2017. Consumers Energy staff participated in this research process via roundtable discussions, workgroups, and public presentations. Staff now are in the implementation phase of those new programs. Consumers Energy supports the enacted state energy policy. We will continue to engage in legislative workgroups and discussions to best implement the revised mandates on utilities for energy efficiency and renewable energy Separately, in September 2020, Governor Gretchen Whitmer announced the Council on Climate Solutions, which would assist the Department of Environment, Great Lakes, and Energy to develop the MI Healthy Climate Plan. Consumers Energy is actively engaged in the Council on Climate Solutions and several of the Council Workgroups as advisory bodies to help formulate solutions for achieving an economy-wide carbon neutrality goal.

Details of exceptions (if applicable) and your organization's proposed alternative approach to the policy, law or regulation
<Not Applicable>

Have you evaluated whether your organization's engagement is aligned with the goals of the Paris Agreement?
Yes, we have evaluated, and it is aligned

Focus of policy, law, or regulation that may impact the climate
Other, please specify (Clean Energy Generation/Carbon pricing)

Specify the policy, law, or regulation on which your organization is engaging with policy makers
The Company has engaged with policymakers on various pieces of legislation being drafted for proposal in Congress that either directly or indirectly relate to carbon such as the Infrastructure Investment and Jobs Act, as well as reconciliation bills dealing with clean energy tax credits, the Clean Energy Performance Program, as well as other issues relevant to the utility sector.

Policy, law, or regulation geographic coverage
National

Country/region the policy, law, or regulation applies to
United States of America

Your organization's position on the policy, law, or regulation
Neutral

Description of engagement with policy makers
This engagement has been minimal, as numerous bills have been proposed with the new Administration, but serious discussions within Congress have not culminated in a final bill. In general, Consumers Energy supported investment in clean energy technology like tax credits and R&D funding and provided comments on proposed legislation like the Clean Energy Performance Program without actively supporting or opposing.

Details of exceptions (if applicable) and your organization's proposed alternative approach to the policy, law or regulation
<Not Applicable>

Have you evaluated whether your organization's engagement is aligned with the goals of the Paris Agreement?
Yes, we have evaluated, and it is aligned

Focus of policy, law, or regulation that may impact the climate
Methane emissions

Specify the policy, law, or regulation on which your organization is engaging with policy makers
NSPS 40 CFR Part 60 Subpart OOOOa

Policy, law, or regulation geographic coverage
National

Country/region the policy, law, or regulation applies to
United States of America

Your organization's position on the policy, law, or regulation
Support with no exceptions

Description of engagement with policy makers
Consumers Energy participates in the American Gas Association (AGA) which has been actively tracking and engaged with policymakers on regulations regarding the regulation of methane. Consumers has been tracking the NSPS 40 CFR Part 60 Subpart OOOOa for indication of similar potential methane regulations that may affect local distribution companies

Details of exceptions (if applicable) and your organization's proposed alternative approach to the policy, law or regulation
<Not Applicable>

Have you evaluated whether your organization's engagement is aligned with the goals of the Paris Agreement?
No, we have not evaluated

C12.3b

(C12.3b) Provide details of the trade associations your organization engages with which are likely to take a position on any policy, law or regulation that may impact the climate.

Trade association
Other, please specify (American Gas Association (AGA))

Is your organization's position on climate change consistent with theirs?
Consistent

Has your organization influenced, or is your organization attempting to influence their position?
We are attempting to influence them to change their position

State the trade association's position on climate change, explain where your organization's position differs, and how you are attempting to influence their position (if applicable)
We understand that AGA supports the use of natural gas because it is "affordable, reliable, safe and essential to improving our environment. America's natural gas utilities are innovative and committed to reducing greenhouse gas emissions through new and modernized infrastructure and advanced technologies that maintain reliable, resilient and affordable energy service choices for consumers." While we support the above statement, we periodically take a different position than AGA when applied to specific circumstances based on factors relevant to our Company.

Funding figure your organization provided to this trade association in the reporting year, if applicable (currency as selected in C0.4) (optional)

Describe the aim of your organization's funding
<Not Applicable>

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?
No, we have not evaluated

Trade association
Other, please specify (Electric Power Research Institute (EPRI))

Is your organization's position on climate change consistent with theirs?
Consistent

Has your organization influenced, or is your organization attempting to influence their position?
We are not attempting to influence their position

State the trade association's position on climate change, explain where your organization's position differs, and how you are attempting to influence their position (if applicable)
EPRI is the world's preeminent independent, non-profit energy research and development organization. They have a significant amount of effort around low carbon technology research to help the power sector develop solutions to decarbonize which is consistent with our position.

Funding figure your organization provided to this trade association in the reporting year, if applicable (currency as selected in C0.4) (optional)

Describe the aim of your organization's funding
<Not Applicable>

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?
No, we have not evaluated

Trade association
Other, please specify (Power Generators Air Coalition (PGen))

Is your organization's position on climate change consistent with theirs?
Consistent

Has your organization influenced, or is your organization attempting to influence their position?
We publicly promote their current position

State the trade association's position on climate change, explain where your organization's position differs, and how you are attempting to influence their position (if applicable)
The Power Generators Air Coalition (PGen) was incorporated in January 2021 as a nonprofit 501(c)(6) organization whose members are diverse electric generating companies – public power, rural electric cooperatives, and investor-owned utilities – with a mix of solar, wind, hydroelectric, nuclear, and fossil generation. PGen is a collaborative effort of electric generators to share information and expertise in the interest of effectively managing air emissions to meet and exceed environmental laws and regulations and in the interest of informing sound regulation and public policy. Our members include leaders in the fundamental transition to cleaner energy that is currently occurring in the industry. The main activities of PGen are: (a) to keep abreast of developments in the air and climate fields and how those developments are impacting power generators, and (b) to help its members communicate their perspective on these issues in the regulatory process. PGen as an organization does not participate in legislative lobbying or litigation. PGen does not have an energy policy agenda or a goal of promoting certain types of electric generation. PGen and its members work to ensure that environmental regulations support a clean, safe, reliable, and affordable electric system for the nation. Beyond the above statements, which are on PGen's webpage (https://pgen.org/), PGen has not taken a position on climate change. CMS Energy collaborates with PGen through discussions of pertinent air regulatory activities.

Funding figure your organization provided to this trade association in the reporting year, if applicable (currency as selected in C0.4) (optional)

Describe the aim of your organization's funding
<Not Applicable>

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?
No, we have not evaluated

Trade association
Edison Electric Institute (EII)

Is your organization's position on climate change consistent with theirs?
Consistent

Has your organization influenced, or is your organization attempting to influence their position?

We are not attempting to influence their position

State the trade association's position on climate change, explain where your organization's position differs, and how you are attempting to influence their position (if applicable)
EEI's member companies are committed to continuing to reduce carbon emissions both within our industry and outside of our industry to transition to clean, efficient electric energy through investments in new technologies and having the right policies in place.

Funding figure your organization provided to this trade association in the reporting year, if applicable (currency as selected in C0.4) (optional)

Describe the aim of your organization's funding
<Not Applicable>

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?
No, we have not evaluated

C12.3c

(C12.3c) Provide details of the funding you provided to other organizations in the reporting year whose activities could influence policy, law, or regulation that may impact the climate.

Type of organization
Non-Governmental Organization (NGO) or charitable organization

State the organization to which you provided funding
Center for Climate Solutions (C2ES)

Funding figure your organization provided to this organization in the reporting year (currency as selected in C0.4)

Describe the aim of this funding and how it could influence policy, law or regulation that may impact the climate
The aim of the funding is to keep abreast of legislative, regulatory, and legal changes in the climate space, and participate in the legislative process on federal climate-related matters relevant to our company.

Have you evaluated whether this funding is aligned with the goals of the Paris Agreement?
Yes, we have evaluated, and it is aligned

C12.4

(C12.4) Have you published information about your organization's response to climate change and GHG emissions performance for this reporting year in places other than in your CDP response? If so, please attach the publication(s).

Publication
In mainstream reports

Status
Complete

Attach the document
10k.pdf

Page/Section reference
40-42, 53-56, 75-77, 82

Content elements
Governance
Strategy
Risks & opportunities
Emission targets

Comment
Our annual report (10k) contains information on the company's response to climate change.

Publication
In voluntary communications

Status
Complete

Attach the document
2022-CMS-Climate-Change-Risk-Vulnerability-and-Resiliency-Report_FINAL.pdf

Page/Section reference
All

Content elements
Governance
Strategy
Risks & opportunities
Emission targets

Comment
Our 2022 Climate Risk Vulnerability and Resiliency Report provides an understanding of the climate risks potentially faced by our Company and will help us determine our future business strategy.

C15. Biodiversity

C15.1

(C15.1) Is there board-level oversight and/or executive management-level responsibility for biodiversity-related issues within your organization?

	Board-level oversight and/or executive management-level responsibility for biodiversity-related issues	Description of oversight and objectives relating to biodiversity	Scope of board-level oversight
Row 1	Yes, both board-level oversight and executive management-level responsibility	The Governance, Sustainability and Public Responsibility Committee (GS&PR Committee) is responsible for advising and assisting the Board with respect to our public responsibility and sustainability matters including biodiversity. The GS&PR Committee gets periodic updates on our land goal which is to enhance, protect, or restore 5,000 acres of Michigan land from 2018 through 2022. On the executive management level, management of CMS Energy and Consumers Energy has implemented an Environmental and Sustainability Council (E&SC) to create a group of critical internal leaders who will work together to ensure our actions meet our environmental goals. The CEO who is also a Board member sits on the E&SC. The E&SC also reviews status updates on the company's sustainability performance and initiatives as well as progress towards the land goal.	<Not Applicable>

C15.2

(C15.2) Has your organization made a public commitment and/or endorsed any initiatives related to biodiversity?

	Indicate whether your organization made a public commitment or endorsed any initiatives related to biodiversity	Biodiversity-related public commitments	Initiatives endorsed
Row 1	Yes, we have made public commitments and publicly endorsed initiatives related to biodiversity	Other, please specify (We have a publicly stated goal to enhance, restore, or protect 5,000 acres of Michigan land from 2018 to 2022.)	Please select

C15.3

(C15.3) Does your organization assess the impact of its value chain on biodiversity?

	Does your organization assess the impact of its value chain on biodiversity?	Portfolio
Row 1	No, and we do not plan to assess biodiversity-related impacts within the next two years	<Not Applicable>

C15.4

(C15.4) What actions has your organization taken in the reporting year to progress your biodiversity-related commitments?

	Have you taken any actions in the reporting period to progress your biodiversity-related commitments?	Type of action taken to progress biodiversity- related commitments
Row 1	Yes, we are taking actions to progress our biodiversity-related commitments	Land/water protection Land/water management Species management Education & awareness Livelihood, economic & other incentives Other, please specify (Complete)

C15.5

(C15.5) 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
Row 1	No, we do not use indicators, but plan to within the next two years	Please select

C15.6

(C15.6) Have you published information about your organization's response to biodiversity-related issues for this reporting year in places other than in your CDP response? If so, please attach the publication(s).

Report type	Content elements	Attach the document and indicate where in the document the relevant biodiversity information is located
In voluntary sustainability report or other voluntary communications	Content of biodiversity-related policies or commitments Biodiversity strategy	Our Biodiversity Policy is located on the Consumers Energy website: https://www.consumersenergy.com/-/media/CE/Documents/sustainability/biodiversity-policy.ashx

C16. Signoff

C-FI

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

C16.1

(C16.1) Provide details for the person that has signed off (approved) your CDP climate change response.

	Job title	Corresponding job category
Row 1	CEO	Chief Executive Officer (CEO)